



Armstrong Economics November 1, 2017



Copyright – ALL RIGHTS STRICTLY RESERVED GLOBALLY
All publications of the publisher are COPYRIGHTED and REGISTERED by license of Martin Armstrong

#### **Armstrong Economics**

United States - Abu Dhabi - London - Beijing

360 Central Avenue, Suite 800, St Petersburg, Florida 33701

The material, concepts, research and graphic illustrations appearing within this publication are the EXCLUSIVE PROPERTY of Princeton Economics Research Institute AG, Switzerland.

NO REPRODUCTION is permitted without the express WRITTEN consent of the publisher. Princeton Economics Research Institute AG might grant permission to utilize in part the research published in its reports for recognized educational purposes of qualified universities or similar institutions when requests are made prior to utilization. Materials can be supplied to universities and similar institutions in most cases without charge. Other individuals, corporations, institutional or brokers within the financial community are strictly prohibited from reproducing in par tor in whole any published materials of Princeton Economics Research Institute AG, its affiliates, associates or joint venture partners. Anyone wishing to apply for such permission must do so in writing for each and every such use.

Princeton Economics International Ltd / Armstrong Economics / Martin Armstrong do not waive any of its rights under international copyright law in regard to its research, analysis or opinions. Anyone who violates the copyright of Princeton Economics Research Institute AG shall be prosecuted to the full extent of the law.

#### **DISCLAIMER**

The information contained in this report is NOT intended for speculation on any financial market referred to within this report. Princeton Economics Research Institute AG makes no such warranty regarding its opinions or forecasts about the markets or economies discussed in this report. Anyone seeking consultation on future economic trends in a personal nature must do so under written contract.

This is neither a solicitation nor an offer to Buy or Sell any cash or derivative (such as futures, options, swaps, etc.) financial instrument on any of the described underlying markets. No representation is being made that any financial result will or is likely to achieve profits or losses similar to those discussed. The past performance of any trading system or methodology discussed here is not necessarily indicative of future results.

Futures, Options, and Currencies trading all have large potential rewards, but also large potential risk. You must be aware of the risks and be willing to accept them to invest in these complex markets. Don't trade with money you can't afford to lose and NEVER trade anything blindly. You must strive to understand the markets and to act upon your conviction when well researched.

Indeed, events can materialize rapidly, and thus past performance of any trading system or methodology is not necessarily indicative of future results particularly when you understand we are going through an economic evolution process and that includes the rise and fall of various governments globally on an economic basis.

CFTC Rule 4.41 – Any simulated or hypothetical performance results have certain inherent limitations. While prices may appear within a given trading range, there is no guarantee that there will be enough liquidity (volume) to ensure that such trades could be executed. Hypothetical results thus can differ greatly from actual performance records, and do not represent actual trading since such trades have not been executed, these results may have under- or over-compensated for the impact, if any, of certain market factors, such as lack of liquidity. Simulated or hypothetical trading programs, in general, are also subject to the fact that they are designed with the benefit of hindsight and backtesting. Such representations, in theory, could be altered by Acts of God or Sovereign Debt Defaults.

It should not be assumed that the methods, techniques, or indicators presented in this publication will be profitable or that they will not result in losses since this cannot be a full representation of all considerations and the evolution of economic and market development. Past results of any individual or trading strategy published are not indicative of future returns since all things cannot be considered for discussion purposes. Also, the indicators, strategies, columns, articles, and discussions (collectively, the "Information") are provided for informational and educational purposes only and should not be construed as investment advice or a solicitation for money to manage since money management is not conducted. Therefore, by no means is this publication to be construed as a solicitation of any order to buy or sell. Accordingly, you should not rely solely on the Information in making any investment. Rather, you should use the Information only as a starting point for doing additional independent research to allow you to form your own opinion regarding investments. You should always check with your licensed financial advisor and tax advisor to determine the suitability of any such investment.

Copyright 2013 Princeton Economics Research Institute AG and Martin A. Armstrong All Rights Reserved. Protected by copyright laws of the United States and international treaties.

This report may NOT be forwarded to any other party and remains the exclusive property of Princeton Economics Research Institute AG and is merely leased to the recipient for educational purposes.



# Contents

| How to Trade a Vertical Market                    | 5   |
|---|-----|
| The Economics of Bubbles                          | 7   |
| What is Behind a True Vertical Market?            | 35  |
| The Breakout Transformation to a Phase Transition | 65  |
| The Phase Transition                              | 69  |
| The Rogue Wave                                    | 70  |
| Plateau Move                                      | 91  |
| The Fan Projection                                | 107 |
| Trading a Live Vertical Market                    | 110 |
| Conclusion  | 119 |



# How to Trade a Vertical Market

By Martín Armstrong

ne of the most difficult trading opportunities to unfold is the vertical market. Indeed, the rally we have witnessed in the Dow Jones Industrials for domestic investors has been like a party where everyone is drunk, nobody is having a good time, and on top of that they are clueless how they even got there. Such a runaway market can take shape in two major varieties — the **Phase Transition** or the **Plateau**Move. Such major events typically try the souls of traders and far too often turns their emotions into lethal financial weapons that self-destruct because of the complexity of systems that defies human interpretation. Each type of move typically emerges from the early stages of a breakout move.

The way to survive such events is to temper and control your emotions. To survive trading decisions, one must truly understand the nature of market movement. That means the **Phase Transition** is easily distinguished from the **Plateau Moye** by the fact that the former is typically not sustained and collapses back down to its base of origin, whereas the latter creates a whole new trading dimension which becomes permanent.



During the run-up to the Bubble Top in 1929, a very famous economist by the

name of Irving Fisher came out on October 15, 1929, and announced that the market had reached a new plateau where it would remain. Irving Fisher (1867–1947) never lived that forecast down.

The question that needed to be answered was whether there were such plateau moves in which much higher prices were sustained in a whole new paradigm. Upon careful research, the answer is actually yes. There were new plateaus reached within the economy. While 1929 was not one of them, this did not negate investigation into whether or not such vertical markets could transform into a whole new permanent plateau level of price movement. We will examine this potential in this report.



Irving Fisher (1867-1947)

(Top Yale Economist in 1929)

Tuesday 10/15/29: "Stock prices have reached what looks like a permanently high plateau... There may be a recession in stock prices, but not anything in the nature of a crash... I expect to see the stock market a good deal higher than it is today within a few months."



# The Economics of Bubbles

ne of the problems that many economists have in understanding vertical markets is their persistent attempt to control the business cycle, and as such, they have schemed to encourage the government to take control. The problem has been that their interpretation of events ignores why vertical markets and great crashes take place. Until the 1970s, all economists believed that the state could control the economy. To this day, they still preach this theory despite the fact that the government has never been able to prevent a crisis, even once, no less manage it correctly. Welcome to the 21<sup>st</sup> century. Ever since economists handed the power to the government, the stage has been set for the next vertical market because those in power will **NEVER** investigate their actions and economists will not admit that all their efforts have failed. They cannot define the cause, and as such, the solution always eludes them.

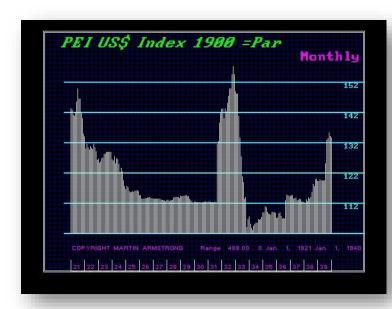
Some blame bubbles and panics on contagions that are imported from foreign countries. Others have focused on the domestic causes to the exclusion of foreign influences. Historically, attributing blame tends to be akin to a political volleyball match. The local politicians always prefer to blame someone else. When there has been no foreign culprit, they then blame people in the private sector and a mythical huge short position.

Herbert Hoover (1874–1964) blamed Europe for the Great Depression of the 1930s, pointing to foreign countries and trade issues. Of course, this was the view he adopted because of the strong rise in



Herbert Hoover (1874 - 1964) (President 1929 - 1933)

the value of the dollar. As the dollar rose in value, US exports declined. This relationship was interpreted from the United States perspective as a protectionist war. There was global overproduction in commodities such as wheat, sugar, cotton, and even precious metals from the perspective of silver in particular. Plus, there was the massive Dust Bowl that left employment impossible in much of the agricultural sector. Agriculture had employed 40% of the civil workforce in 1900, and the Dust Bowl sent unemployment soaring to 25%.



Hoover was correct in pointing to Europe. However, he failed to hit the nail on the head. The problem was the excessive reparation payments on Germany and France's quest to be the dominant nation in Europe.

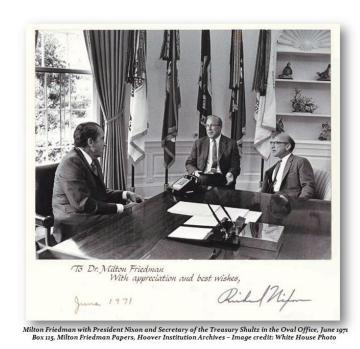
Milton Friedman (1812–2006), a friend of mine whom I deeply admire as

one of the most brilliant men I ever met, wrongly asserted that the crisis originated in the United States. Milton and his wife Anna Schwartz (1915–2012) produced one of the most influential books in modern economic history – A Monetary History of the United States, 1867–1960 (MHUS). I never had more respect for any economist other than Milton.

I met Milton in Chicago when I was speaking at a conference. Milton came to listen to me speak. When I finished, Milton walked up and stuck out his hand and said, "Hello. I'm Milton Friedman. That was the best speech I ever heard."

I was totally shocked. I was stunned that Milton came to a trader's conference. As I came to know Milton, I understood that he was truly a brilliant man who thought both dynamically and out of the box. What Milton had come to listen to was the fact that I was regarded as the top of the field in foreign exchange forecasting. By then in the mid–80s, I had more than \$2 trillion under contract for advisory work. "You are doing what I only dreamed about," Milton said to me. He encouraged me to look at the world and contribute to the field of economics. I was dumbfounded. I saw myself only as a trader, not as an economist who could change the world as he had done by creating the floating exchange rate system.

I state this background story because I came to disagree with Milton and Anna



on their monumental work. I tend to feel a bit guilty, I suppose, in offering any criticism whatsoever of someone I so admire: deeply who encouraged me to write this right now. Milton was a person of intense deep analytical analysis. So, what I offer here is not necessarily a critique of his thinking process. It is something I believe Milton would have recognized had he been exposed to the real movement of capital on a grand, global scale.



# ArmstrongEconomics.COM

There are classical economists and businessmen who assimilate their idea of economics in terms of a zero-sum game. Effectively, if one side gains, the other side loses (gains and losses sum to zero). There were those classical economists who argued that the solution to the problems of the Great Depression was to cut wages. Indeed, that might sound cruel. However, what was taking place in the economy was a rise in the purchasing power of money as people needed to sell assets that became overvalued. In reality, there was not enough hard cash to equal value or assets. If a stock rises from \$10 to \$500, one would think that they became rich overnight. But that new mark in value does not correspond to a physical increase in the supply of money. There lies the crisis.

Milton looked at the Great Depression from a monetary perspective. He saw the stock market crash of 1929 as a climatic event that took place in the United States. He attributed the collapse of the stock market to a decline in the supply of money in late 1930s as being predominantly domestically influenced. Milton

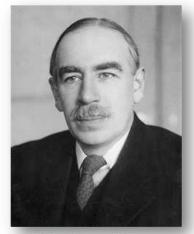


and his wife Anna were correct in looking at the gold standard as the restraint on the supply of money that created deflation. They viewed the Fed as overly concerned about supporting the value of the dollar. Today, this same view is the policy of Germany imposing austerity upon the rest of Europe.

John Maynard Keynes (1883–1946) saw this economic system still as a zero-sum

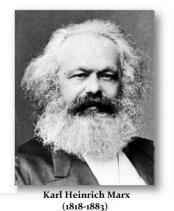
game. Keynesianism became the name attributed to his solution that followed Karl Marx in advocating that government could steer the economy and eliminate the business cycle. Keynes became the father of the "New Economics" that applied this concept of regulatory mechanisms to control the economy. This concept was adopted at Bretton Woods to control the world capitalist economy, which operated superficially to appear fairly successful until the Bretton Woods accord collapsed in 1971.

Economists believed that they had conquered the old mechanism that regulated the economy, which was the business cycle. Economic theory changed and laissez-faire, which believed that markets would automatically bring about necessary adjustments, was replaced by the new era of "Keynesian" economics with a new emphasis on the role of the state in managing the economy.



John Maynard Keynes (1883-1946)

#### The Interventionists

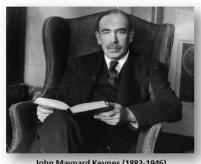




John Maynard Keynes (1883-1946)

The death of laissez-faire and respect for the business cycle as a regulatory mechanism became the maxim arising from the 1930s. The view was that the downturn in the business cycle would never have reversed on its own. Of course, this was extremely arrogant for it altered both economics and politics. Now the elite were able to play God with the economy. They always try to manipulate it, yet never truly understanding what they are doing. Keynes had advocated interventionist policy by stating that the government could eliminate the business cycle.

"I find myself more and more relying for a solution of our problems on the invisible hand which I tried to eject from economic thinking twenty years ago,"



John Maynard Keynes (1883-1946)

Yet before Keynes died, in 1946 he told Henry Clay, a professor of social economics and adviser to Bank of England, that he had hoped Adam Smith's Invisible Hand would help Britain (Source: after the War, The World Bank, the IMF and the End).

Keynes died in 1946. He attended the Bretton Woods conference in 1944. He quickly began to understand that his interventionist ideas were not working. Adam Smith's (1723-1790) invisible hand applied to government as well. The government would act only in its self-interest, and therein lied the demise of Bretton Woods.

Paul Volcker, the man who has most clearly articulated the business cycle, was an undersecretary of the treasury in 1971 when the fixed exchange rate system of Bretton Woods collapsed and the floating exchange rate system emerged. Volcker later became the chairman of the Federal Reserve under President Carter and President Reagan. He stood up and declared that the Keynesian theories that stated that the government could manipulate the business cycle by eliminating depressions and recessions were obviously flawed.



Paul Adolph Volcker, Jr. (born September 5, 1927)

The Rediscovery of the Business Cycle – is a sign of the times. Not much more than a decade ago, in what now seems a more innocent age, the 'New Economics' had become orthodoxy. Its basic tenet, repeated in similar words in speech after speech, in article after article, was described by one of its leaders as 'the conviction that business cycles were not inevitable, that government policy could and should keep the economy close to a path of steady real growth at a constant target rate of unemployment.

-- Paul Volcker, Rediscovering the Business Cycle (1979)

Volcker dismissed all previous economic theories (e.g. Marxism, Keynesianism, etc.) in favor of re-examining the business cycle. Admittedly, his book was partly a response to the recession of 1974-76, when even gold fell from \$200 to \$100. Most of all, he wanted to debunk the new economics idea that the government had the power to flatline the economy. He was responding to the prevalence of political promises at the time — "Ensure perpetual growth! Eliminate recessions! Ensure the Depression will never return!" These promises proved to be hollow because Adam Smith's invisible hand prevailed, and unquestionably the self-interest of government came first.

Smith's invisible hand still dominated government and could be clearly seen by the third Kennedy–Nixon Presidential Debate of October 16, 1960, which created a gold panic briefly.





Arthur Burns (1904-1987)

October 13th, 1960 - Third Presidential Debated between Kennedy & Nixon

During the third debate, candidates were questioned on the outflow of gold from USA reserves that set off a panic in the London gold market. During this panic, gold rallied to \$40 for the first time, showing that the Bretton Woods system was indeed collapsing. The United States outflow of gold was not really from a trade deficit, but from the fact that the USA was defending the world and establishing military bases everywhere. That meant capital was leaving. Kennedy explained in that debate:

"The difficulty, of course, is that we do have heavy obligations abroad, that we therefore have to maintain not only a favorable balance of trade but also send a good deal of our dollars overseas to pay our troops, maintain our bases, and sustain other economies. In other words, if we're going to continue to maintain our position in the sixties, we have to maintain a sound monetary and fiscal policy. We have to have control over inflation, and we also have to have a favorable balance of trade."

Gold would rally again up to \$40 in the late 1960s, and finally, it forced the collapse of the convertibility of gold under the Bretton Woods system in 1971. It was the self-interest of government that defeated Bretton Woods. You cannot build military bases around the world without exporting dollars.

Arthur Burns (1904–1987), chairman of the Federal Reserve in 1971 when the fixed exchange rate system of Bretton Woods collapsed, also commented on the business cycle.

"For well over a century business cycles have run an unceasing round. They have persisted through vast economic and social changes; they have withstood countless experiments in

industry, agriculture, banking, industrial relations, and public policy; they have confounded forecasters without number, belied repeated prophecies of a 'new era of prosperity' and outlived repeated forebodings of chronic depression.'"

Arthur F. Burns (1947). Stepping stones towards the future. Annual Report 27. New York: National Bureau of Economic Research. p. 27; Cited in: Gordon (1986; 1)

## Karl Marx (May 5th, 1818 - 1883) Most Influential Economist in History

#### Economics

"We should not say that one man's hour is worth another man's hour, but rather that one man during an hour is worth just as much as another man during an hour. Time is everything, man is nothing: he is at the most time's carcass."

The more the division of labor and the application of machinery extend, the more does competition extend among the workers, the more do their wages shrink together.

#### Society

"Society does not consist of individuals but expresses the sum of interrelations, the relations within which these individuals stand."



Karl Heinrich Marx

#### Religion

"The first requisite for the happiness of the people is the abolition of religion."

"Religion is the impotence of the human mind to deal with occurrences it cannot understand."

#### History

"The history of all previous societies has been the history of class struggles."

"History repeats itself, first as tragedy, second as farce."

#### **Politics**

"Democracy is the road to socialism."

"The theory of Communism may be summed up in one sentence: Abolish all private property."

It was clear that Keynes and Marx had one thing in common. They both had the idea that government could control the business cycle, defeat it, and thus create a whole new world. Both failed to comprehend that government is still driven by human decision and that that decision will always be in their own self-interest.



Adam Smith (1723-1790)

"It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest."

Adam Smith; Wealth of Nations 1776, Book I, Chapter II, Of the Principle which gives occasion to the Division of Labour Milton Friedman (1812–2006) and his wife Anna Schwartz have inspired tremendous innovations in economic thought. Their study on the monetary base focused upon one aspect. However, I do not believe monetary theory has withstood the test of time insofar as providing yet another tool to defeat the business cycle.



Secret Meetings of the Central Bankers Germany - USA - Britain - France
On July 1, 1927, Montagu Norman of Britain was accompanied by Hjalmar Schacht, head
of the German Reichsbank. They were joined by Charles Rist, governor of the Banque de
France. All three went into conference with Benjamin Strong to discuss the weak reserve
position of the Bank of England and the capital flight from Europe to America. It was
hoped that lowering US interest rates would deflect the capital inflows from Europe.

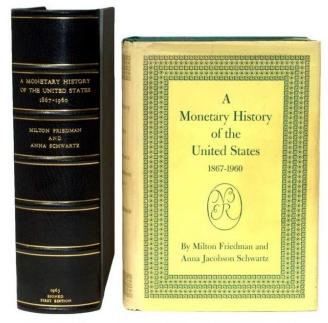
Indeed, Freidman was focusing on the fact that the Federal Reserve raised interest rates from 1927 into 1929, doubling rates chasing the stock market all the way up (see next page). This was sparked by the failure of 1927 secret accord of central bankers trying to deflect the capital from the United States back to Europe.





Moreover, Milton and Anna went on to point out that the tightening of monetary policy (austerity) was followed by falling prices and weaker economic activity:

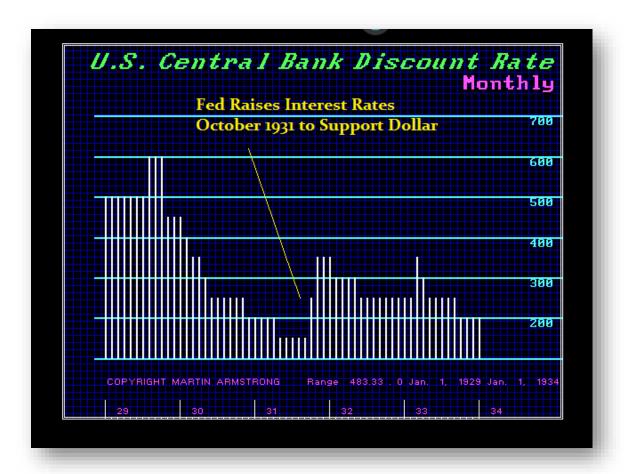
"During the two months from the cyclical peak in August 1929 to the crash, production, wholesale prices, and personal income fell at annual rates of 20 per cent, 7-1/2 per cent, and 5 per cent, respectively." (Kindle version 7160) Of course, once the crash occurred in October, the result was a significant slowing of the economy. Incidentally, as early as the spring of 1928, money was tight because of the Fed's desire to slow outflows of U.S. gold to France who was attempting to attract massive inflows of gold



A Monetary History of the United States: 1867-1960 First edition Princeton: Princeton University Press, 1963

from abroad to raise France to the dominant power in Europe.

