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Debt-based Historical View vs. Productivity-based Historical View (Part 2)

**Productivity and credit have propelled the DJIA over the past 100 years**

In this second part of my series about debt-based vs. productivity-based historical views, I will analyze movements of the Dow Jones Industrial Average (DJIA) over the past 100 years to seek hints about the outlook for the stock market. In the past, stock prices have surged whenever there was a match between productivity and credit (debt). Amid today's deepening global financial crisis, we have reached the point where falling stock prices are very likely to produce a self-fulfilling simultaneous recession. What are the causes of the current volatility in global financial markets? And what will happen next? To answer these questions, we must study what happened in the past.

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