Friedman and Schwartz highlighted another tightening period in September 1931, following the sterling crisis. During that month, a wave of speculative attacks on the pound forced Great Britain to leave the gold standard. Anticipating that the United States might be the next to leave the gold standard, speculators turned their attention from the pound to the dollar. Central banks and private investors converted a substantial quantity of dollar assets to gold in September and October of 1931. The resulting outflow of gold reserves (an external drain) also put pressure on the U.S. banking system (an internal drain), as foreigners liquidated dollar deposits and domestic depositors withdrew cash in anticipation of additional bank failures. Conventional and long-established central banking practices would have mandated responses to both the external and internal drains, but the Federal Reserve decided to respond only to the external drain.



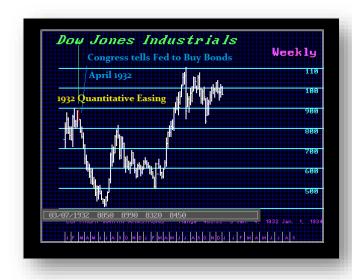
As Friedman and Schwarz wrote, "The Federal Reserve System reacted vigorously and promptly to the external drain. . . . On October 9 [1931], the Reserve Bank of New York raised its rediscount rate to 2–1/2 per cent, and on October 16, to 3–1/2 per cent—the sharpest rise within so brief a period in the whole history of the System, before or since" (Monetary History Kindle version 7320).

This counter-action by the Fed stemmed the outflow of gold but contributed to what Friedman and Schwartz called a "spectacular" increase in bank failures and bank runs, with 522 commercial banks closing their doors in October alone. The policy tightening and the ongoing collapse of the banking system caused the money supply to fall precipitously, and the declines in output and prices became even more virulent. The Fed did not cut rates back to 1931 levels after that. Again, the logic was a monetary policy change related to objectives other than the domestic economy. In this particular instance, defense of the dollar against external attack resulted in changes in domestic output sending prices into a contraction.



Moreover, hundreds of cities began to issue their own money in the form of Depression Scrip because money was being hoarded in addition to the austerity policy of the Federal Reserve. Therefore, the possibility remains that the Great Depression occurred for other reasons beyond domestic money supply and that the contractionary monetary policies merely coincided with the trend; following events rather than causing them. What remains missing is the fact that there is an underlying assumption that a mere increase in the supply of money will translate into an increase in spending. That has proven to be completely false.

A third episode of tightening was provided in April 1932, when the Congress began to exert considerable pressure on the Fed to ease monetary policy. Congress wanted the Fed to conduct largescale open-market purchases of government securities. This was the policy in Europe post-2007 that has morphed into merely help for governments creatina lifesupport system.



The Federal Reserve Board was quite reluctant to start buying debt. Nevertheless, between April and June 1932, the Fed authorized substantial purchases. We can see that this contributed to the collapse of the stock market. This infusion of liquidity appreciably slowed the decline in the stock of money and significantly brought down yields on government bonds, corporate bonds, and commercial paper. It failed to support the economy, as we have seen again in Europe. Friedman and Schwartz noted (Monetary History p. 324; Kindle id/7431):

"The tapering off of the decline in the stock of money and the beginning of the purchase program were followed shortly by an equally notable change in the general economic indicator. . . . Wholesale prices started rising in July, production in August. Personal income continued to fall but at a much reduced rate. Factory employment, railroad ton-miles, and numerous other indicators of physical activity tell a similar story. All in all, as in early 1931, the data again have many of the earmarks of a cyclical



Milton Friedman (1912–2006)

revival. . . . Burns and Mitchell (1946), although dating the trough in March 1933, refer to the period as an example of a 'double bottom.' "

Although it appeared that the Fed officials (notably George Harrison at the New York Fed) supported the openmarket purchase program, most did not consider the policy to be appropriate. Many took the view that low nominal interest rates were indicative of monetary ease. Hence, when the

Congress adjourned on July 16, 1932, the system essentially ended the program. By the latter part of the year, the economy had relapsed dramatically. Again, there was no confirmation of a direct positive impact.

The final episode put forth by Friedman and Schwartz, occurred from January 1933 to the banking holiday in March that year. This time the uncertainty that emerged was the rumor that Franklin D. Roosevelt would confiscate gold. He denied that rumor the night before the election.

### February 17th, 1933 Herbert Hoover to Franklin D. Roosevelt

My dear Mr. President-elect:

A most critical situation has arisen in the country of which I feel it is my duty to advise you confidentially. I am therefore taking this course of writing you myself and sending it to you through the Secret Service for your hand direct as obviously its misplacement would only feed the fire and increase the dangers.

The major difficulty is the state of the public mind, for there is a steadily degenerating confidence in the future which has reached the height of general alarm. I am convinced that a very early statement by you upon two or three policies of your Administration would serve greatly to restore confidence and cause a resumption of the march of recovery.

I then reviewed at length the situation which had developed.

I therefore return to my suggestion at the beginning as to the desirability of clarifying the public mind on certain essentials which will give renewed confidence. It is obvious that as you will shortly be in a position to make whatever policies you wish effective, you are the only one who can give these assurances. Both the nature of the cause of public alarm and experience give such an action the prospect of success in turning the tide. I do not refer to action on all the causes of alarm, but it would steady the country greatly if there could be prompt assurance that there will be no tampering or inflation of the currency; that the budget will be unquestionably balanced, even if further taxation is necessary; that the Government credit will be maintained by refusal to exhaust it in the issue of securities. . . . It would be of further help if the leaders could be advised to cease publication of RFC business.

1 am taking the liberty of addressing you because both in my anxiety over the situation and my confidence from four years of experience that such tides as are now running can be moderated and the processes of regeneration which are also always running can be released. . . .

HERBERT HOOVER 2

Roosevelt was elected in November 1932, yet would not take office until March 1933. This long interim promoted uncertainty, resulting in speculation that caused the markets to anticipate his likely policies. Markets love uncertainty, which manifests into volatility. Roosevelt's refusal to make definite policy statements or endorse actions proposed by the increasingly frustrated Hoover increased the uncertainty.

The leading speculation was that Roosevelt would abandon the gold standard or just devalue the dollar. Fearing the resulting capital losses, both domestic and foreign investors began to convert dollars to gold, putting pressure on both the banking system and the gold reserves of the Federal Reserve system. Hoover pleaded with Roosevelt to come out and deny the rumor. He even sent a private letter by Secret Service to ensure it would not be leaked given its serious impact

<sup>&</sup>lt;sup>2</sup> The full text may be found in Myers and Newton, The Hoover Administration (Charles Scribner's Sons), pp. 338-340.

on the markets and economy. Nevertheless, Roosevelt remained silent and allowed the banking system to collapse deliberately to create a panic.



Bank failures and the Fed's defensive measures against the gold drain to support the dollar further reduced the supply of money. The economy took its deepest plunge between November 1932 and March 1933, once more confirming the temporal sequence predicted by the monetary hypothesis.

After Roosevelt was sworn in, his declaration of a national bank holiday and subsequent confiscation of gold proved the rumors were correct. The expectation of a devaluation of any currency has historically always resulted in financial chaos.

These four episodes were part of Friedman and Schwartz's evidence for the role of monetary forces during the Depression. Milton and Anna were not isolationists entirely. They introduced what they called "cross-sectional" analysis that was the international examination of the differences in exchange rate regimes across countries during the 1930s. They noted that the international gold standard had been suspended during World War I, and governments attempted to reestablish it during the 1920s, but was modified and reclassified as the gold exchange standard.

Under the international gold standard, nations were essentially required to maintain a fixed exchange rate with other gold standard countries. The USA had supplanted Britain as the financial capital of the world after World War I, and the deflation unleashed during the commodity collapse on 1919 tended to export deflation from the USA to other member nations. Many countries could not adhere to the gold standard, such as Britain, due to their debts and poor economic conditions. France, on the other hand, was adamant about rising to be the leader of Europe and sought to compete against the United States.

Friedman and Schwartz's insight took the view that the monetary contraction from 1919 to 1920 was the source of economic depression post-World War I. Those nations who restored the gold standard followed the United States into

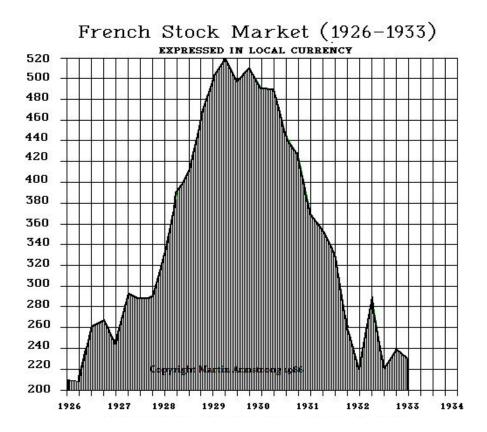
deflation, which was steep compared to the less severe economic downturns among nations who were off the gold standard

China was outside the gold standard. Friedman and Schwartz wrote (MH p. 361);

"China was on a silver rather than a gold standard. As a result, it had the equivalent of a floating exchange rate with respect to gold-standard countries. A decline in the gold price of silver had the same effect as a depreciation in the foreign exchange value of the Chinese yuan. The effect was to insulate Chinese internal economic conditions from the worldwide depression. . . . And that is what happened. From 1929 to 1931, China was hardly affected internally by the holocaust that was sweeping the gold-standard world, just as in 1920–21, Germany had been insulated by her hyperinflation and associated floating exchange rate."

China escaped the worst of the Depression. Likewise, Spain entered into the Spanish Civil War and did not re-adopt the gold standard during the 1920s. Japan was forced from the gold standard after being on it for only a matter of months, and thus it was noticed that they too escaped the worst of the postwar depression. This evidence speaks loudly against Germany's austerity policies that have been exported to Europe via the euro post-1998.

Those nations who had restored the gold standard during the 1920s were then forced to abandon it in 1931, Friedman and Schwartz observed (MHUS p. 362), suffered deflation while on the gold standard and began to recover upon exiting that monetary system. Great Britain returned to the gold standard in 1925, but was then compelled to abandon it during September 1931. The Scandinavian countries followed Britain's lead and also abandoned the gold standard. The effect, they argued, was to free domestic monetary policy from international ones, which immediately stopped the monetary contraction. Friedman and Schwartz noted (MHUS p. 362) that: "The trough of the depression in Britain and the other countries that accompanied Britain in leaving gold was reached in the third quarter of 1932. [In contrast, in the countries that remained on the gold standard or, like Canada, that went only part way with Britain, the Depression dragged on."



The seven countries that remained part of the French-led gold bloc, namely the Netherlands, Belgium, Italy, Luxembourg, Switzerland, and Poland, suffered the most drastic economic contractions in output and prices. Deflation rose as assets declined, and the purchasing power of money rose. France was the leader of the gold bloc with aspirations of being the leader of Europe after Germany's defeat and Britain becoming severely limited. France attracted gold reserve inflows from 1928 onward, attempting to amass the largest gold reserve that it believed would result in economic dominance. France's gold inflows allowed it to maintain its money supply and avoid a serious downturn until 1932. France waged World War II in the financial markets by attacking other nation's bond markets. This policy of liquidation of non-gold foreign exchange reserves began to offset the gold inflows. Milton an Anna saw this as reducing France's money stock that resulted in a significant deflation which continued until April 1935. Economically, this policy extended France's Great Depression longer than any other nation. The plunge in its share market was relentless from 1929, and it did not begin to recover until 1935.



Credit Anstalt - 1931 Austria

Friedman and Schwartz pointed out that there were nations who tried to join the club with the gold standard, but had very low gold reserves. This group included Austria, Germany, Hungary, and Romania (MHUS p. 361). These countries suffered deflation and an extensive banking and financial crisis, which made their plunge into depression particularly precipitous. Credit Anstalt in Austria began the

contagion of a banking crisis in 1931, which knocked country after country off the gold standard, right up to Britain, setting off the worst of the Great Depression.

Many economists believed that it was this analysis by Friedman and Schwartz of external countries which proved their point that the depression had not been the primary product of non-monetary forces. They saw that if changes in autonomous spending or productivity took place, then the nominal exchange rate regime chosen by each country would have been largely irrelevant. The close connection among countries' exchange rate regimes, their monetary policies, and the behavior of domestic prices and output was viewed as strong evidence for the proposition that monetary forces played a central role not just in the U.S. depression but the world as a whole.

Overlooked in this analysis was the element of confidence. Once Credit Anstalt failed, that set off the contagion in the collapse in confidence, not the money stock. The Rothschilds were part owner of Credit Anstalt. Once that bank failed, the rumor was that the most powerful banking family was going down. Panic struck and spread to Germany and across the Atlantic to the United States. Sometimes the behavior of markets and economies cannot be attributed to quantified causes and effects based exclusively upon economic data. The bottom line has always been a belief system. It is a confidence game above all else. Did the failure of Credit Anstalt by itself justify the Great Depression and global collapse in banking? Of course not. Reality and theory do not always meet.

Of course, Friedman and Schwartz's analysis has been adopted by other economists such as Ehsan Choudhri and Levis Kochin (1980) who considered the

relative performances of Spain, who did not adopt the gold standard due to its civil war. Barry Eichengreen and Jeffrey Sachs (1985) examined key macro variables for ten major countries over 1929–35, concluding that those countries which abandoned the gold standard earlier also recovered earlier.

Ben Bernanke and Harold James (1991) confirmed the findings of Eichengreen and Sachs. They took a much broader sample of twenty-four predominantly industrialized nations, and Pamela Campa (1990) did the same for a sample of Latin American countries. Real wages and real interest rates differed greatly across gold standard and non-gold-standard economies as Friedman's and Schwartz's analysis would conclude. The most detailed narrative discussion of how the gold standard propagated the depression around the world is, of



George F. Warren (1874-1938)

course, the influential book by Eichengreen (Golden Fetters: The Gold Standard and the Great Depression, 1919–1939; 1992). Eichengreen (Financial Crises: And what to Do about Them; 2002) which were in agreement with the Friedman and Schwartz analysis.

In 1932, George Warren (1874–1938) had written, Wholesale Prices for 213 Years, 1720–1932 (published 1932). Effectively, this work was a forerunner to Friedman's MHUS by making observations that prices rose with the gold discoveries and declined when supplies of gold declined. This work was a simplistic monetary view of the world that Franklin Roosevelt could

understand. Maintaining the gold standard created deflation as prices collapsed and gold became scarce. Warren's theory thus became a simple relationship that the only way to raise prices and end the deflation of the Great Depression was to raise the price of gold, which meant it would be a dollar devaluation relative to gold. This was a first and important step in comprehending the role of money. But to the classical economists and bankers, this was pure heresy since they believed money should be tangible, which created deflation (austerity).

Roosevelt suspended gold exports on his first day in office. This was not formally a suspension of the gold standard, yet it was akin to building a Berlin Wall around capital by using capital controls. At this point, nobody quite understood what

effect such capital controls would even have on the dollar and the economy. By April 1934, Roosevelt then announced to his Brain Trust that the country was off the gold standard. The Thomas Amendment to the Agricultural Adjustment Act allowed the president to devalue the dollar by 50% and issue \$3 billion in currency without gold backing. The Brain Trust was horrified. Everything they believed that the gold standard represented had come to an abrupt end. Some argued there would be riots, civil unrest, and maybe even a revolution. Money just had to be backed by gold in their minds. Nothing of that nature took place. In fact, it was the opposite effect that proved Warren was correct.

Roosevelt was very much an outsider looking in. He won the election because people wanted change. He did not speak of his ideas, for in politics, hey, that is just fair game — don't ask and don't tell policy.

To the dismay of the Brain Trust, the stock market took off like a rocket ship and jumped 15%. To the total amazement of the economists and bankers, this was the only act that made any real difference in turning the economy. The stock market continued to advance, rising sharply and nearly doubling over the

subsequent three months. The rally continued into 1937. Even wholesale prices began to rise as did orders for industrial goods. The only thing that lagged behind was unemployment. What they did understand was that employment would be the last to rise as companies sought to expand to the maximum possible production as it was unknown whether the reversal in trend would lead to a reversal of fortune as well.



The traditional economists and bankers failed to understand the role of money. They did not understand what happened in Britain. When Britain abandoned the gold standard in 1931, the devaluation of the pound marked the end of the

depression for Britain as prices began to rise. Warren was approaching everything from the fringe, making truly a groundbreaking evolution in the concept of money, but that is where all major change comes from in every field. Only those with creative minds can think out of the box whereas the field promotes conformity to gain the respect of the industry. This conformity is why the majority must always be wrong.

France, who had worked so hard to gather gold and seeing this as the means to European dominance, was now left alone clinging to its gold reserves, which was the largest in Europe and the second largest in the world. France made its people endure hardship by austerity for the image of a future greater glory. Finally, in 1936, the Bank of France abandoned the gold standard after it became overtly obvious that their economy was becoming isolated. They were unable to export due to an overvalued currency because their labor was too expensive.

The traditional economic thought considered Warren a crackpot. The conventional wisdom simply failed to comprehend money and its role within the scope of our collective society. They missed the entire point that money declines in purchasing power during economic booms and rises in purchasing power as assets decline during economic recessions and depressions, which causes the cost of labor to rise and creates unemployment.

The assumption that money had to be tangible was just not correct, for money rises and falls in value with economic booms (inflation) and recessions (deflation). The ultimate object of the medium of exchange is the exchange of one thing (object or labor) for another (object or labor). What constitutes "money" is simply the medium of exchange like words that relay concepts between two parties. At the core lies the perception of value that fluctuates according to demand and supply.

Therefore, Warren demonstrated that for prices to rise, the value of the dollar had to decline. Thus, the only way to do that was to abandon the gold standard. Gold is merely one recognized object of value. Its advantage is that it is movable compared to real estate which is fixed. Gold is internationally accepted as a valuable object, and thus it is free of opinion regarding quality unlike diamonds. It is the hedge against the government, but it need not be the medium of exchange to fulfill that role. Gold can be free to float outside of an official

sanctioned medium of exchange and provide the hedge against the policies of the state.

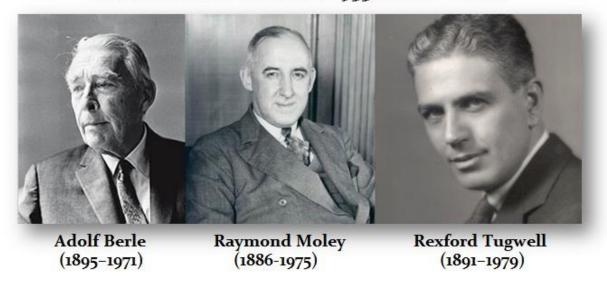
Consequently, it was George Warren who saved the day and contrary to the Brains Trust moved toward creating inflation to end the austerity. The "Brain Trust" became a term applied to the so-called group of advisers to President Franklin Roosevelt during his administration. It was Roosevelt's speechwriter and legal counsel Samuel Irving Rosenman (1896–1973) who suggested having an academic team to advise Roosevelt in March 1932. This Brain Trust was really for show, for being such a member is rarely ever taken seriously by the politicians involved. They have their ideas and listen to few, if any, non-political types.

The idea of an expert academic advisory group was not new. In 1917, President Woodrow Wilson prepared for peace negotiations following World War I and used a group of academics for the show just prior to his famous January 8th, 1918 Fourteen Points Speech. It was the journalist James Kieran of the *New* York Times in 1932 who coined the term "Brains Trust" when he applied it to this group of "experts" who Roosevelt ignored. On September 6, 1932, it was reported that Roosevelt's



"brains department" was helping him to create policy positions and speeches. The *Times* on September 9, 1932, called this same group a "brains trust." Newspapers began to call the group a "brains trust" by at least October 17, 1932.

Franklin D. Roosevelt's 1933 Brains Trust



The core of the first Roosevelt Brains Trust consisted of a group of Columbia law professors Adolf Berle (1895–1971), Raymond Moley (1886–1975), and Rexford Tugwell (1891–1979). Note that they were lawyers, not market investors, technicians, or economists. They knew how to get around the Constitution, but they did not know how to straighten out the economy. Still, these were the men who played a strategic role in shaping the legal policies of the First New Deal in 1933 — not the economists. They also never actually met together as a group. They each were solicited for their legal opinions by Roosevelt.

He later expanded his Brain Trust, adding James Paul Warburg (1896–1969) who was the son of the famous banker Paul Moritz Warburg (1868–1932). Nonetheless, James lacked the banking experience of his father. Louis Dembitz Brandeis (1856–1941) was another lawyer who became a Supreme Court Justice. Another lawyer educated in Chicago also joined the Brains Trust, Harold L. Ickes (1874–1952). Harry Lloyd Hopkins (1890–1946) was a social activist at the time whose philosophy created jobs and the WPA. The first woman appointed was Frances Perkins (1882–1965) whose background was in chemistry and physics. She at least had a vision compared to the lawyers and brought in the labor movement. Perkins later became the U.S. Secretary of Labor from 1933 to 1945. Another lawyer was Basil O'Connor (1892–1972) who went on to become head of the American Red Cross.



Roosevelt's Brains Trust was the subject of many newspaper editorials and editorial cartoons ridiculing them as impractical idealists. The media portrayed the image that these men were restructuring the economy, when in fact they were lawyers who were focusing on getting around the Constitution. The core of the Second Roosevelt Brain Trust emerged from men associated with the competing Harvard Law School. This group included Benjamin V. Cohen (1894–1983), Thomas Gardiner Corcoran (1900–1981), and Felix Frankfurter (1882–1965)

became a Supreme Court Justice although he was born in Vienna. These men played a key role in shaping the policies of the Second New Deal (1935–1936).

There was also Hugh Samuel "Iron Pants" Johnson (1881–1942) who graduated West Point and went on to get his law degree from Berkeley University in 1916.

Neither of Roosevelt's Brain Trusts were experienced in economics. Moley broke away in disagreement with Roosevelt and became a sharp critic of the New Deal. It was George Warren, the



farmer/economist out of the mainstream, whose idea was to devalue the dollar. The Brain Trust disagreed, and they had nothing to do with the devaluation of the dollar.

The confiscation of gold was a whole new issue, which was primarily done to



ensure that the government, and not the public, would make money on the revaluation of gold. It was also done to prevent the hoarding of money, which was a serious issue at that point in time.

Eventually, the gold standard collapsed and President Nixon was forced to close the gold exchange window in 1971 because there was no mechanism to revalue gold in proportion to inflation and the increase in money supply. One

cannot fix the price of "money" without fixing everything else. If wages rise and prices are free to float, then they do so against money, which means it then purchases less. Therefore, it is impossible to create a gold standard by fixing the price of gold without fixing the price of everything else, which is effectively

communism. This process began with silver rising as an industrial metal, which forced President Kennedy to abandon silver in his Executive Order 11110 in 1963. This abandonment of silver was then followed by the first crack in the gold standard in 1968, whereby a two-tier market began with gold trading in London at a free price that the member nations maintained at the Bretton Woods fixed rate of \$35. Hence, the economic pressure began during the early 1960s, and it was JFK who



Nixon closes Gold Window August 15th, 1971

began the process that led to the free-floating currency system.

Of course, Milton was incorrect from the standpoint of monetary policy that

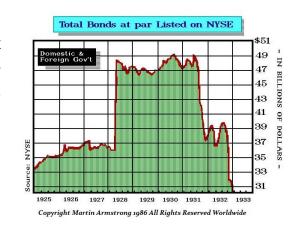


caused the collapse of the stock market. The correction between 1929 and 1930 was only 59% the Sovereign until Defaults of 1931. correction of 59% is fairly standard. We will see in the next chapter that the observations of Freidman ancient applied to events without central banks and government manipulation.

What turned the entire

affair into a massive depression began in 1931 with the sovereign debt collapse of European governments. Back then, the bankers in New York were marketing foreign government debt in small denominations to the average person on the street. When a sovereign debt crisis unfolds, major institutions normally suffer losses as was the case with the Mexican and Russian crises for example. During the 1930s, the losses were suffered by the average person, resulting in bank withdrawals and eventually a massive bank failure in the United States going into

1933 with more than 9000 banks failing. These foreign bonds from Europe and Asia were listed on the New York Stock Exchange. The economists did not take into account the destruction of savings that took place in 1931.



34

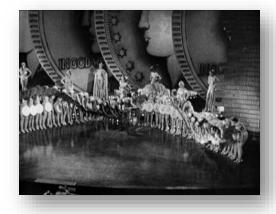


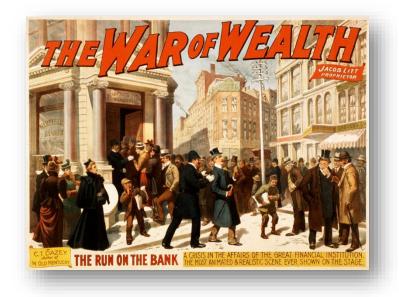
# What is Behind a True Vertical Market?

ne of the greatest mysteries to most people has been the fact that a domestic market will surge in price often doubling in price is a very short span of time. The typical explanation is some new fundamental like the DOT.COM Bubble. These events suck everyone in and inspire all sorts of news reports on the phenomena. At times, these events inspire songs like "We

are in the Money," which was a song from the 1933 Warner Bros. film, *Gold Diggers*. This song obviously mentions the Great Depression, reflecting the 1929 Bubble. The movie is about four girls looking for rich men.

On March 9, 2000 however, the people thought once again of the euphoria of "We are in the Money." What causes these bouts





of euphoria, which in the end people say are just smoke and mirrors that couldn't possibly last?

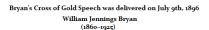
The Panic of 1893 inspired a play on Broadway. *The War on Wealth* opened in 1896 just a few years after the Panic of 1893. The play incorporated several aspects of the Panic of 1893, including a run on the bank in which frenzied

investors stormed the stage seeking to retrieve their money.

The War on Wealth was not a commentary on America's recent financial crisis. Instead, The War of Wealth was a melodrama intended to be light-hearted entertainment drawn from recent events. Like most melodramas, the plot featured a series of incredible coincidences. Robert Warfield married a woman with a shady past when a former lover conspires to ruin Warfield. He buys securities that are worthless in the bank's name and sets it up to cause a run on the bank. The ex-lover storms the bank, throws the cashier into the vault and locks it. Warfield blows the bank vault to save the employee and a wagon filled with gold then rumbles onto the stage, providing the bank with the funds needed to save the day.

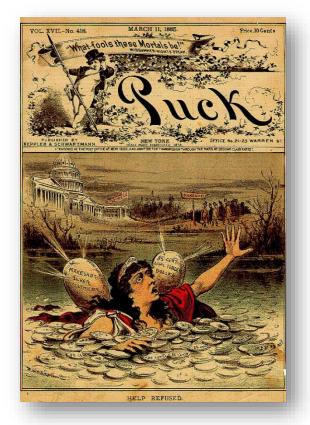
During the U.S. presidential election of 1896, William Jennings Bryan was nominated by the Silver Democrats who argued for

"If they dare to come out in the open field and defend the gold standard as a good thing, we shall fight them to the uttermost, having behind us the producing masses of the nation and the world. Having behind us the commercial interests and the laboring interests and all the toiling masses, we shall answer their demands for a gold standard by saying to them, you shall not press down upon the brow of labor this crown of thorns. You shall not crucify mankind upon a cross of gold."





the abandonment of the gold standard. Bryan delivered his famous speech at the 1896 Democratic Convention that "You shall not press down upon the brow of labor this crown of thorns; you shall not crucify mankind upon a cross of gold."



Consequently, the Silver Democrats sent the economy into a tailspin. The Sherman Silver Purchase Act of 1890 overvalued silver by setting the silver-gold ratio at 16:1. Arbitrage emerged where people could take gold from the USA by purchasing it with silver that was much cheaper in Europe. William Jennings Bryan refused to listen and simply wanted to eliminate the gold standard given the huge supply of silver that was discovered in the USA. The European gold reserves began to expand sharply with the US gold reserves collapsing at an alarming speed.

This serious drain on the US gold reserves caused by the overvaluation of silver led to the famous bailout of J.P.

Morgan (1837–1913) who saved the United States. President Grover Cleveland

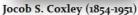
was a Democrat while J.P. Morgan was a Republican. Nevertheless, Morgan voted for Cleveland because he stood against the Silver Democrats and insisted upon sound money and the gold standard. Cleveland's speech during the Panic of 1893 about its cause lying in unsound finance established the common-ground between the two men.

Congress sat on their hands and refused to give the authority to replenish the gold reserves, which only cascaded the economy into serious crisis. The first march



John Pierpont Morgan (1837-1913)





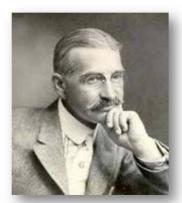


Coxley's Army Marched on Washington

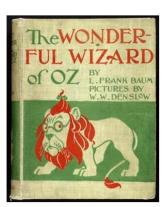
upon Washington was carried out by a group known back then as Coxey's Army. This was a group of unemployed men who marched during the depression year of 1894. Jacob S. Coxey

(1854–1951) was a businessman in Ohio whose idea was that government should provide employment by creating public works. His ideas were eventually incorporated in Franklin D. Roosevelt's New Deal and became the WPA in 1935.

Coxley set out for Washington with about 100 men on March 25, 1894, and arrived on May 1 with about 500. His First Amendment rights were of course violated and he was arrested for walking on the grass. They pretended his arrest had nothing to do with his march.



Lyman Frank Baum (1856-1919)



First Edition 1900

Frank Baum (1856–1919) was impressed by this movement and wrote *The Wonderful Wizard of Oz* satire. The Tinman was industry, the Scarecrow was



agriculture, the Cowardly Lion was William Jennings Bryan, and the Wizard of Oz was congress. The Yellow Brick Road was the gold standard. Once again, the booms and busts of markets within the business cycle inspired a book and movie.

Charles Kindleberger, a professor at MIT, wrote *Manias, Panics and Crashes* in 1978. The book provided a comprehensive history of financial crises, stretching back to before the South Sea

Bubble. He argued, not wholly original, that several common threads linked these different disasters over the centuries in almost all corners of the financial world. Manias, or bubbles, he argued, typically occurred in the markets following unexpected good news, and so reflected economic progress. He wrote, "New opportunities for profit are seized, and overdone." When this eventually dawns on investors, he argued, the financial system may experience distress and often panic.

Of course, back in 1978 economics was still in its own bubble of Keynesian Economics. A year later in 1979, Paul Volcker said this concept of New Economics had failed in his *Rediscovery of the Business Cycle*.



Charles Kindleberger (1910-2003)

Indeed, most economists who studied finance were in thrall to efficient markets theory, which in its purest form rules out the possibility of bubbles. In so far as it acknowledged past bubbles, the theory blamed them on immature, fraudprone markets and argued that they were unlikely to occur in sophisticated, well-regulated, modern settings. Hence, this New Economic Age was designed where economists could rule the world and smooth out the business cycle by advising the government.

After his book appeared in 1978, there were the gold and silver bubbles. More than 30 years later, people continued to expect the 1980 rally to reappear and destroy the US dollar. We then saw the Biotech Bubble into 1987, followed by the Japanese Bubble in 1989, and then the South–East Asia bubble when Thailand peaked in 1994 and crashed into 1998 with the Asian Currency Crisis of 1997.



Of course, the Asian Currency Crisis of 1997 hit because there was a mad rush into the new internet opportunities starting in the USA. The dollar made its historic low against the Japanese yen in 1995, and the capital flows began to shift causing the Asian Currency Crisis in 1997.

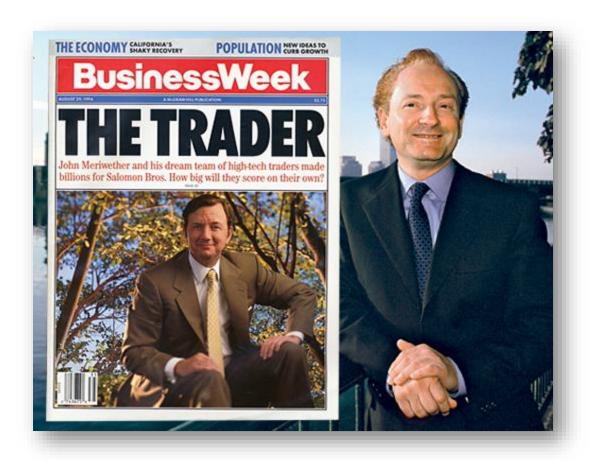
The efficient market hypothesis (EMH) was

coming unglued. It was an investment theory that stated it was impossible to "beat the market" because stock market efficiency causes existing share prices to incorporate and reflect all relevant information. Bubbles implied markets were not efficient.

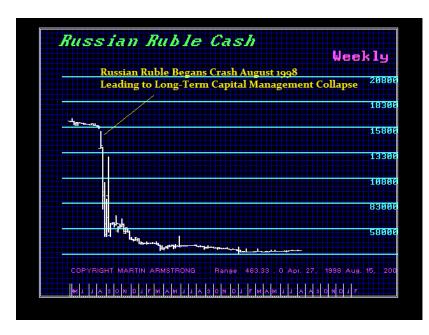
Hedge funds were implicated in the 1992 crisis that led to major exchange rate realignments in the European monetary system when the pound crashed. Then

again in 1994 Hedge funds were blamed after emerging market debt turbulence. Concerns mounted in 1997 in the wake of the financial upheavals during the Asian Currency Crisis of 1997.





Then in 1998, allegations were building against large hedge fund transactions when the hedge fund Long-Term Capital Management (LTCM) collapsed because of their investments in Russia. Government officials, fearing this new



threat to world financial markets, bailed out LTCM in a very controversial rescue.

The Long-Term Capital Management (LTCM) collapse in 1998 has often been referred to "When Genius Failed" by Roger Lowenstein. The collapse of Russia instigated the collapse of LTCM. Everyone and their 5th ex-wife were long on

Russian bonds. Bribes were paid to IMF members to ensure the loans would keep flowing to Russia so they could earn huge guaranteed interest payments on Russian debt.



The collapse of LTCM illustrated the problem that I have been warning about — everything is connected. The collapse came within weeks of the turning point on the ECM — July 20, 1998. The US share market peaked precisely on that day. The crisis in LTCM was that they were at least traders involved in many markets. They had positions in everything. Once Russia collapsed, so many other traders and funds were playing the Russia bet, and suddenly they now needed cash to cover losses. They began to sell other positions in other markets that had nothing to do with Russia just to get liquidity. This is why you cannot forecast *anything* in isolation or look at a simple one–dimensional cause and effect. This is when the economic rationale collapses into utter confusion and bewilderment.

The entire trading system was based upon what was known as the Black & Scholes Model, for which they won the Nobel Prize. The model completely failed, for it lacked the historical depth to back test the forecasts under all conditions.

The Black & Scholes Model is a study of price variation over time of financial instruments, such as stocks, that can be used to determine the price of a European call option. The Black & Scholes Model assumed that the market consists of at least one risky asset, usually called the stock, and one riskless asset, usually called the money market, cash, or bond. With these assumptions, the riskless rate is the rate of

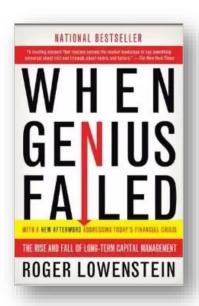


Fischer Sheffey Black (1938–1995)

return on the riskless asset such as a treasury note that is constant and thus called the risk-free interest rate. With Quantitative Easing, we can see how this assumption is already incorrect for it also presumes government never defaults.

Secondly, risk trade wrongly follows the random walk theory of market movement. The instantaneous log return of a stock price is an infinitesimal random walk, which they assumed moved in a geometric Brownian motion. They also assumed volatility remained constant. If volatility is random, that assumption will lead to disaster.

Brilliant men, who had no trading experience, created the models that resulted in the 1998 collapse of the Russian bond debacle in the Long-Term Capital Management (LTCM). When Genius Failed is a book that discusses the arrogance



of the firm and the era. Long-Term's partners relied upon what they thought was the magic formula that could predict markets. Their arrogance in mathematical certainties created a new age culture of Wall Street that set the stage for its collapse, yet it has still not quite gone away. This arrogance remains, and it has contributed to both the rise and fall of Wall Street in search of the perfect trade.



Following the 1998 LTCM debacle, over the next two years capital flows shifted globally into the United States and created the Dot.com Bubble for 2000 which lasted 104 days. Following the 1987 Crash, there came the 1989 Japanese Bubble, 1997 Asian Currency Crisis, and the LTCM Crisis of 1998. The theory of inefficient markets was starting to emerge as questions about the pure efficient markets theory was under fierce attack.

Now Mr. Kindleberger's work suddenly seemed spot-on. Studying bubbles

became all the rage among academia. school One thought to emerge was "Behavioral Economics," which viewed that recent bubbles proved that all market movement was truly irrational, and reflected psychological biases, such as over-optimism or pessimism, among investors.





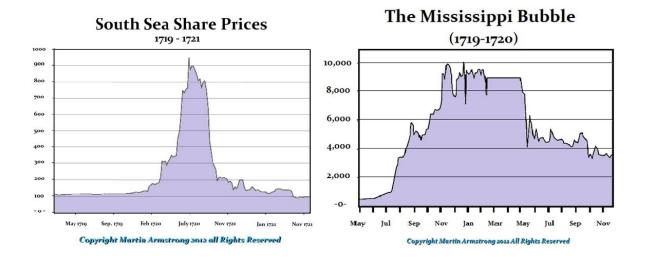
Only a few old believers clung to the notion that the rise in Dot.com share prices genuinely reflected likely profits and that regulatory inactivity caused their sudden plunge. They failed to see the connection that the expectation of the future has always far exceeded reality.

The railroads were the internet of the 19th century, which was where capital

concentrated up until its last rally into 1907. The next investor boom was into land speculation in Florida. That bubble burst in 1927. Finally, the capital then shifted into the industrial shares as the automobile would bring a new age of prosperity.

The common theme in most of these moves is the expectation of some new dynamic age. We had the automobile into 1929, and the internet into the Dot.com Bubble in 2000. If we look at the two major bubbles of 1720, we find the same idea of a new age during the South Sea and Mississippi Bubbles of 1720.



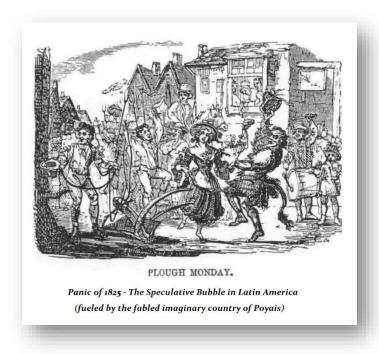


Even if we look at the two bubbles of 1720, the South Sea and Mississippi Bubbles, the common link is a new emerging market of opportunity. It is the same general proposition as the automobile bubble into 1929 or the Dot.com Bubble of 2000. Even the Japanese Nikkei Bubble of 1989 was the same proposition. This concept appears throughout history, and is taking place right now in the cryptocurrencies.

The lessons of this Mississippi Bubble are quite profound. One of the primary issues concerned the government intervention. John Law's (1671–1729) fatal mistake was assuming that there was a viable theory of absolutism that a king could

simply decree something and it would take place. The government tried to guarantee a floor to the stock of the Banque Royale. That proved to be a disaster.





Investing in some new dynamic, be it technology or a new world opportunity of an emerging market, has always been the lure to suck in would-be investors. There is no better example of that than the famous Panic of 1825 that began with the Bank of England arising out of speculative investments made in Latin America, which included an imaginary country that did not exist called Poyais. This crisis originated in England following

the South Sea Bubble idea of unlimited opportunity and wealth. This Poyais Bubble led to the failure of six London banks.

Very few informed rational investors ever hedge. Even among corporations, they

rarely hedge for it usually turns into a trade itself. There are also limits to hedging and arbitrage. The cost of hedging and arbitrage by no means remains constant. The costs will rise with volatility.

The 2007 Real Estate Bubble was enabled by the model used for the CDOs, which failed as did the model back in 1998 that led to the Long-Term Capital Management collapse. David X. Li, the Canadian math whiz, was blamed for the 2007 failure.



Mr. Kindleberger believed that "markets work well on the whole," but occasionally "will be overwhelmed and need help" from a lender as a last resort. He argued that there was both the danger of inaction by such a lender and the "moral hazard" that its mere existence can create by encouraging investors to be reckless if they believe that they will be bailed out if all goes wrong. Certainly, the banks have used that principle by arguing their leverage as primary dealers for government debt. If they are not bailed out and protected, the government cannot sell its debt. So, we have ended up with the Too Big to Fail, Too Big to Jail effect that in itself has to be investigated a bit deeper.



Kindleberger argued that a "lender of last resort should exist, but its presence should be doubted." It should always come to the rescue, but "always leave it uncertain whether the rescue will arrive in time or at all, so as to instill caution." Pulling this off is, he noted, would be a difficult "neat trick."

Then we have a disagreement with the whole lender of last resort theory. Central

banks have engaged in Quantitative Easing, and many see this as simply leading to the current bubble in stock markets created by easy credit, although nobody can be certain what effect tighter money will have had once the bubble continues. Other economists believe that the interest rate cuts after the 2007 Real Estate Bubble had been a triumph, preventing a severe recession in the United States. Others argue that the Fed has just postponed the day of reckoning.

Indeed, Kindleberger's Manias, Panics, and Crashes provided an engaging and entertaining account of the mismanagement of money and credit. However, did he discover that such policies led to financial explosions over the centuries? Granted, he covered such topics as the history and anatomy of crises, speculative manias, and the lender of last resort. While he opened his mind to see that such bubbles took place across centuries, what he failed to understand is that capital concentration creates the bubbles. Many critics blame the free markets and point to these bubbles that must be stopped. But free markets are a bit like democracy: the worst system for allocating resources, except all others.



The Via Sacra (Sacred Road) in the Roman Forum, was the ancient Wall Street of its day. Cicero (106–43 BC) wrote that anytime there was news of a disaster in Asia Minor, a financial panic would run down this street because of all the money that was lent to that region (the emerging market for Rome). This is an early account of

international capital flows.

Cicero wrote about how financial panics would unfold when payments were hindered by the collapse of credit ("solutione impedita fidem concidisse"). When Pompey took control of the eastern wars, there was a surge of confidence, and everybody rushed to gain financial footing in the east.

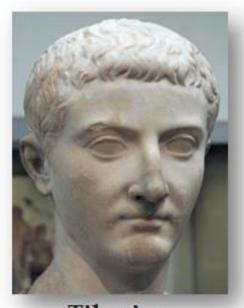
There was a vibrant banking industry in Rome. They constructed their arch known as the *Arcus Argentariorum* (completed in 204 AD). The dedicatory inscription is framed by two bas-reliefs representing Hercules and a genius. The construction appears to have been in honor of Emperor Septimius Severus (193–211 AD) and his family. After Severus' death, he was succeeded by his two sons, but Caracalla (198–217 AD) quickly killed his brother, father-in-law, and wife. Thus, their names

on the dedicatory inscription were chiseled off.

The banking industry began to plummet during the 3<sup>rd</sup> century after this arch was constructed. Perhaps it was the high point of banking in Rome. As confidence in government declines, money is hoarded, reducing the supply, and government is forced into massive debasement to pay its bills.



Roman Moneylender (Banking) Arch of 204AD known as the Arcus Argentariorum



Tiberius (14-37AD)

The financial panic of 33 AD provides one of the few detailed accounts of events recorded by the ancient historian Tacitus (56–117 AD) whose primary focus appeared to be moneylending. Of course, Tacitus did not personally experience the event being born well after. Nonetheless, Tacitus (Ann. 6, 22) says that money lenders were charging illegal rates and were ordered to adjust their loans at legal rates within eighteen months, and furthermore, to invest twothirds of their capital in Italian real estate.

Tiberius (14–37 AD) ruled the Roman Empire and was notoriously frugal in his expenditures. He was so frugal, Tiberius

issued very few coins with no variety in design. Consequently, Tiberius never raised taxes during his reign, and in fact, lowered Roman taxes when Cappadocia became a province (located in modern Turkey). Tiberius' frugality also allowed him to be liberal in helping the provinces, such as when a massive earthquake destroyed many of the famous cities of Asia.

The political intrigue of the era appears to surround the prefect or head of the Praetorian Guard who had designs of being the heir to the throne. According to

Tacitus, Sejanus's first subversive act was the seduction of Tiberius's daughter-in-law, Livilla, at the time married to Drusus, Tiberius's son. Drusus, it seems, resented Sejanus's influence over his father so Sejanus, in conjunction with Livilla, poisoned him in 23 AD.

In 25 AD, Sejanus asked Tiberius for permission to marry Livilla, Drusus's



Drusus Julius Caesar (October 7th, 13 BC - September 14th, 23AD) Son of Tiberius (14-37AD)

widow. Tiberius refused. Tiberius perhaps began to suspect Sejanus of intrigue.

The following year, when the aging emperor withdrew from Rome to live on the Isle of Capri, from which Tiberius was never to return to the city Rome, the tables turned. Sejanus was planning to take over as emperor and Tiberius appeared to have Iulled him into a trap.



Tiberius (14-37AD) Silver Denarius - the Tribute Penny

Tiberius seems to have been far from a fool. He rejected Sejanus's initial proposal to marry Livilla in 25 AD, and then cleverly appeared to have withdrawn his objections in 30 AD. Sejanus was betrothed to Livilla's daughter (Tiberius' granddaughter) instead. The Prefect's family connection to the Imperial house was now imminent. Then in 31 AD, Sejanus

held the consulship with the emperor as his colleague, an honor Tiberius reserved only for heirs to the throne. This further made Sejanus assured he would be emperor. In 31 AD, Sejanus reached the pinnacle of his power and was effectively emperor himself. The contemporary sources paint the typical picture of senators lining up to pay respects to a man they considered their social inferior but who held the reign of power.

When Sejanus surrendered the consulship early in the year, he was granted a share of the emperor's proconsular power. Then on October 18th, 31AD, Sejanus was summoned to a meeting of the Senate. Sejanus assumed he would have been made co-emperor. Tiberius may have set the stage to lull him into complacency. Tiberius sent a letter to the Senate from Capri initially praising Sejanus quite extensively, and then suddenly denounced him as a traitor and demanded his arrest.

The political intrigue of 31 AD set the stage to the economic meltdown. Sheer chaos ensued. Senators long allied with Sejanus headed for the exits, the others were confused — Was this a test of their loyalty? What did the emperor want them to do? The Praetorian Guard, the very troops formerly under Sejanus's command, had been just secretly transferred to the command of Q. Sutorius Macro. They rushed in and arrested Sejanus, conveyed him to prison, and shortly afterward executed him. A witch-hunt followed. Sejanus's family was arrested and executed. Livilla perished for her role in poisoning Tiberius's son Drusus. Any

of the followers and friends of Sejanus were denounced and imprisoned or tried and executed; some committed suicide. Their corruption in securing land in Rome was suddenly exposed. All around the city, grim scenes were played out, and as late as 33 AD, a general massacre of all those still in custody took place.



The corruption had engulfed Rome under Sejanus. Tiberius resorted to the charge of treason (maiestas) clean house and to remove his enemies. Since his working relationship with the Senators was not a good one, repression was a convenient method of dealing with them. Dozens of Senators and Equites are on record as having been prosecuted. It was a precedent followed in later years by emperors more tyrannical still than Tiberius had ever been.

Tacitus' portrayal of Tiberius is one of vengeance. The historian Suetonius records that Tiberius became paranoid, and spent a great deal of time brooding over the death of his son.

Nevertheless, Tacitus provides a detailed account of the Financial Panic of 33 AD, which appears to be the culmination of the economic collapse in confidence and Tiberius engaging in monetary easing to solve the financial crisis.

The treason trials set off a series of prosecutions that were launched against the corrupt wealthy supporters of Sejanus who used laws that were nearly 100 years old and had not been enforced before this period. These laws targeted

moneylending and land in Italy, which had been the object of speculation under the corruption of Sejanus.

The treasury was bulging as the property was seized and resold. This resulted in a tremendous amount of money filling the coffers of the state and shrinking the money supply. The confiscation of property from the rich involved with Sejanus had a devastating impact and unleashed a massive contraction in the money supply that set off deflation. It is questionable if Tiberius struck much coinage during the crisis. Most of the coins struck in 33 AD appear to be from the east, namely the mint in Cappadocia.



Tiberius (14-37AD) with Drusus Caesar his son CAPPADOCIA, Caesarea-Eusebia AR Drachm (3.59 grams) Struck AD 33-34AD  $TI \cdot CAES \cdot AVG \cdot P \cdot M \cdot (TR) \cdot XXXV$ 

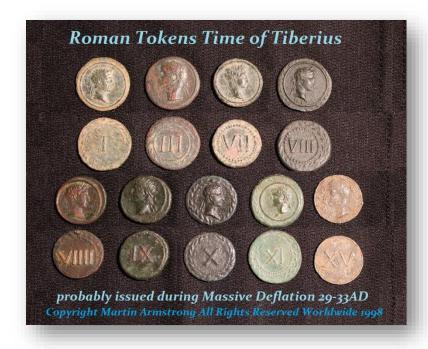
The Senate, in this case, sought to protect their own self-interests. The economic distress impacted all the Senators who then suffered a conflict of interest. As a result, they implemented an 18-month stay to allow those impacted by these laws that targeted land ownership and credit to

settle their affairs before final judgment.

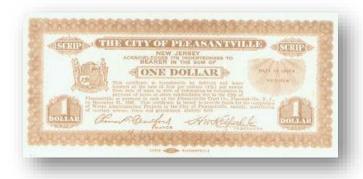
Limitations were then imposed on credit. It was required that two-thirds of every loan be invested in Italian land to reduce the speculation in the provinces. On top of that, it was decreed that two-thirds of every loan should be paid off. This massively deleveraged the economy and created the ancient version of the S&L Crisis in the US, which saw the failure of 1,043 out of the 3,234 savings and loan associations from 1986 to 1995. Like the S&L Crisis, changes in the regulations created a one-way market of all sellers and no buyers without absolutely distressed prices.

Restricting loans to Italian land and ordering two-thirds of such debts be paidoff set in motion the collapse in real estate. Loans were now called in to be paid in full, and nobody wanted to be associated with this witch hunt of the rich followers of Sejanus. Debtors were now forced to sell, and the market was flooded; real estate was collapsing the market prices for everyone. Combine this with a shortage of money, and this turned into such a financial meltdown that Tacitus recorded its significance.

There was a severe shortage of money, which was one of the observations of Milton Friedman argument in MHUS.



It was during the reign of Tiberius that we see a host of tokens being privately produced to compensate for the shortage of coinage.



We saw precisely the same response during the Great Depression in the United States during the 1930s. The lack of money in circulation resulted in hundreds of cities issuing their own money just to function.

Tiberius also saw the contagion spreading from the Senate's corruption that crippled the banking system. The firm Seuthes and Son of Alexandria was facing difficulties after the loss of three richly laden ships in a Red Sea storm, followed by a fall in the value of ostrich feathers and ivory. Nearly at the same time, there was the house of Malchus and Co. of Tyre with branches at Antioch and Ephesus. They suddenly became bankrupt as a result of a strike among their



Ephesus, Anatolia (modern Turkey)

Phoenician workmen and the embezzlement of a freedman manager. These two banking failures also affected the Roman banking house, Quintus Maximus and Lucious Vibo operating in the Roman forum.

These events set in motion bank runs in the Roman Forum, which then impacted another major Roman banking house of the Brothers Pittius. The Wall Street of the day in the Forum was the Via Sacra, which erupted in panic as merchants were impacted by a banking collapse and a shortage of money supply, as Milton Friedman pointed out during the Great Depression in the United States. There was then a rebellion among the people of Northern Gaul, and the emerging markets went into crisis as well. Money was contracting as nobody would lend and hoarding soared.

When Publius Spencer, a wealthy nobleman, requested 30 million sesterces from his banker Balbus Ollius, the firm was unable to fulfill his request and closed its doors. Over the next few days, prominent banks in Corinth, Carthage, Lyons, and Byzantium announced they had to rearrange their accounts, i.e. they had failed. This led to a banking panic and the closure of several banks along the Via Sacra in the Roman Forum as well. Money was in short supply.

As the crisis spread, banks began calling in their loans on everyone in an attempt to raise capital. When debtors could not meet the demands of their creditors, they were forced to sell their homes and possessions. Money was unavailable even at the legal limit of 12% interest. The prices of real estate and other goods just completely collapsed in a downward spiral of deflation. A full-scale panic was sweeping the entire Empire.



The Financial Panic of 33 AD became so severe it forced Emperor Tiberius to implement what we would call Quantitative Easing. The contraction began within a matter of days after arresting Sejanus. Eventually, the decrees which had precipitated the problem were suspended. One hundred million sesterces were to be taken from the imperial treasury and distributed among reliable bankers to loan to the neediest debtors. A loaf of bread sold for half a sestertius and soldiers earned around 1000 sesterces annually. So, this was about the equivalent of around \$2 billion in modern terms considering the lower population at that time.

The loans were to be interest-free; no interest was to be collected for three years. Security was to be offered at double value in the real property. This enabled many people to avoid selling their estates at distressed prices. Some arrested the contraction in prices and felt assured that the lack of liquidity would be

addressed. Many banks just never survived. This was the Great Depression of the Roman Empire. The observations of Milton Freidman were identical. The common link between all such events is the collapse in **CONFIDENCE**.



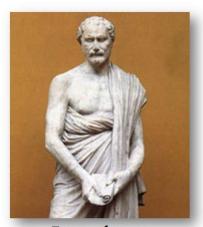
If we turn to Greece, we see another credit crisis that led to massive bank failures. The same observation of a shortage of money unfolded in Athens during the Financial Panic of 354 BC. Corruption between government and bankers is nothing new. During the 4th century BC, money that was donated to the gods became the temple treasury. Typically, the government would borrow from this hoard of cash, and thus temples emerged as bankers.

In Athens, one of the early banking crisis events involved what we would call the Secretary of the Treasury, so to speak, and his banking friends. While there may be some parallels to Hank Paulson helping Goldman Sachs during the crisis of 2007–2009, the events that took place are different but the ethics are probably very similar.

The Temple kept its donations in the Opisthodomos. The Temple was not earning interest on its hoard of cash. The treasurer agreed to lend the money to personal banking friends who would then pay the treasurer interest that he could personally put in his pocket. When the banking crisis hit, there was a liquidity problem and the banks could not repay their loans to the Temple. The value of assets declined against the available supply of money resulting in the classic shortage.

Demosthenes (384–322 BC) tells us that banking transactions were completely confidentially in Athens. He tells us that the rich could "conceal [their] wealth or in order that [t]he[y] might obtain secret returns through the bank." Dem 45.66.

The banker Aristolochos was said to have taken substantial deposits and owed many a significant amount of funds (Dem 46.50). The bankers Sosinomos and Timodemos failed with many others and were unable to meet demands for withdrawals (Dem 36.50).



Demosthenes (384-322BC)

With a banking crisis in full bloom, the treasurer was exposed. In an attempt to cover up the scandal, they set fire to the Opisthodomos. Nevertheless, the scheme was detected, and the Treasurers of Athena were seized and imprisoned, about 377–376 BC.

In 1989, government ministers of Crete pulled the same scam. depositing government funds in the Bank of Crete and interest was being diverted to themselves. It was the failure of the Bank of Crete that exposed the scam (See NY Times, 9/21/89, A14; 9/27/89, A3).

Aristolochos' bank failed, it appears, due to real estate prices collapsing (Dem 36.50). Then the bankers failed and all of their funds and property were seized. What is interesting is that Demosthenes warns his fellow Athenians of the dire consequences for all of Attica should the banker Phormion be forced into bankruptcy. "Don't throw [him] away! Don't allow this piece of filth to bankrupt him!" (Dem 57–58).



pawnbrokers, who were present in the marketplace or festival sites, changing the coinage of foreign merchants into local currency who were the first foreign exchange brokers.

What Demosthenes saw in the midst of one of the earliest banking crises in all recorded history was that the lending of money was clearly a leverage that indeed had supported the entire economy. The drop in real estate in ancient Athens is not unlike that of the 2007 crisis. The deep corruption on the part of the Treasurer is something that set off a public crisis and a collapse of confidence in banking.

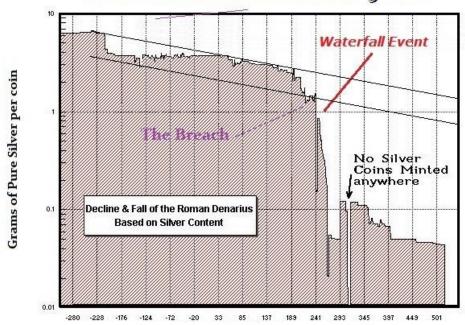
Ancient Greek bankers were known as trapezitai, which was a term that derived from their use of the trapeza shaped tables they would set up in the street of the Agora. They were initially active during the 5th century BC and provided a variety of services, primarily money changing such as

a foreign exchange broker. They also evolved into providing interest payments on deposited monies, pawn brokering, acting as notaries, and safeguarding valuables by storing money for people.

Demosthenes does make it clear that the people should be angry at the trapezitai (bankers) who failed (Dem 49.68). Reading between the lines implies he is trying to counsel the people not to panic or withdraw their funds from all bankers. They should be justly concerned and outraged by the bankers who have failed, but they should not by any means attribute that to all bankers.

These are words that have been repeated countless times in the midst of every financial panic throughout recorded history. They are repeated time and again. Demosthenes focuses on the individuals and tries to dispel the contagion that was spreading throughout the entire economy. There appears to have been a second period of a banking failure around 336 BC. This event involved a banker by the name of Herakleides. There are no doubt debates over these serious accounts. The 370 BC decade was one of a major Athenian banking crisis that seems to have involved government officials, which should come as no surprise.

## Collapse of the Roman Silver Monetary System Silver Denarius Basis - 280 BC - 518 AD



Copyright Martin Armstrong all rights reservede 2012

Of course, there was the major Financial Crisis of the 3<sup>rd</sup> century AD, which was set in motion after an invading force captured a Roman Emperor. Valerian I (253–260 AD) departed Rome for the east to deal with the rising threat from Persia. Valerian established his headquarters at Antioch in Syria and mounted his campaign against the Persians.

The fate of the empire seems to have been decided in 260 AD. That is when Valerian attempted a major assault by taking his legions through Mesopotamia. In a tactical error, his legions were surrounded and emperor Valerian was taken



capture by the Persians reached his son in Rome. From that moment on, confidence in the Roman Empire began to collapse. Valerian's son Gallienus had always been unpopular among the military leaders. People panicked and began to hoard money. The shortage in coinage in circulation forced Gallienus to debase the coinage very rapidly.

prisoner. Valerian was turned into a royal slave and made to be the footstool for the Persian King Shapur I (241–272 AD). This mural still survives, showing Valerian pleading for mercy before Shapur I. Eventually, Valerian was stuffed as a trophy upon his death.

In the autumn of 260 AD, the dreadful message of Valerian's



Diocletian Edict on Maximum Prices
(Edictum De Pretiis Rerum Venalium)
One of four pieces of the edict (in Greek) re-used in the door
frame of the medieval church of St. John Chrysostomos in
Geronthres, in Laconia, Peloponnese, Greece.

Once again, we can see that a collapse in confidence causes massive hoarding of coinage to the it necessitates point that debasement as the government tries to pay its bills by creating more money out of less metal. We know that this set off inflation, for in 301 AD Emperor Diocletian (284–305 AD) issued an edict to control wages and prices.

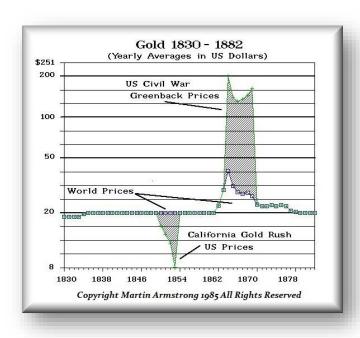
It does not matter what century we look at as the human response and government response has been the same. In 1971 when Bretton Woods collapsed, President Richard Nixon responded in the same manner as Diocletian back in 301 AD and resorted to wage

and price controls.

Even if we look at the 1869 Gold Panic, we find similar results. Gold peaked going into 1864 reaching \$200 an ounce. The cause may appear to be domestic since it was unique to the United States. However, if we pull back the curtain, we will see that this was when the United States entered a floating exchange rate system by abandoning the gold standard. We then have the United States Civil War that introduced uncertainty over who

The News and Observer

would win the war. This resulted in the 1864 peak in gold where it reached \$200 per ounce.



Even when they pull back, most bubbles will have already sucked in many people who believe it is a new era, which they often continue to keep alive (i.e. the very reasons the bubble was created). Therefore, we see in 1869 the famous attempt by Jim Fisk to corner the gold market and force it to new highs once again. The 1869 gold rally reached only \$162 per ounce before the bubble burst. Consequently, once a bubble takes place, people often expect that it will reappear once again very shortly. They do not want to give up the idea of a new era.

Booms and busts in various markets are typically transmitted from one country to another because of the currency movement. Foreigners will often buy a market because it is rising more rapidly than their domestic currency. However, such bubbles will accelerate quite rapidly when the focus of investment turns inward



from outside internationally. This makes it important to look at such events regarding all currencies.

# New York Gold Monthly 1982 - 1991 550 1983 High 1987 High 450 400 350 1982 Low 1985 Low 250 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 Copyright Martin Armstrong 2011 All Rights Reserved



Back in the 1980s, we published these two charts, which explained why gold was not going to rally for 19 years. It only appeared to be rising in dollars into 1987 because of the Plaza Account manipulating the dollar down by 40%. Gold was declining regarding all other currencies, so non-Americans were net sellers.

The gold bugs never got it. They swore gold would rally again. They utterly failed to understand that every investor buys or sells based upon their home currency (i.e., Smith's invisible hand of self-interest).

It is vital to comprehend that international investors will only act based upon their own currency. The foreign investor will be attracted even more to invest in that foreign market. Therefore, we see cross-border investment has taken place throughout the centuries only when it makes sense in their own currency. Many people believe that these bubbles that have taken place over the past 30 years are unique to financial history. Nothing could be further from the truth. As demonstrated, there has been historically a succession of waves of investment throughout the centuries going back to ancient Greece and Rome. The fact that Hammurabi's Code also includes wage and price controls implies that the business cycle was present even during Sumerian and Babylonian days.

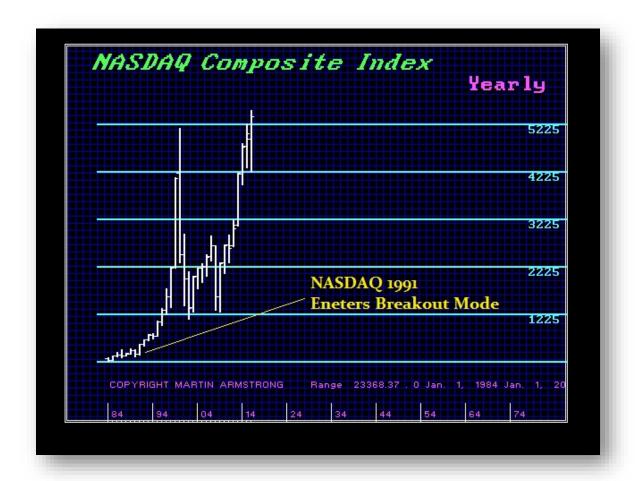
The wisest of all investors are instructed by reason forged through experience. Humans of less understanding construct reason without experience from sophistry; the most ignorant of all human beings act only from passion forged by necessity. Such is the nature of humankind. The only true reason comes from experience. To survive the future requires **confidence**. If you lack confidence, even in yourself, you are defeated before you begin. With confidence, you can take the first step into the future. But that confidence must be based upon reason — not sophistry.

In trading, the true goal must be understanding and not just the acquisition of wealth, which does not end all troubles, it just changes them from acquisition to preservation (the other side of the bell curve). What we have just reviewed is a brief history of financial booms and busts. We can conclude that fundamentals mean little. It boils down to what you believe, regardless of whether there is any truth in that vision.

Bubbles such as the ones in automobiles, internet, real estate, cryptocurrencies, or whatever, typically respond to what appears to be logical. What is empty is the understanding of time. The Scottish inventor Alexander Bain worked on chemical mechanical fax type devices and in 1846 was able to reproduce



graphic signs in laboratory experiments. He received British patent 9745 on May 27th, 1843 for his "Electric Printing Telegraph." It took more than 100 years to make the fax machine truly practical.



# The Breakout Transformation to a Phase Transition

uite often, when a market begins to prepare for a Phase Transition (doubling in price then crash) and a Plateau Move (sustainable new trading level), our model will identify the start as a breakout move. This is typically a normal pattern of a sharp rally. By itself, it does not reflect a doubling in price or any sustainable rally on a broader perspective. A breakout move is defined simply as a sharp, short-term rally. It does not imply a doubling or a new trading plateau altogether.

| Dorto       | Oracia | Llicub | Love   | Class  | DNIa  | DravD | Cammantt                                  |
|-------------|--------|--------|--------|--------|-------|-------|---|
| <u>Date</u> | Open   | підп   | LOW    | Close  | FINO  | rievr | Comment\$                                 |
| 19880101    | 33510  | 39750  | 32900  | 38140  | 7225  | 15828 | Preparing to Possible Rally               |
| 19890101    | 37890  | 48750  | 37690  | 45480  | 7225  | 7225  | Temp High                                 |
| 19900101    | 45290  | 47030  | 32300  | 37380  | 7226  | 7225  | Knee Jerk Low                             |
| 19910101    | 37300  | 58635  | 35300  | 58634  | 57021 | 7226  | Entering In Breakout Mode                 |
| 19920101    | 58004  | 67695  | 54595  | 67695  | 7227  | 57021 | Breaking-Out                              |
| 19930101    | 67531  | 79120  | 64471  | 77680  | 7228  | 7227  | Breaking-Out                              |
| 19940101    | 77411  | 80443  | 69095  | 75196  | 7229  | 7228  | Preparing to Enter Phase Transition       |
| 19950101    | 75131  | 107485 | 74047  | 105213 | 7223  | 7229  | Entering Phase Transition                 |
| 19960101    | 105283 | 132895 | 97779  | 129103 | 7224  | 7223  | Phase Transition                          |
| 19970101    | 129265 | 174878 | 119416 | 157035 | 7350  | 7224  | Phase Transition                          |
| 19980101    | 157410 | 220063 | 134387 | 219269 | 7351  | 7350  | Major Phase Transition                    |
| 19990101    | 220754 | 409061 | 219268 | 406931 | 7352  | 7351  | Major Phase Transition                    |
| 20000101    | 418619 | 513252 | 228816 | 247052 | 13340 | 7352  | Major Phase Transition HIGH               |
| 20010101    | 247416 | 289236 | 138706 | 195040 | 14787 | 13340 | Waterfall In Motion                       |
| 20020101    | 196518 | 209888 | 110849 | 133551 | 12475 | 14787 | Waterfall MAJOR LOW                       |
| 20030101    | 134693 | 201523 | 125322 | 200337 | 12431 | 12475 | Preparing to Rally                        |
| 20040101    | 201108 | 218556 | 175082 | 217544 | 18293 | 12431 | Starting Sharp Rally                      |
| 20050101    | 218475 | 227816 | 188983 | 220532 | 11471 | 18293 | Moving Higher                             |
| 20060101    | 221653 | 247095 | 201278 | 241529 | 15507 | 11471 | Pressing Higher                           |
| 20070101    | 242972 | 286151 | 233157 | 265228 | 54017 | 15507 | Important Reaction High Waterfall Likely  |
| 20080101    | 265391 | 266150 | 129548 | 157703 | 12455 | 54017 | Waterfall Subsiding                       |
| 20090101    | 157887 | 229580 | 126552 | 226915 | 14737 | 12455 | Waterfall MAJOR Low                       |
| 20100101    | 229441 | 267526 | 206114 | 265287 | 72085 | 14737 | Entering Breakout Mode                    |
| 20110101    | 267665 | 288775 | 229889 | 260515 | 7323  | 72085 | Breakout                                  |
| 20120101    | 265739 | 319693 | 262723 | 301951 | 57022 | 7323  | Moving to Phase Transition                |
| 20130101    | 309133 | 417773 | 307660 | 417659 | 57024 | 57022 | Major Phase Transition in Motion          |
| 20140101    | 416003 | 481495 | 394603 | 473605 | 15670 | 57024 | Major Phase Transition in Motion          |
| 20150101    | 476024 | 523194 | 429214 | 500741 | 15265 | 15670 | Temp High Major Still in Phase Transition |
| 20160101    | 489765 | 551237 | 420976 | 538312 | 15557 | 15265 | Phase Transition in Motion                |
| 20170101    | 542562 | 663552 | 539799 | 662422 | 1117  | 15557 | Possible Temp High                        |
|             |        |        |        |        |       |       |   |

Here is the output from the **Global Market Watch** covering the NASDAQ Composite on a yearly basis from 1988 onward. Notice that the market first enters this classification of a breakout in 1991. It remains **ONLY** in a Breakout Mode until it reaches 1994. Keep in mind that this is purely a pattern recognition model. You can see the Date, OPEN, HIGH, LOW, CLOSE are followed by the Pattern Number (PNo) assigned to that entry. The next column is the Previous Pattern Number. This allows us to create a database of pattern numbers and try to forecast what normally comes next. We see the Pattern Number sequence is 7226, 57021, 7227, followed by 7228, expressing the shift to a Phase Transition.



The pattern that emerged in 1994 is what we refer to as a "staging pattern" that will typically make a new high, hold the previous low, and close lower to make people believe the rally is over. This type of staging pattern can be tricky.

Here is an example of how it appears on a weekly level. It is still closing above the center point of the previous session on the yearly level. However, it does close weak below the mid-point level for the entire year of 1994.





The NASDAQ is rather unique insofar as it also illustrates Type II of the transformation process from a Breakout to a Phase Transition. This second type

of pattern is simply a thrust to the upside. It will rally sharply and close above the previous session high.

A thrust move of this nature comes after a Breakout begins, and is also indicative of a transformation from a normal rally Breakout to what will be a Phase Transition of a Plateau Move.





### The Phase Transition

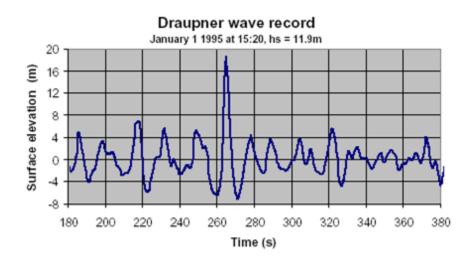
Transition unfolds as an isolated rogue wave of speculation that focuses on a single, typically unsustainable market, followed by a waterfall. Such moves often emerge from capital concentration that sucks investors in from all other sectors, domestically and internationally. The second pattern, which will be explored separately, is a much more profound event that amounts to a monumental change in trend. This second type of vertical market pattern, I call the Plateau Move. However, we must trade these two types of vertical markets completely differently. Each will test the skills of even the best-seasoned trader, for they are a rare occurrence. It takes patience and a global understanding to survive these tumultuous events.

#### The Rogue Wave

In the ocean, sailors have long told stories of the "Rogue Wave" that appears out of nowhere. These monstrous waves can be simply explained as a serious "cyclical convergences" whereby numerous cyclical waves of different frequencies combine and produce an abnormally "giant" or "large" wave that causes the amplitude of the individual waves to blend together producing the huge abnormal event.

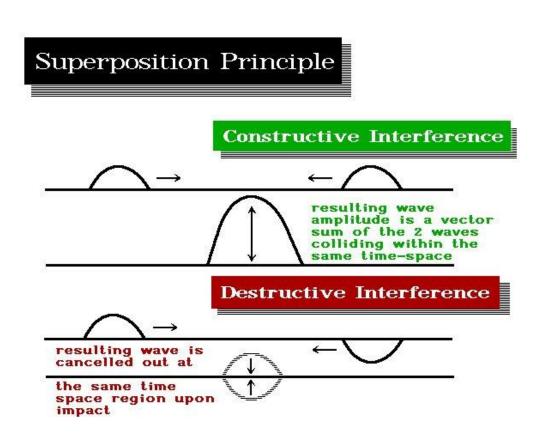


This famous Japanese print, known as the "Great Wave," does not portray a tsunami caused by an earthquake. The Great Wave pictures what its title denotes, simply a large *okinami* (translation: wave of the open sea). Until 1995, these "Great Waves" or "Rogue Waves" were known only from stories of sailors. The 1972 movie *Poseidon Adventure* depicts an ocean liner turned upside down by one of these monstrous waves.



In 1995, there was the first measurement of such a wave known as the **Draupner** wave or **New Year's wave**. It struck the Draupner oil platform in the North Sea off the coast of Norway on January 1, 1995. This provided the first opportunity to measure such a wave, and the study was carried out by an engineer named

Paul Taylor. The platform survived this event, but the wave, measured with lasers, was 84 feet high (25.6 meters) in a sea where the average wave was 39 feet high (12 meters).



These **Great Waves** or **Rogue Waves** are a product of the **Superposition Principle**. This is important to understand, for as we will see, this also affects the global economy. In physics as well as in systems theory, the **Superposition Principle**, or **Superposition Property**, states that for all linear type systems, the net result at a given point in time of converging two or more stimuli, becomes the **SUM** of the individual stimuli. Therefore, if we take the Great Depression of the 1930s, many stimuli took place at that same point in time resulting is a giant wave marking a depression rather than a recession.

Let us narrow our focus to look at just two effects. First, there was the Great Dust Bowl that wiped out farms at a moment in time when agriculture accounted for 40% of the employment within the civil workforce. Secondly, there were the



Sovereign Debt Defaults of 1931 where most of Europe, China, and South America defaulted on their national debts. This wiped out formation capital and impacted the failure of some 9,000 banks in the United States. These two trends converging together at the same point in time created a Rogue Wave within the business cycle.

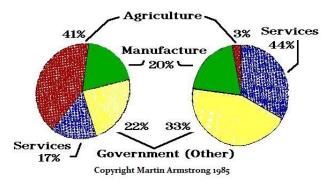
This was abnormal because the combined effect is known as constructive inference (the Superposition Principle). So the Dust Bowl (input A) produced response X, and Sovereign Debt Defaults (input B) produced response Y, and therefore input (A + B) produced a magnified response (X + Y).

Since agriculture accounted for 40% of employment in the United States in 1900, the introduction of tractors and the combustion engine, combined with the

devastation of the Dust Bowl, pushed unemployment to 25%. The Sovereign Debt Crisis wiped out savings and the banks. These two effects combined to create a "Rogue Wave" in economics, or what I am calling a **Phase Transition**.

Vertical markets that are of the **Phase Transition** variety typically begin from a sideways base like a

#### US Civil Work Force 1900 1980



Rogue Wave in the middle of an ocean. They are often distinguishable from the

**Plategy Moye** as they are usually isolated to a single market in a single sector and typically a single nation. It draws in capital from around the world, as well as domestically, combining forces into one of these giant waves.



The vertical market that unfolds constituting a big **Phase Transition** is short-lived. Another characteristic is that the market will typically double in value in the shortest amount of time. These events are dangerous for they suck in non-suspecting novice investors. Once sucked in, they lose a fortune in the subsequent crash as the market retraces back to the levels from which it began. Often those people refuse to accept that their reasoning was wrong for getting involved, and thus they tend to hold positions while expecting it rise again just as fast. This was the case with gold in its PT into 1980, which lasted only 57 days, and took the yellow metal from \$365 to \$875 for a gain of 240%. For almost 40 years, the same expectation has been the sales pitch behind gold.

The vertical market **Phase Transition's** hallmark is its doubling effect in the shortest amount of time followed by a **Waterfall** collapse. This type of move always sucks in the majority, for that is how they function. Like a tornado, they suck in

everything around them and cause people to think that the rally will never end. People often respond late to the rally and live in denial, expecting it to take place again at any moment as the subsequent correction unfolds.

These types of events draw in people from many other markets.

They essentially start following the leader and will come in at the last moment.



The recent October report of 2017 by the Commodity Futures Trading Commission (CFTC), the professional shows that investors have continued to bet on fallina Dow Jones (short) as private investors are starting to bet heavily on rising prices (long). Professional investors remain suspicious of a further rise in the US stock market. The private investors' view is exactly the opposite. It has been the so-called professionals who get vertigo and have continued selling every new high, expecting it to be the last. Their short-covering is what has kept the market rising.

There have been plenty of instances where the professional was dead wrong and the average person on the street outperformed the professionals. I remember my mother and her sister went to the bank the week interest rates peaked

back in 1981, and locked in CD rates at 20% for ten years. They never asked me anything. They said they never saw such rates and booked it. Obviously, a lot of other people did the same while the professional could not see the turn even when it smacked them in the face.

Reuters reported that 69% of hedge fund investors expected the second half of 2017 to be worse than the first half. So why are the professionals so pessimistic? I guess they got that one wrong as well. The talking heads on TV have been calling every high "the high" since 2011, and they still keep talking.

When you live and breathe the market every single day, it is hard to get a grip on vertical markets. The professionals, more so than the



average street investor, tends to do worse in such markets because it makes them uncomfortable. There is a self-gratifying notion that the market is over when retail investors come in. Yet, they tend to ignore the fact that there is a huge difference between the average retail investor and someone who has never invested who rushes in to join the party at the top simply be everybody else if

there.



Imperial Hotel Tokyo

I have told the story before of how I was doing an institutional-only seminar in Tokyo at the Imperial Hotel. An individual bribed someone in the hotel to get in. He came up to me and apologized, offering to pay. He said he just had to speak to me. I asked him what the problem was; he explained he had bought the Japanese share market on the very day of the high, and now it was crashing. His investment was \$50 million. But the intrigue came when he said

it was the first time in his life he had purchased any stock. He then had my attention since I was talking to the guy who bought the high.

I asked him what made him buy that day for the first time in his life. He replied that brokers had called him every year to say the Nikkei rallied an average of 5% every January with the New Year. He watched it for seven years and then finally bought the high. That is what I mean about the difference between the average retail investor and the fool who rushes in at the end because everybody else is there. When that final group of people rushes in, it marks the end of the market — not when average investors who follow the market buy.



In most good vertical markets, the professional short-term traders continually try to sell the new highs. This has been the group that has been bearish ever since 2009. They never saw new highs coming, and they still try to sell every new high today. They falsely believe that they are "professional," so they will be right, and the average investor is the fool. But the average investor sees the trend for what it is and goes with the trend, while the short-term "professional" keeps trying to beat the market. That will change. They will suddenly shift and become convinced to make that final rally.

Unfortunately, this type of vertical market, that I have classified as the **Phase Transition**, has led to catastrophic consequences. We all have heard that people were jumping out of windows during the Great Depression as the markets collapsed. There were also people jumping in Japan with the Nikkei crash. Watching everything you have go below zero is a serious issue. You can only hold on for so long. Those who do not look at the market objectively can even risk their life.

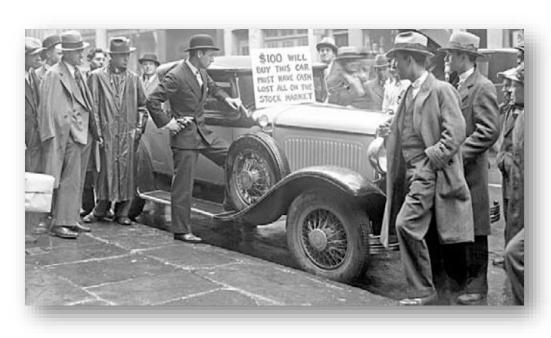
Today, the day trader who thinks he is limiting his risks and the program trader who tries to arbitrage ticks will typically get caught when they suddenly find that a lack of liquidity traps them in a position they cannot get out of. During a crash, liquidity becomes an instant virtue of the past. Those who assume that liquidity is constant have a lot to be concerned about.



The talking heads on TV try to explain market movements by always relating them to some sort of fundamental to make it sound logical, which is pure sophistry. However, when the underlying tone of a market is bearish and good news comes out, the market may pause for a brief moment and then collapse. The talking heads will immediately say that the news was "not bullish enough" and the market was anticipating better numbers. That statement by itself proves that fundamentalists are not

the real movers and shaker.

Indeed, the vertical market that unfolds producing a **Phase Transition** leaves behind impressive spike highs that are not seen again for a very long time. These are simply the cyclical convergence that must be understood to grasp what is actually unfolding. The **Phase Transition** is, therefore, the **Rogue Wave** which is easily distinguished by the aftermath. However, they are also distinguishable by their rapid doubling which warns of a spike high to be followed by a crash.





When we look at the 1929 **Phase Transition** high during the Great Depression, we see it took 62 weeks to almost double the market value, which rose from 202 to 386. The last surge was 13 weeks. From the last false decline on Friday, May 31, 1929, it took 67 days to reach the **Phase Transition** high. Gold was just 57 days (or interestingly 8.14 weeks) including weekends. Here we have a slower event,

but the last 17 days  $(2 \times 8.6)$  to the high was relentless.

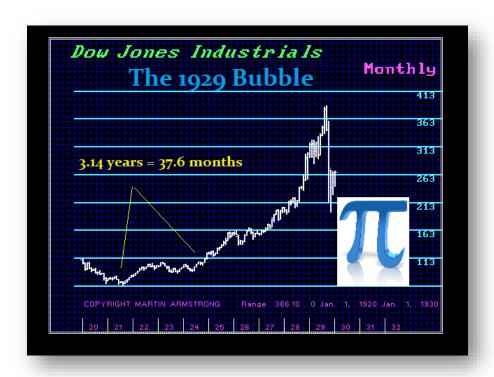
Obviously, the 1929 bubble took a bit longer to unfold than many other such events because there was indeed a new paradigm — the birth of the combustion engine and automobiles.





The Most Hated Bull Market Ever



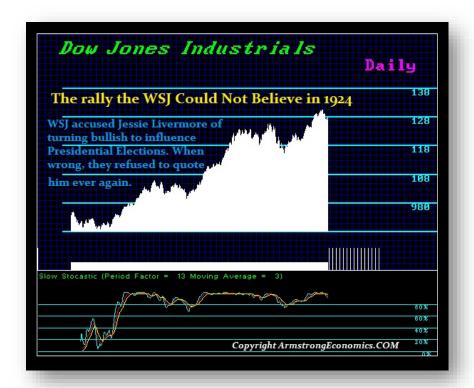


When we look at the duration of the 1929 bubble and compare it to the current rally in the United States share market, we obviously see a stark difference in the patterns. From the 1921 low to 1929 high, the time was 97 months and the extent of the rally was 512%. If we dig a bit deeper, we see that the first 3.14 years (37.68 months) was the consolidation preparing to rally. If we look at what took place in that first segment, we see a recovery, but a huge sideways basing. The Dow Jones Rallied from the August 1921 low at 63.9 to October 1924, reaching 104.1 or 65%.

This 3.14 years (37.68 months) produced an intense battle in the analytical world not much different from what we see today. The U.S. gold reserves had reached their highest point in history up to that point with nearly half of the entire world's official reserves held by the United States. Interest rates were easy, money was easy, and there was no appreciable sign of runaway inflation. The soundness of the banking system was in question as pessimists were predicting runaway inflation would take place as in Germany post-WWI. This type of attitude continued for many years because these were the very traders who kept shorting the market and spreading rumors about Jesse Livermore (1877–1940) to discredit his accuracy and experience, both of which they lacked. Their principles were based upon a foregone conclusion propelled by an

unwarranted assumption. They were using the Quantity of Money theory and swore this would lead to hyperinflation. Sound familiar?

Jesse Livermore had been proven correct, not only about the market, but about



the economy as well. Nonetheless. few people like someone who is correct more than incorrect. particularly when money is at stake. In fact, The Wall Street Journal refused to even mention the accuracy of his predictions in light of their own views, but many grew to fester a hatred toward the man. They accused Jesse of trying to influence the 1924

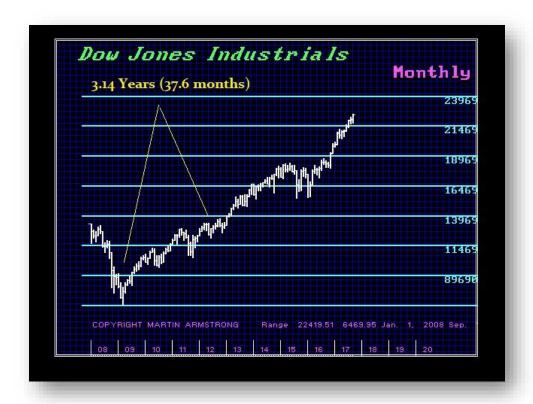
presidential election because he was friends with the president. They said that was the only reason he was bullish.

Corporate profits were up an average of 30% along with dividends as the expanding American economy prompted many members of the general public to take stock in America. The professionals and the media kept up the bearish forecasts.

Perhaps it was human nature to blame manipulation on Livermore rather than admit one's own error. Nonetheless, this attitude would continue to the point that his own life was being threatened because of his accuracy.



Jesse Lauriston Livermore (1877—1940)



If we take the first 37.6 months of the current rally in the Dow Jones Industrials from the March 2009 low, we come to May 2012. That produced a fake out to the downside and the lowest monthly closing just before the market began to take off to the upside. That segment was a rally from 6,469.95 to 13338.66 (106%).

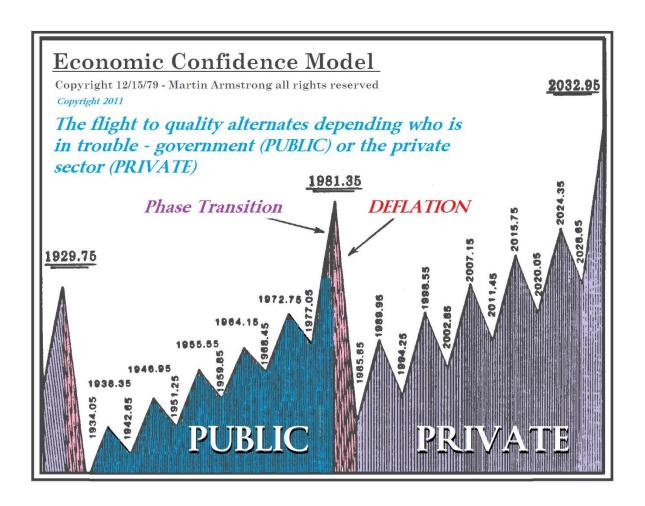
Now let us compare this to 1929 and the first 3.14 years (37.68 months), which was the August 1921 low at 63.9 to October 1924 reaching 104.1. At that same time, the 1929 rally produced an advance of only or 65% compared to the 2012 rally of 106%. This reflects that what we are dealing with is significantly stronger than the 1929 bull market.

Look at the extent of the entire Roaring '20s bull market into 1929 that lasted 97 months. That 97-month segment, which culminated in the 1929 bubble, saw the Dow Jones Industrials rally from 63.9 in 1921 to 386.1 in 1929, which is about a 512% rally. In the current market, the rally from low to peak during this 97 months comparison has been from 6469.95 to 21169.11, amounting to only a 227% advance. Therefore, if the Dow reached the same advance, that would be 33,121. Hmm, I guess the Dow may not be that overvalued.

Therefore, the entire pattern of the current rally does not match that of 1929. We see a steady, relentless rally in the current movement compared to the burst into

a **Phase Transition** that took place culminating into the 1929 high. In the current case, we have gone through four **Phase Transitions** since 1985. This speaks of something much more profound — a **Plategy Moye**.

| Date     | Open High Low       | Close PNo      | PrevF | Comment\$                                    |
|----------|---------------------|----------------|-------|--|
| 19880101 | 195076 219506 18459 | 9 216857 1818  | 15815 | New Pattern Forming                          |
| 19890101 | 216839 280908 21271 | 4 275320 7362  | 1818  | Starting In Breakout Mode                    |
| 19900101 | 275320 302426 23443 | 1 263366 23062 | 7362  | Breaking-Out                                 |
| 19910101 | 263366 320461 24470 | 3 316883 19178 | 23062 | Breakout                                     |
| 19920101 | 315210 344067 30957 | 9 330111 15605 | 19178 | Breakout                                     |
| 19930101 | 330110 379992 32319 | 5 375409 15605 | 15605 | Breakout                                     |
| 19940101 | 375410 399264 35524 | 7 383444 15868 | 15605 | In Breakout Mode                             |
| 19950101 | 383440 523562 38172 | 6 511712 57020 | 15868 | Converting to Phase Transition               |
| 19960101 | 511570 658953 50145 | 2 644827 15557 | 57020 | Phase Transition in Motion                   |
| 19970101 | 644750 829949 63528 | 3 790830 13476 | 15557 | Phase Transition Unfolding                   |
| 19980101 | 791020 938020 74003 | 0 918143 15904 | 13476 | Phase Transition In Motion                   |
| 19990101 | 918401 115687790632 |                | 15904 | Phase Transition High Close                  |
| 20000101 | 1150185117502896546 |                | 11217 | Phase Transition IMPORTANT High              |
| 20010101 | 1079092113500580623 |                | 13186 | WARNING Possible CRASH                       |
| 20020101 | 1002171106731071974 |                | 1811  | Possible Temp Low                            |
| 20030101 | 834238 104624474166 |                | 20119 | Preparing for Phase Transition Doubling      |
| 20040101 | 1045274108680797084 |                | 26195 | Phase Transition Building                    |
| 20050101 | 1078375109844610000 | 46107175020130 | 26650 | Phase Transition in Motion                   |
| 20060101 | 1071830125298810661 | 1512463152263  | 20130 | Nearing Phase Transition High                |
| 20070101 | 1245954141981011939 | 61132648219199 | 2263  | Phase Transition Major High Waterfall Likely |
| 20080101 | 1326182132795474493 | 8 877639 18337 | 19199 | Waterfall in Motion                          |
| 20090101 | 877225 105803364699 | 5 104280527105 | 18337 | Waterfall LOW                                |
| 20100101 | 1043069116250096143 | 2 115775126069 | 27105 | Entering In Breakout Mode                    |
| 20110101 | 1157743128760010404 | 49122175626668 | 26069 | Breaking-Out                                 |
| 20120101 | 1222119136618712035 | 09131041421213 | 26668 | Breaking-Out Preparing to Explode            |
| 20130101 | 1310430165882513104 | 30165766628904 | 21213 | Entering Phase Transition                    |
| 20140101 | 1657217181034515340 | 69178230719198 | 28904 | Phase Transition in Motion                   |
| 20150101 | 1782307183513615370 | 33174250315833 | 19198 | Phase Transition in Motion                   |
| 20160101 | 1740548199876315450 | 56197626015557 | 15833 | Phase Transition in Motion                   |
| 20170101 | 1987286233683719677 | 94232739611189 | 15557 | Phase Transition Easing CAUTION              |



The dot.com bubble was a Phase Transition much like the 1929 stock market bubble. From the 1990 low after the 1989 high, bottoming at 32300, the NASDAQ rallied to 513252 in 10 years rather than eight, but the highest yearly closing was in 1999. Hence, the bull market here was slightly longer in duration compared to the 1929 bubble.

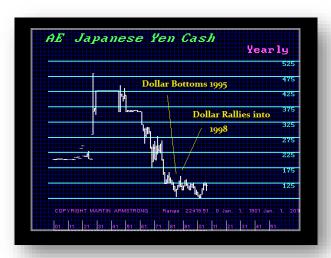
Of course, the 1929 bubble was followed by a massive decline from 386 to 42 in 34 months, amounting to about a 90% drop. Keep in mind that the collapse back then was due to the Sovereign Debt Crisis in 1931. In the NASDAQ, the decline was 78.4%, dropping from 513252 in 2000 to 110849 in 2002. The time in this instance was pi or 31 months compared to 34 months going into the 1932 low. Obviously, the dot.com bubble was purely a speculative bubble and not a profound breakdown in the global economy. The 1929 peak came with the peak of the 51.6-year wave of the ECM, whereas the dot.com bubble did not unfold with such a monumental turning point.



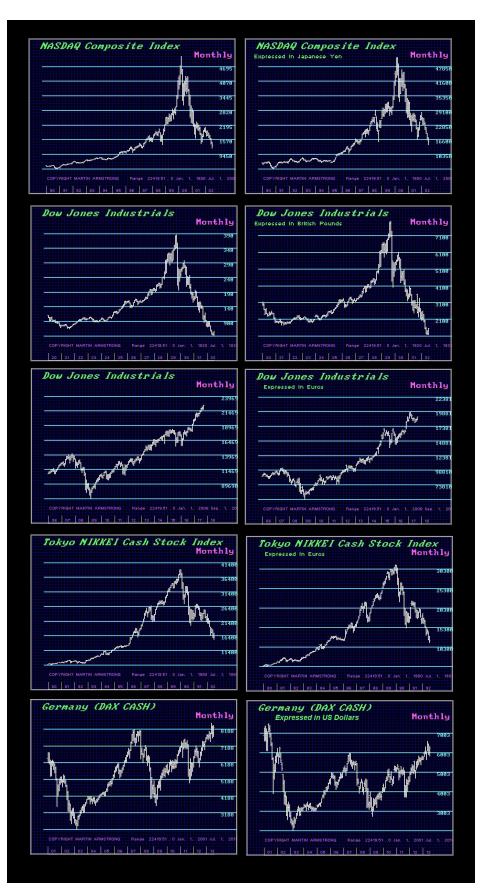
The breakout in the NASDAQ Composite began in 1995 with the change in trend for the dollar. It was 1995 when the dollar bottomed against the Japanese yen. We then have a three-year rally in the dollar which enhanced the NASDAQ rally from a global perspective. On the next page, you will see a comparison of various markets expressed in their local currency and then the dominant

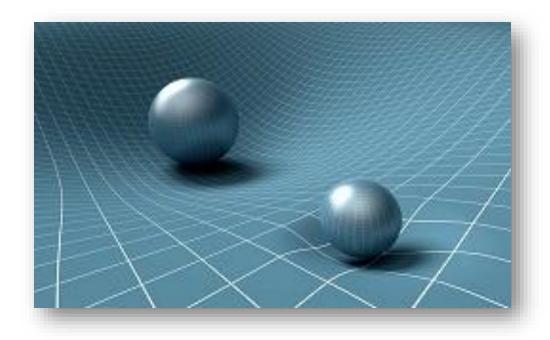
currency of that period. A market is enhanced when it is rising in all currencies, not just local.

The final count for the last leg of the rally in the NASDAQ was 104 days. The overall explosive move took five months as the market rallied from the October 1999 low at 263201 to the March 2000 high, which was a 95% rally. Here the decline was 31 months, equal to pi, whereas the 1932 low took 34 months from the



1929 high. In both cases, these rallies were focusing on new technology – the internet and automobile.

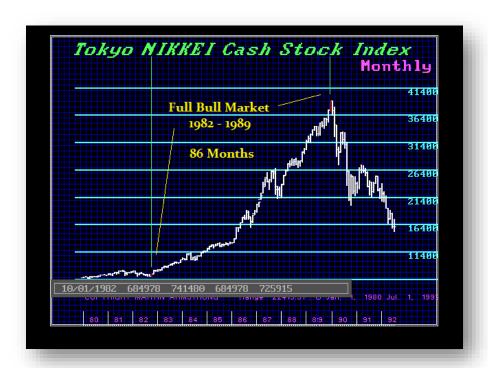




Looking carefully at these five market comparisons, which include the current rally in the Dow Jones Industrials, you will see that each of these market rallies has taken place in both the domestic currency as well as the dominant foreign currency at that time. Now, look at the last market — the German Dax. In local currency (euro), the market appears to be scoring important new highs. However, look at it expressed in US dollars. The market has not been making new highs in dollars, which is why it has not attracted a lot of foreign investment.

We must also understand that capital will be attracted to concentrate in a given market in a particular country when it is providing a profit opportunity to investors from outside the domestic economy. Those investors will judge their investment decision based on the performance of that asset in their currency exclusively.

Therefore, turning back to the 1929 bubble, we can see that it was the culmination of a major private wave with a rising dollar due to the turmoil in Europe and the fear of the German hyperinflation sparking a revolution on a contagion basis. There was a political shift in 1933 when FDR came to power in the United States, installing a version of Marxism. In the same year, we see Mao in China, and in Germany that same year brought Hitler to power. This was the profound political change that marked the shift from a private to public wave on the ECM that coincided with the 1929 bubble, but not the dot.com bubble.



When we turn to the Japanese Bubble of 1989, here too, we see that the **Phase Transition** emerged from the breakout that begins from the 1982 low and lasted 86 months. What is most interesting is the fact that 1982 also marked the change in direction for the Japanese yen. While the European currencies collapsed into 1985, the yen held its 1982 low.

What is fascinating is how everything appears to be as if it were truly predetermined. No matter what the event, everything appears to be a very subtle inference of what is to come. In this case, the yen low in 1982 sets the



stage for the entire
Japanese 1989
bubble. Also noted,
gold had first reached
an important low
within the normal
correction time frame
of two years from
1980 to 1982, but it
was just 29 months
rather than the more
common 34-month
drop. Gold fell to
\$297.50 in June 1981



and then rallied for eight months before reaching \$520 in February 1983. Obviously, 1982 provided a false low in gold that was penetrated in February 1985, dropping to \$282.60. The Deutschmark reversed direction and plummeted against the Japanese yen as well. These were just the tip of the iceberg, forewarning of a serious change in trend for Japan that began in 1982.

Once again, the final **Phase Transition** that culminated in the major high for Japan that lasted for the minimum cycle of 23 years was then in play, and that



final wave unfolded once more at 103 weeks.

To survive these events, never expect them to continue for a long time. They are very short in duration; the price often doubles, and the aftermath is always a Waterfall Event.

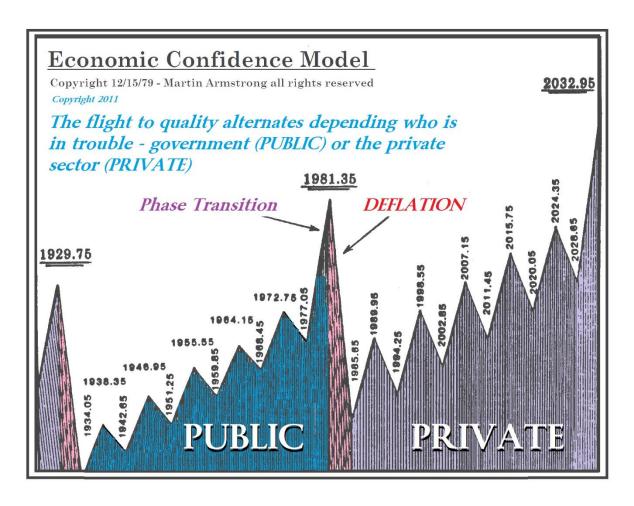


Before we move into the **Plateau Move**, it is important to note that 1982 not only signaled the reversal in trend for the Japanese yen and the first low in gold, but it also marked the final low in the Dow Jones Industrials just before it began its **Plateau Move**. This confirms that we need to look at the world and see all markets lining up to clearly grasp what is unfolding. Nothing but nothing takes place in total isolation. It is absolutely critical to understand what is going on.

# Plateau Move



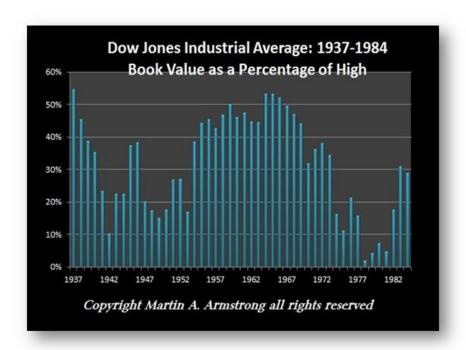
This is when the market under observation moves to a whole new paradigm and no Waterfall Event can take it back down to where it broke out from. This was the case in the Dow Jones Industrials in 1985, and confirmed the birth of the new private wave in the Economic Confidence Model which began 1985.65. Indeed, vertical market Plateau Moves are substantially different from the more common Phase Transition which creates spike highs that are not seen for many years after that. The Plateau Move is a more permanent change in the trading range. This move creates a completely new trading level that is sustained. There is no return to the former trading range. Such events are profound and often are interlinked with the Economic Confidence Model.



The importance of the Economic Confidence Model in defining the tone of the economy and financial markets is beyond contemplation. The Great Depression followed the collapse from the Roaring 20s that was a private wave. The collapse into the Great Depression brought into play the New Age of Marxism. While Marxism had made significant inroads, starting with the idea of an income tax that began during the 1890s, it began to take hold in 1917 with the Russian Revolution. It then took hold in the United States under the banner of socialism championed by Franklin D. Roosevelt (FDR). Following World War II, Marxism became the foundation of European politics.

As the public wave began in 1934.05 with the election of FDR, the focus shifted to the public sector as the safe bet — not private stocks that go boom and bust. Government debt was considered to be the best of the best rates, despite the fact that government debt always went bust historically. The collapse of 1931 saw massive defaults from Asia to South America. By the time we reach the final

8.6-year wave that began in 1977, tensions begin to rise. Margaret Thatcher was elected and the public sector unraveled as she started to privatize government-owned industries. She was followed by the election of Ronald Reagan. Inflation was soaring as people began to lose confidence in government.



A public wave is when government assets do well and private assets are shunned as risky. Here we can see the fundamental reason why the Plategy Maye was going to take place. A public wave began in January 1934 when FDR initiated his New Deal to reverse the Great Depression (1934.05). During a public wave, confidence shifts to government and the stock market takes second

place. This chart illustrates what happens in a public wave and why the market exploded. The book value as a percent of the high for the Dow Jones Industrials between 1937 and 1984 illustrates the point. The stock market was drastically undervalued. I was blamed for creating the "takeover boom" after advising a number of the takeover players. Companies could be bought, their assets sold, and you would double your money.



That demonstrated how oversold the market had become.

Fundamentally, a **Plateau Moye** took place because we were shifting from a public to a private wave on the Economic Confidence Model, and this is when private assets became oversold. Likewise, the same is true when the private sector collapses. That is when people flee to the quality they perceive to be government assets.

The **Plateau Move** was so important that we took the back page of *The* 

Economist for three weeks in July 1985, marking the beginning of this new private wave on August 25, 1985 (1985.65).

Such milestones in market trading do not show up every day of the week. They are often just once in a lifetime events. This is why few people have ever bothered to look at these type of moves that change the world around us quite profoundly.

The birth of the private wave in July 1985 also had a profound impact on government. Here too we find the confidence shifting from public to private. The government began to become much more active in trying to manipulate



Back Page of the Economist July 1985 ran for 3 weeks to announce the turning point in the world economy

markets, to say the least. It is all about holding on to power.



1985 Plaza Accord

From left are <u>Gerhard Stoltenberg</u> of West Germany, <u>Pierre Bérégovoy</u> of France, <u>James A. Baker III</u> of the United States, Nigel Lawson of Britain and <u>Noboru Takeshita</u> of Japan

The government sought to take control of the free markets to secure their role within the political-economic structure, which became the Plaza Accord that gave birth to the G5. The agreement was signed on September 22, 1985. The theory was to manipulate the dollar down to reduce the trade deficit and therefore create jobs. Paul Volcker tried to stop the inflation boom into 1980, and raised interest rates to insane levels.

As Volcker raised interest rates to make it too expensive to speculate, he failed to realize that the biggest borrower is the government. As a direct result, the cost to fund the national debt exploded. Capital poured into the USA, sending the dollar to all-time record highs. This is what set the stage for the Plaza Accord. No good deed goes unpunished. Fighting inflation into 1980 created the soaring dollar, and the solution was to plead with Europe to create the euro at the Plaza Accord to create some competition for the dollar.

THE CHAIRMAN OF THE COUNCIL OF ECONOMIC ADVISERS

November 8, 1985

Doar Mr Armstron

The President has asked me to respond to your latter of Octobar 25. It is important that concerned citizens such as yourself express that riews and we appreciate your efforts. We share your concern about intervention into foreign exchange rarkets. Numerous studies have failed to show that sterilized intervention has a long-run impact on the exchange rate, and unsterilized intervention affects the exchange rate while at the same time increasing the risk of renewed inflation. We agree that foreign exchange rate intervention is not the appropriate means by which to influence the exchange rate. We do not share, however, your concern over exchange rate volatility.

Sorth the high value of the dollar and the volatility of its value under the flexible exchange rate period have been sources of cohern for many. The first issue which needs to sources of cohern for many. The first issue which needs to and the implications reason behind the dollar's appreciation and the implications of the common performance. The simultaneous existence of common performance. The simultaneous existence of the dollar deficit and a sevidence that our international economic system is a evidence that our international economic system is a considered to the common that the exchange rate we observe need not be the one which balances the current account in a world of capital mobility. The exchange rate is instead influenced by both current and expected trade and capital flows. Intervention which attempts to force the exchange rate to a level thought to achieve a current account balance of zero is therefore misguided and may not be desirable.

In addition, one must remember that the exchange rate, at the same time, both reflects and affects economic variables. The exchange rate, for example, is affected by the mans variables which have led to the rise in the current account deficit. One important factor driving the present current account deficit is the difference in economic growth rates between the U.S. and the rest of the world. This economic growth which we now enjoy is therefore an important factor driving the value of the dollar.

The volatility of the exchange rate is also cited as evidence of disarray in international financial markets. We do not believe this to be the case. The exchange rate is the price of an asset which, like all assets, is determined by the values of future economic variables as well as by their current values. As is the case with many asset prices, day-to-day fluctuations which reflect a reaction to news can be large; however, the apparent volatility does not indicate

market imperfections or irrationality on the part of market participants. In addition, the empirical evidence does not support the hypothesis that exchange rate whatlity is an impediment to trade. On the contrary, international rade has floorished in the floating-tate period, expanding much more rapidly than it did during the fixed-rate period.

more rapidly than it did during the fixed-rate period.

The system you proposed to eliminate axchange rate volatility essentially implies a return to a fixed-exchange rate rate and the system would suffer from many of the same believe that such a system would suffer from many of the same essentially end of the Bretton Moods System. Since there is accountered under the Bretton Moods System. Since there is a countered to the same short the same shore the same short the same short the same short the same short the

In conclusion, we believe that the attributes of a floating rate system have been adminorpreted as deficiencies. Exchange rate specially reflects a rational response to current or expected energy reflects a rational response to current or expected reflects in accoundingly are accounted in turnoil; rather, the dollar reflects a healthy accountey in turnoil; rather, the dollar reflects a healthy accounted in turnoil; rather, the dollar reflects a healthy accounted in turnoil; rather, the dollar reflects a healthy accounted for the reflect and to reduce the uncertainty accounted for the reflect and to reduce the uncertainty surrounding exchange rate movements are those which encourage successing growth and monetary stability at hote and shroad. Actions which reduce faceal deficits, ensure noninflationary sometary policies, and yield a worlded for reduction in barriers to trade will promise progress toward such coals.

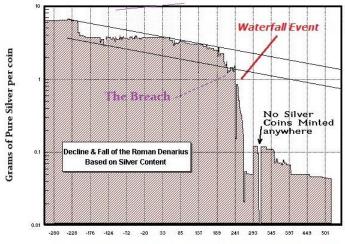
Bery W. Sprinkel

Mr. Martin Armstrong Chairman Princeton Boonomics International 101 Carnegie Center, Suite 314 Princeton, New Jersey 08540

I was asked for my advice by the government back then. It was clear what was about to happen. I was young and naïve so I tried my best to prevent what I knew would unfold. I wrote the White House, warning them not to try to manipulate the dollar down to reduce the trade deficit, for that would only lead to higher volatility. On November 8, 1985, the Chairman of the Council of Economic Advisors responded to my letter under President Reagan. Mr. Sprinkel stated that there was no evidence that intervening in the foreign exchange markets would cause a rise in volatility. "We agree that foreign exchange rate intervention is not the appropriate means by which to influence the exchange rate. We do not share, however, your concern over exchange rate volatility," he said.

I took every effort to warn the government that what they were doing would fail. My computer was picking up that the pattern formation would be a **Plateau** Move and not a simple **Phase Transition**, as had been the case in gold moving into its high on January 21, 1980.

#### Collapse of the Roman Silver Monetary System Silver Denarius Basis - 280 BC - 518 AD



Copyright Martin Armstrong all rights reservede 2012

The **Plateau Move** is by far the most powerful pattern that can develop from the upside perspective. It is the reciprocal of a **Waterfall Event**, which defines the collapse of a system. When a **Waterfall Event** takes place on a grand scale, it too implies the collapse of the system from which there is no recovery. Thus, it is the converse of the **Plateau Move**.

A **Phase Transition** is an isolated event that is more of a speculative rogue wave or blip rather than a sustained change in trend. In this case, such blips are followed by a quick **Waterfall Event** since it is typically created from a speculative frenzy rather than a profound economic change in the political economy. The collapse of the Roman monetary system was the equivalent of a **Plateau Moye**, yet in the opposite direction. Once the channel was broken, there was no recovery back to where it had once been trading — game over!

What we typically see is that the **Plateau Move** is usually the reciprocal of the **Waterfall Event** that takes place on the opposite side of the balance sheet. In the case of Rome, it was the currency that was collapsing in a **Waterfall Event**, so on the opposite side of the balance sheet tangible assets rose regarding the declining currency value. This was confirmed by the reforms of Emperor

Diocletian (284–305 AD). He issued an edict in 301 AD that was, in fact, wage and price controls. He was addressing the inflation in tangible assets.



Aurelian – 270-275 AD
IMP C AVRELIANVS AVG Radiate, cuirassed bust right.

Rev-RESTITVT ORBIS Woman standing right, presenting wreath to emperor who is standing left holding scepter. Q center over XXI in ex.

There is always an attempt to restore the economy, and this is when we see political change. While the currency collapsed into 268 AD, the reform began with Aurelian (270–275 AD) taking power. Note the theme on his coinage, "Restorer of the World."

When Diocletian comes to power, like Ronald Reagan, he promises to restore the empire from inflation to restore the

pride and dignity of the Roman people. He reinstitutes silver coinage.

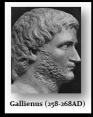
It was the capture of the Roman Emperor Valerian I in 260 AD by the Persians who turned him into a royal slave. Once that took place, all the Germanic and Gothic tribes saw Rome as weak and began to invade. Hence, Aurelian reformed the currency, and attempted to make it standardized by instituting mint marks so that everyone would know which mint was producing the coinage.

He also addressed the barbarian invasions. It was Aurelian who built the wall around Rome to protect it from the Barbarian invasions after the capture of Valerian I



Aurelian (270-275AD) Constructed Defensive Walls Around Rome

## Reform of the Roman Monetary System 292AD



The Collapse of the Roman Silver Monetary System during the 3rd century did not destroy Rome. It led to tremendous political upheaval, civil war, and the worst Christian persecutions. The Monetary Reform that followed the collapse took place under Deiocletian (284-305AD). He reintroduced fine silver coinage known as the Argentius.









Bronze Debased Double Denarius Amtoninianus

Silver Argentius

A new silver argentius was issued with about the same weight and fineness of that of the denarii during the reign of Nero - 96 to the pound (3.41 grams)

Nonetheless, the major reforms come into play with the Roman Emperor Diocletian (284–305 AD) 26 years from the collapse of the Roman monetary system. We see for the first time silver making its appearance back into circulation. However, we also see Diocletian's edict which instituted wage and price controls to stop inflation.

It was also Diocletian who instituted political reform. Instead of contests between generals to seize control of the throne, he established a tetrarchy. This was a new political system where there would be two emperors. Each would select the Caesar who would be next in line to the throne and serve under the other's domain. Diocletian was the first Roman emperor to retire and pass his throne to the Caesar ruling under him.

Therefore, after a major **Waterfall Event**, we should expect to see political reform, which is not far behind, that should take place within 26 years of such a collapse in the currency.



"Tetrarchy"



Therefore, the **Plateau Moye** is what takes place on the opposite side of the balance sheet regarding assets, whereas the currency purchasing power undergoes a **Waterfall Eyent** collapse. Here is the Japanese press talking about our forecast with the first objective being 6,000 on the Dow back in 1985. Our

forecast back in 1985 was for a **Plateau Moye** to reach 10,000 by 2000, which we accomplished after reaching 11,750.28.

Therefore, we have the **Plateau Moye** on the asset side against a **Waterfall Eyent** on the currency side. This is why all assets rise when a currency collapses.

Understanding this reciprocal aspect between the **Plateau Moye** and



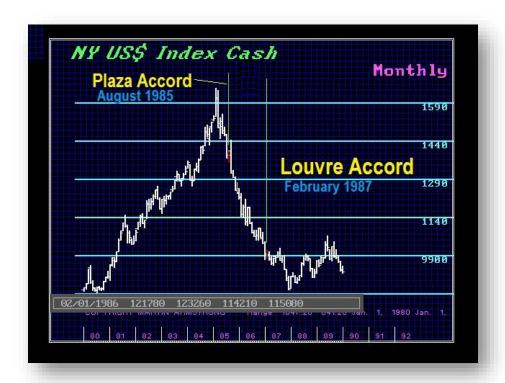
**Waterfall Event** is a view into the future. This is what happens when we enter a currency reset. If the currency collapses in the years ahead because the entire monetary system requires restructuring, then we are looking at a **Plateau Maye** in assets.



Plaza Accord - September 22, 1985

In the case of the events for the 1980s, the **Waterfall Event** was being instigated deliberately by the government through the actions of the Plaza Accord to reduce what they thought would be limited to a trade deficit to create domestic jobs. This deliberate act of forming the G5 in 1985 would set the stage for the private wave.

Share prices were far too low in 1985, and the proof of that statement was simply the fact that you could buy all the shares of a company, sell its tangible assets, and double your money! The share market had been seriously undervalued. Even the Japanese press was stunned by our forecasts that the Dow would rally to 6,000 and gold to \$1,000. The Dow reached our first 6,000 target by 1996. Our next target was 10,000, and the Dow reached 11,908 by 2000 and eventually 14,279 by 2007. Thereafter, our targets were 18,500, 23,000, and 40,000.



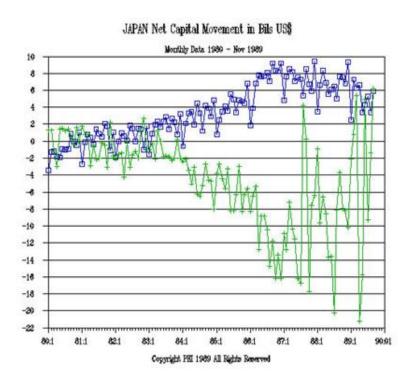
A **Plateau Moye** is indeed a profound event that must be understood within the context of the whole since everything is interconnected. The Louvre Accord was signed in Paris on February 22, 1987, just seven months before the 1987 crash. The now G7 realized what they had done was a serious mistake, and the volatility I warned would be unleashed hit them square between the eyes. The now G7, expanded from G5, attempted to correct the effects of the Plaza Accord with a new Louvre Accord signed in Paris.

The aim was to try to stabilize the international currency markets by reducing volatility and halting the continued decline of the US dollar set in motion by the Plaza Accord. The agreement was signed by France, West Germany, Japan, Canada, the United States, and the United Kingdom. Italy declined to sign the agreement.

The G7 meeting of central bankers and finance ministers in Paris announced that the dollar was now "consistent with economic fundamentals." The G7 announced that they would only intervene when required to ensure foreign exchange stability. The objective was then to manage the floating currency system.

Democrats gained control of Congress in 1986 and immediately called for protectionist measures. They also raised taxes, targeting the real estate boom. That would set the stage for the S&L Crisis by creating a one-way market where everyone tried to sell and get out.

The dollar depreciation agreed to in 1985 at the Plaza Accord failed to improve the trade perspective. In 1986, the trade deficit rose to approximately \$166 billion with exports at about \$370 billion and imports at about \$520 billion. The objective of manipulating currency to create jobs and alter trade flows proved to be completely ineffective. The Democrats wanted to then turn to protectionism.

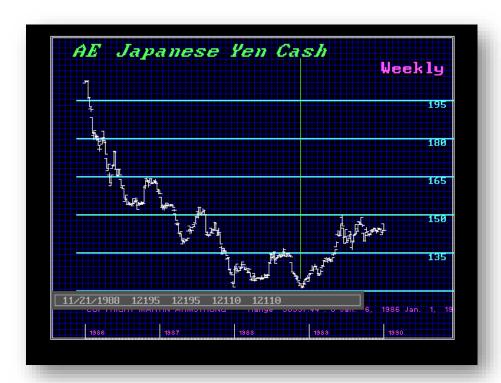


My concerns warning that volatility would increase made back in 1985 were materializing in spades. What the politicians did not understand was that lowering the dollar in value also led to a shift in capital flows and the selling of US assets. The Japanese had purchased nearly one-third of the national debt to help the trade friction, but such purchases are recorded in the capital account on the opposite side of the ledger from the current account. We can see that the Japanese began moving into Treasuries in 1984, and extreme volatility unleashed and produced the 1987 crash.



Foreigners were suffering losses by investing in US dollar assets be it debt, equity, or real estate. I was advising our Japanese clients to buy gold on the New York COMEX, export it, and then resell. This would also make it appear that the US exports were increasing. However, the lower dollar resulted in the importation of inflation into their own nations. The entire scheme of manipulating the dollar unleashed incredible volatility and exported inflation to Japan and Europe thanks to the G7.

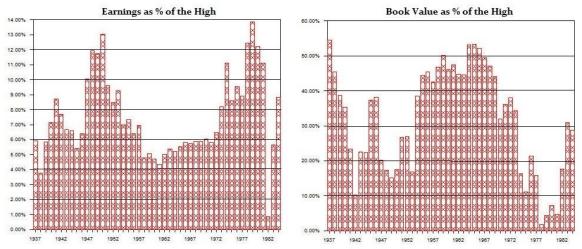
The Louvre Accord saw that the G7 was incapable of managing the economy, no less the currency. After they backed off on the position in the Plaza Accord, the rumors became viral that the dollar would go into a freefall in 1988, falling another 40%. With the G7 seen as impotent, the market simply panicked. Capital sold US assets, and at first there was even a contagion that impacted other share markets, as we saw in Japan during that fateful week of October 19, 1987. But the markets regrouped and turned back up to new highs as the talking heads were once again calling for a new Great Depression.



The bearishness on the dollar remained in play as it finally made its low for that move during the week of November 21, 1988. The dollar was starting to rise in advance of the Japanese property and share market bubble of 1989. The decline in the dollar had already begun before the Plaza Accord in August 1985. By the time we arrived at the Louvre Accord, the dollar continued to decline, and thus the confidence in the G7 was in serious trouble. The dollar had continued to decline despite the fact that in February 1987, the G7 said enough was enough. Here too we can see the dollar began to rise from 1988 into 1989, signaling that the trend was preparing to change once again.

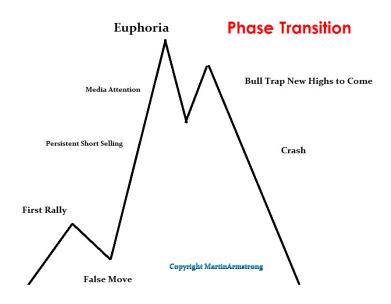
The attempt to manipulate the foreign exchange markets proved to beyond the capacity of the G5, which had been expanded to G7 (today it is the G20). The price action of the dollar proves that the central banks lacked the power to influence the markets. The trend had begun before the Plaza Accord, and it continued to decline following the Louvre Accord. So much for those who think all-powerful forces are dictating market moves. The collective force of everyone is the greatest force of all.

### Dow Jones Industrial Average 1937-1982



Copyright Martin Armstrong All Rights Reserved 1983

The market was seriously undervalued after a public wave, which results in everyone thinking government bonds are the safe bet. We have to understand that the Plaza Accord was the notion that they could lower the currency to help trade without any understanding of what it would cause on the asset side of the balance sheet. Therefore, a **Plateau Moye** is not like the typical **Phase Transition** that is an isolate rogue wave that creates the blip followed by the **Waterfall Eyent** in assets. Here, the **Waterfall Eyent** is in the currency and the assets rose in the balance.



# The Fan Projection



Phase Transition (the former is the reciprocal of the Waterfall Event in currency, whereas the latter is in assets and associated with a speculative event), we can move on to mapping such an event. The question concerns how to define how far up the event will go. To accomplish defining the scope of such a move, we must employ the technique of what I call a Fan Projection. This is constructed simply from the start of the event, regardless of whether this is a Phase Transition or a Plateau Move.

In this case it was 1985, and the very first high was the 1987 crash. Therefore, we connect the 1985 high to the 1987 high, and this will provide the scope of the upper resistance boundary. This will also help in determining if this will be a **Phase Transition** or a **Plateau Moye.** We then take the 1985 low and connect that to the 1987 crash low to find the lower support boundary.

Now pay attention closely. These upper and lower boundaries can be breached intraday slightly. They are not definitive in that respect. The key is the closing. Note that the 2007 high did not exceed the upper boundary, but the 2009 low slightly penetrated that support. It did not close below it, which confirmed that the rally was still in motion and we would see a retest of the upper boundary making new highs along the way. The fact that we had a high in 2000, 2007, and new highs currently clearly demonstrates that this is not a rogue wave or a blip as in a **Phase Transition**. The persistent movement to new highs confirms the **Plateau Move**.

Now focus in on the Dot.Com bubble for 2000. Note that the Dow did exceed the upper boundary and closed above it in 1999. That warned we would see

some follow through into 2000, and it was also a confirmation that we would experience yet another **Plateau Moye** as distinguished from the NASDAQ.

Obviously, 2016 reached 19987.63 intraday, which exceeded the **Fan Projection** that stood at 19795.46. So what does that mean? We saw 2016 close the year at 19762.60, just slightly beneath

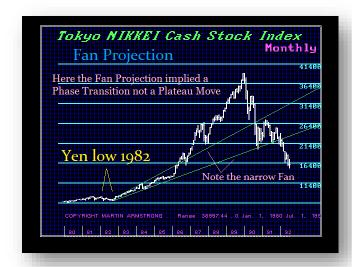
#### Fan Projections into 2020

2016 ... 19795.46 2017 ... 20383.35

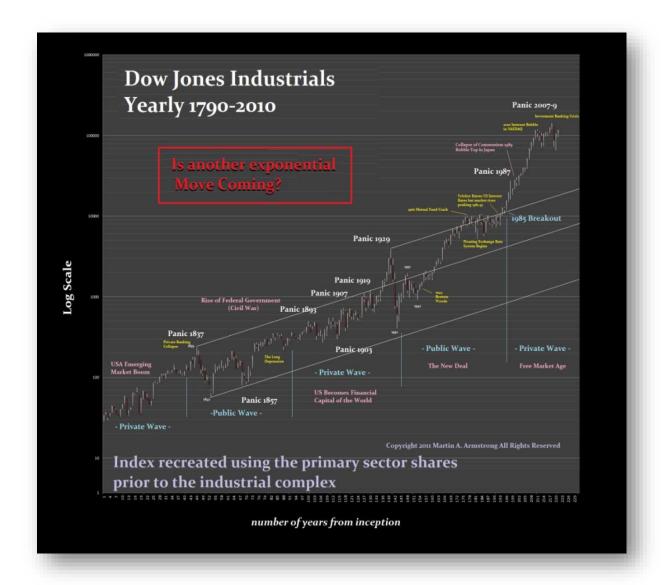
2018 ... 20971.24 2019 ... 21559.13

2020 ... 22147.02

the upper resistance boundary. For 2017, this stands at 20383.35, and for 2018 it stands at 20971.24. The critical question then becomes whether we are preparing for a breakout and continuation of the **Plateau Moye**. If we close **ABOVE** the 2017 **Fan Projection** of 20383.35, then we should see follow through to the upside in 2018.



Now, look at the **Fan Projection** on the Nikkei. We exceeded it, supported it, made a high, and then crashed. This confirms it was a **Phase Transition** and not a **Plateau Move** which typically follows the **Fan Projection**.



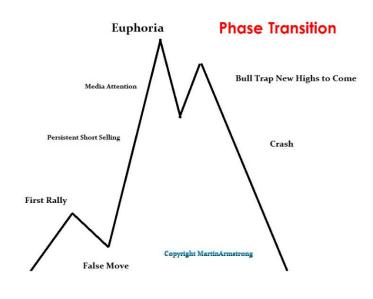
Even when we take the Dow Jones Industrials and chart this on a log scale, the hidden order remains. Still, we can easily see the **Plateau Moye** that begins in 1985. The 1929 event broadened the channel created from the 1837 Panic. Taking a parallel using the same angle to the 1929 high defined the 1985 **Plateau Moye.** Simply no other event could produce a warning as this pattern does or is confirmed on every model we have. From the government's perspective, if we did not yell, "Fire!" there would have been none. That's just plain nuts.

## Trading a Live Vertical Market



ow the question becomes how to trade a vertical market. The first and most important step is to establish a roadmap and understand that we have two types of vertical markets — the **Phase Transition** and the **Plateau Moye**. Then we must create a game plan based on the type

of vertical market. A game plan is essential to keep emotions in check to avoid buying the high or getting caught in the bull trap that takes place in an attempt to make new highs following the peak. So obviously we have to keep this in mind. We want to avoid the short selling during the rally as well. The **Fan Projection** shows us what is possible, broadly speaking.





Corrections are always a part of the process. The steepness of corrections in a vertical market can be up to 23% often, and the market would still be capable of a continued rally.

Here are the corrections in the Roaring 20s bull market into 1929. We can see that the maximum correction after the breakout took place in 1924 was 16.6% from the February 1926 high. The steepest correct of 19.3% took place during the pre-stage basing period before the breakout.

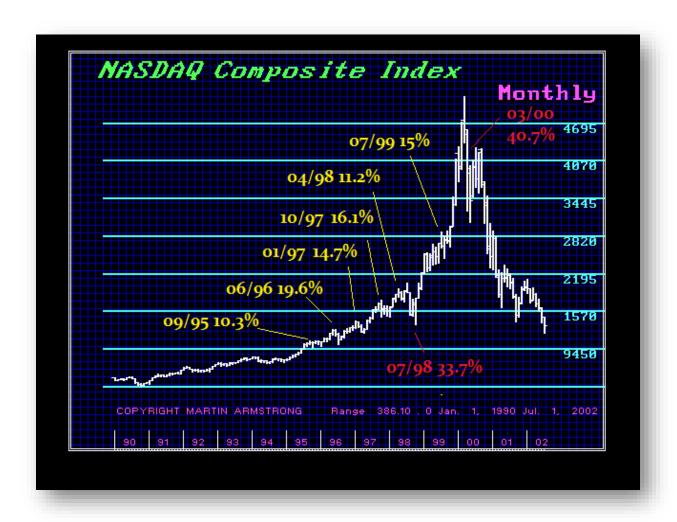
| Great Depression Corrections |       |       |             |        |  |  |
|------------------------------|-------|-------|-------------|--------|--|--|
| <u>Date</u>                  | High  | Low   | %Drop #     | Months |  |  |
| 10/22                        | 10346 | 9200  | 0.110767446 | 1      |  |  |
| 03/23                        | 10540 | 8500  | 0.193548387 | 7      |  |  |
| 02/24                        | 10130 | 8830  | 0.128331688 | 3      |  |  |
| 08/24                        | 10560 | 9900  | 0.0625      | 2      |  |  |
| 03/25                        | 12570 | 11500 | 0.085123309 | 0      |  |  |
| 02/26                        | 16230 | 13520 | 0.166974738 | 1      |  |  |
| 08/26                        | 16660 | 14570 | 0.12545018  | 2      |  |  |
| 09/27                        | 19900 | 17900 | 0.100502513 | 1      |  |  |
| 05/28                        | 22090 | 20200 | 0.085559077 | 1      |  |  |
| 02/29                        | 32451 | 28151 | 0.132507473 | 1      |  |  |
| 09/29                        | 38610 | 19535 | 0.494042994 | 2      |  |  |



Now let us look at gold. We can easily see that corrections are limited to up to three time units. If you go beyond that point in time, we are in a change in trend. The Reversals will dictate if that is a short or long-term change in trend. From the 1974 high in gold, only the first two Monthly Bearish Reversals were

elected. From the 1980 high, again, we only elected the first two Monthly Bearish Reversals. In both cases, the Reversal system confirmed the change in trend, but at the same time, it warned that new highs were still on the horizon after it completed a 19-year bear market. Once the breakout began after the 1976 low, the maximum correction was 23.4% until the crash in 1980.

| Gold Corrections |       |       |              |         |  |  |
|------------------|-------|-------|--------------|---------|--|--|
| <u>Date</u>      | High  | Low   | %Drop        | #Months |  |  |
| 08/72            | 7000  | 6010  | 0.1414285713 |         |  |  |
| 06/73            | 12700 | 8970  | 0.293700787  | 5       |  |  |
| 04/74            | 17950 | 13350 | 0.256267409  | 3       |  |  |
| 12/74            | 19750 | 9770  | 0.505316456  | 21      |  |  |
| 03/77            | 15480 | 13710 | 0.114341085  | 3       |  |  |
| 03/78            | 19250 | 16550 | 0.14025974   | 1       |  |  |
| 10/78            | 24860 | 19030 | 0.234513274  | 2       |  |  |
| 02/79            | 26030 | 22640 | 0.130234345  | 2       |  |  |
| 10/79            | 44970 | 36750 | 0.182788526  | 1       |  |  |
| 01/80            | 87500 | 45200 | 0.483428571  | 4       |  |  |

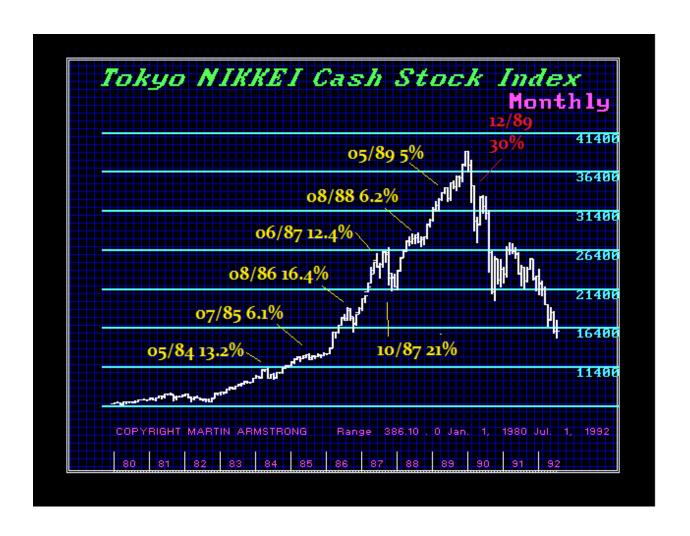


When we look at the NASDAQ bubble, we find the exception to the 23% rule. From the July 1998 high, the NASDAQ fell for three months, dropping 33.7% intraday. However, it still only elected the first two Monthly Bearish Reversals;

holding the third which was 127004, and falling to 134387 intraday with the lowest monthly closing being 149873 in August 1998.

The maximum correction otherwise was 198.6%. Note that once the high was in place, there was a 40% correction in two months. That correction confirmed the major high was in place.

| NASDAQ Corrections |        |        |           |     |                |  |
|--------------------|--------|--------|-----------|-----|----------------|--|
| <u>Date</u>        | High   | Low    | %Drop     | #N  | <u> Months</u> |  |
| 09/95              | 107023 | 95936  | 0.1035945 | 554 | 1              |  |
| 06/96              | 125412 | 100804 | 0.1962172 | 268 | 1              |  |
| 01/97              | 140053 | 119416 | 0.1473513 | 36  | 3              |  |
| 10/97              | 174878 | 146561 | 0.1619243 | 313 | 3              |  |
| 04/98              | 193183 | 171504 | 0.1122200 | 019 | 2              |  |
| 07/98              | 202818 | 134387 | 0.3374010 | )2  | 3              |  |
| 07/99              | 287492 | 244222 | 0.1505085 | 536 | 1              |  |
| 03/00              | 513252 | 304266 | 0.4071800 | )99 | 2              |  |
|                    |        |        |           |     |                |  |



Turning to the Japanese Bubble of 1989, the steepest correction was 21%. Again, we see that corrections last only from one to three months. This one to three month time period is the major distinguishing factor between just a

correction and an actual change in trend. Here we see that 99% of such corrections take place at or under the 23% rule. The maximum appears to be 33%. Here, at first there was a four-month correction of 40% that warned any rally would be a bull trap.

|             | JAPAN   | NIKKEI  | Correction | ons |             |
|-------------|---------|---------|------------|-----|-------------|
| <u>Date</u> | High    | Low     | %Drop      | #Mo | <u>nths</u> |
| 05/84       | 1119017 | 970335  | 0.1328684  | 01  | 2           |
| 07/85       | 1302965 | 1223227 | 0.0611973  | 46  | 0           |
| 08/86       | 1893624 | 1581955 | 0.1645886  | 41  | 2           |
| 06/87       | 2592942 | 2270274 | 0.1244408  | 86  | 1           |
| 10/87       | 2664643 | 2103676 | 0.2105223  | 85  | 1           |
| 08/88       | 2847568 | 2670144 | 0.0623072  | 04  | 1           |
| 05/89       | 3433794 | 3260560 | 0.0504497  | 36  | 1           |
| 12/89       | 3895744 | 2725104 | 0.3004920  | 24  | 4           |
|             |         |         |            |     |             |



October 2017 saw two back-to-back 51.6-month cycles. Therefore, the risk of a correction, however brief, comes into play. To negate that, the Dow Jones Industrials must make new highs in November and close higher at month-end above that of October. Additionally, from a purely technical perspective, the support for an October closing will be 22459.48, and by November this will rise to 22,583.84. A continued rally beyond 2017 implies a test of the 40,000 level by 2022.

If the market OPENS 2018 **ABOVE** the 2017 high, that will probably be one of the strongest signals possible. The year 2018 is also a Panic Cycle. Without a cycle inversion, ideally an October high should lead to a two-month correction. If the current cycle inversion continues, then we are looking for a seriously wild ride ahead.

Keep in mind that the entire problem the majority has is simply vertigo. As explained previously, the market nearly rallied 500% from the 1921 low into the

1929 high. The same percentage rally from the 2009 low would bring the market up to the 30,000 level. Clearly, on a percentage movement basis, the Dow has not reached those sort of levels as before. However, we have exceeded the time frame of 97-months as of last April, warning that we may see a complete extension of this entire process and the final peak may not arrive until 2032.



So how do we even trade such events? This looks completely insane. We can see from our review that normal corrections tend to be 8% or less. The next category is 10–14%, followed by 15–21%, 23–29%, 30–34%, 40–42%, and 49–51%. Moving beyond 51% is a **Phase Transition** followed by a **Waterfall Event**, and new highs are not to be expected very soon.

There are even cycles to the correction process. When we look at the table on the current rally in the Dow Jones Industrials, note that the majority of corrections have been under that 8% threshold. Then we get a pop in a correction that will be one or two back to back corrections in the next category above 10%.

Look closely at this table. Note that from July 2007, there is a 10% correction and the next three are all over 10%. That defines a bearish trend into the final low which was a 45% drop. After the 2009 low, the majority of corrections were under 8% and any over 10% were one–time isolated events, until 2015 where we had two in a row over 10%. Since that time, we have been back to the first category under 8%. Note the duration is the typical correction frequency of one to three time units.

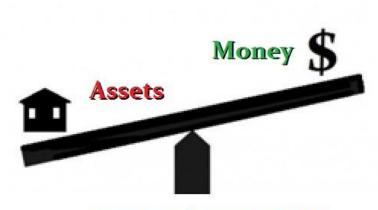
| Dow J       | ones Indi | ustrials (2 | 2006-2017   | <b>')</b> |
|-------------|-----------|-------------|-------------|-----------|
| <u>Date</u> | High      | Low         | %Drop       | #Months   |
| 05/06       | 1167019   | 1068332     | 0.084563319 | 2         |
| 02/07       | 1279593   | 1193961     | 0.066921279 | 1         |
| 07/07       | 1402195   | 1251794     | 0.107261116 | 1         |
| 10/07       | 1419810   | 1163482     | 0.180536832 | 3         |
| 05/08       | 1313669   | 1082771     | 0.175765737 | 2         |
| 08/08       | 1186711   | 646995      | 0.454799863 | 7         |
| 01/10       | 1072989   | 983509      | 0.083393213 | 1         |
| 04/10       | 1125801   | 961432      | 0.146001824 | 3         |
| 02/11       | 1239129   | 1155548     | 0.067451411 | 1         |
| 05/11       | 1287600   | 1186253     | 0.078710003 | 1         |
| 07/11       | 1275389   | 1040449     | 0.184210464 | 3         |
| 05/12       | 1333866   | 1203509     | 0.097728707 | 1         |
| 10/12       | 1366187   | 1247149     | 0.087131557 | 1         |
| 05/13       | 1554240   | 1455127     | 0.063769431 | 1         |
| 12/13       | 1658825   | 1534069     | 0.075207451 | 2         |
| 09/14       | 1735064   | 1585512     | 0.086193939 | 1         |
| 05/15       | 1835136   | 1537033     | 0.162441912 | 3         |
| 11/15       | 1797785   | 1545056     | 0.140577989 | 2         |
| 04/16       | 1816763   | 1706308     | 0.060797693 | 2         |
| 08/16       | 1872261   | 1788356     | 0.044814799 | 3         |
| 03/17       | 2116911   | 2037955     | 0.037297742 | 1         |
|             |           |             |             |           |
|             |           |             |             |           |



No foolproof stop can be used outside of the Reversal System. Nevertheless, a general rule to gauge risk is a standard three week moving average of the lows, not closings. Sometimes the market will close below this once and it proves to be a false signal. That can be judged by looking at the Reversal System with the Arrays for timing.

Here you can see that the week of 10/31/16 closed at 17888.28 and the three week moving average was 18024.00. Obviously, if you assume that a weekly closing below the three week moving average is a definitive sell signal, you could sell the low just before a rally.

Therefore, this is simply a guide to reflect where the general risk level lies. It is by no means definitive, and it is best to use the Reversal System. In that instance of 10/31/16, the Weekly Bearish was 17,713 but it was not elected. We will provide the three week moving average of lows in our reports.



ArmstrongEconomics.COM

## Conclusion

rading a vertical market is by no means easy. Far too many people simply get vertigo and have great difficulty getting beyond the persistent move to new highs. This reluctance to accept new highs is nowhere more prevalent than among the professional class. The idea that the time to sell is when the retail guy buys is a serious self-aggrandizing attitude that can cost you a fortune if not your livelihood.

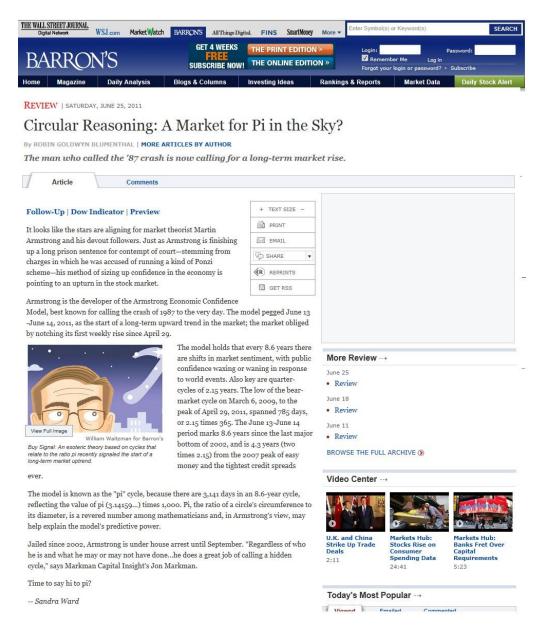


Understanding the clash between money and assets is vital to your survival. What is a rally in assets is a waterfall in the purchasing power of the currency. When it is scary to buy a market conversely means you are bullish on the currency. It is always a matter of perspective, so it is best to understand the environment you are dealing with.

The question of how high is high, well, we can only refer to history. As I have shown, to reach the same level of advance as the 1929 bubble, the Dow Jones Industrials must rally to reach 30,000. The same percentage movement that would be equal to the Nikkei from the 1974 low would put the Dow at 64,000 from the 2009 low.







Far too often the perspective of value is limited to the perspective of the domestic investor. Everyone acts out of their self-interest, and that is judged entirely by their currency. On the previous page, you will take note that the Dow Jones Industrials from 1971 to 2016 has been presented both in dollars and in euros. Note that the 2007 high was merely a reaction within a global bearish trend. The low in 2009, which was eight years from the 2001 high, was the major low. Consequently, it is the 2009 low that was the most profound cyclical turning point for the global economy. Perhaps now you can see a bit behind our forecast that the Dow would be off to new highs that Barron's thought was ridiculous (i.e., the majority must be wrong).

We must now exceed the 2017 high for this market to rally continuously. A new high in 2018 would imply we may see the real high unfold in 2022. The minimum target would then be 37,634.94.

Here is a table of target levels moving forward. If the Dow closes 2017 **ABOVE** 20323.96, it will be short-term bullish, but we need to

## **Dow Jones Industrials Projected Levels**

2016 ... 18630.45 18879.99 23251.20

2017 ... 19060.46 20323.96 25648.40

2018 ... 19490.47 21767.92 28045.71

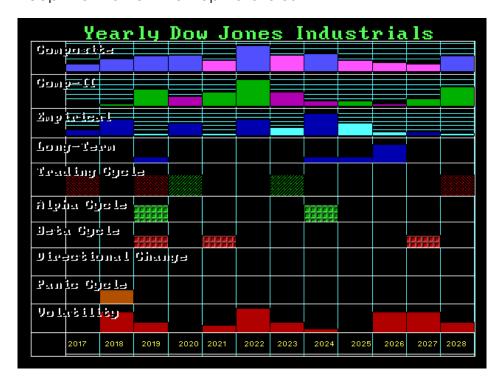
2019 ... 19920.48 23211.88 30443.02

2020 ... 20350.49 24655.85 32840.32

2021 ... 20780.50 26099.81 35237.63

2022 ... 21210.51 27543.77 37634.94

close ABOVE 21767.92. Then exceeding the 2017 high in 2018 and **HOLDING** 21767 will keep the market in an upward bias.



Without question, we have reached the focal point. The year 2018 is a Panic Cycle, and that should put us on notice that the Dow can run away to the upside. The rally is exceptionally strong in world currencies, so the more turmoil we see outside the USA, the greater the potential rally for a real breakout.



- Our model called for new highs on the very day of the low during the 1987 crash. Many people thought we were completely nuts. That forecast proved to be correct, and it had nothing to do with a simple personal opinion.
- 2. Our model called for new highs again after the 2000 high with a low in 2002. Once again, the market was also following the Economic Confidence Model.
- Then for a third time, our model called for new record highs in 2009.
   Once again, people thought this was nuts.

Why has the model consistently called for new highs and not the end of the world with a complete crash to 10 cents on the dollar as the majority of analysts have been calling? The simple explanation has been that our model distinguished this market movement as a **Plateau Moye** and not a **Phase Transition** that would have seen the Dow fall back to where it had begun. That primary distinction has led to 40 years of accurate forecasts that are not based on personal opinion.

## Dow Jones Industrials (1790 - 2017) (Log Scale)

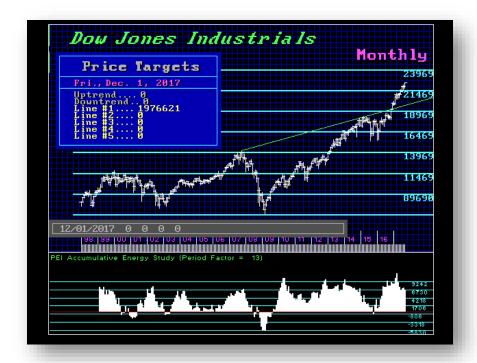


Now we are at heaven's door knocking once again. Here is the Dow Jones Industrials back to 1790 charted on a log scale. The 1987 rally punched through the upward channel constructed between the 1835 and 1929 highs. The 1987 crash was the fallback. But it came precisely to the day of the **ECM**. The new high from the 1989 forecast was correct. As you can see, the market began to form its base above the 1835–1929 projection. This was when resistance became support and we were off on a new **Plateau Move**. This pattern supported our forecast that the Dow would reach 10,000 when it was fooling around with 1,000.

The 2000 high was rather important because of the currency. The parallel from the 1835–1929 projection is taken from that high. You can see that 2017 has punched through that resistance once again. There is the risk of a fall back like we saw in 1987. If that took place, it would be extending the high into 2032.

So welcome to the focal point! We are at the threshold where we might see a fall back, like the 1987 crash, with 2018 being a Panic Cycle, or we may take off immediately by opening ABOVE the 2017 high, which would result in everyone running away chasing their own tail. That is when people just rush in because they do not understand what is going on.

The 1987 crash was a 40% move. Such a move today would take the Dow back to the 14,000 level. The very first Yearly Bearish Reversal lies at 15340. In 1987, the Yearly Bearish was 1075 when the high in the Dow was 2746. Looking at the Monthly Bearish Reversals, the sweet spot will be 18270.



We can see that our Energy Models are declining on a monthly level. The support from a technical perspective lies in the 19766 area. So while there is the potential to blast out the top, there is also the risk of a Panic Cycle in 2018 that could take it down and cause it to swing to the upside very violently. Either you swing in both directions or you just run away in one direction. That is what a Panic Cycle is all about.

Either way we look at this, we are in a plateau move that can carry us off to test 35,000–40,000 or with more time go to the 60,000 area before the world monetary system simply breaks.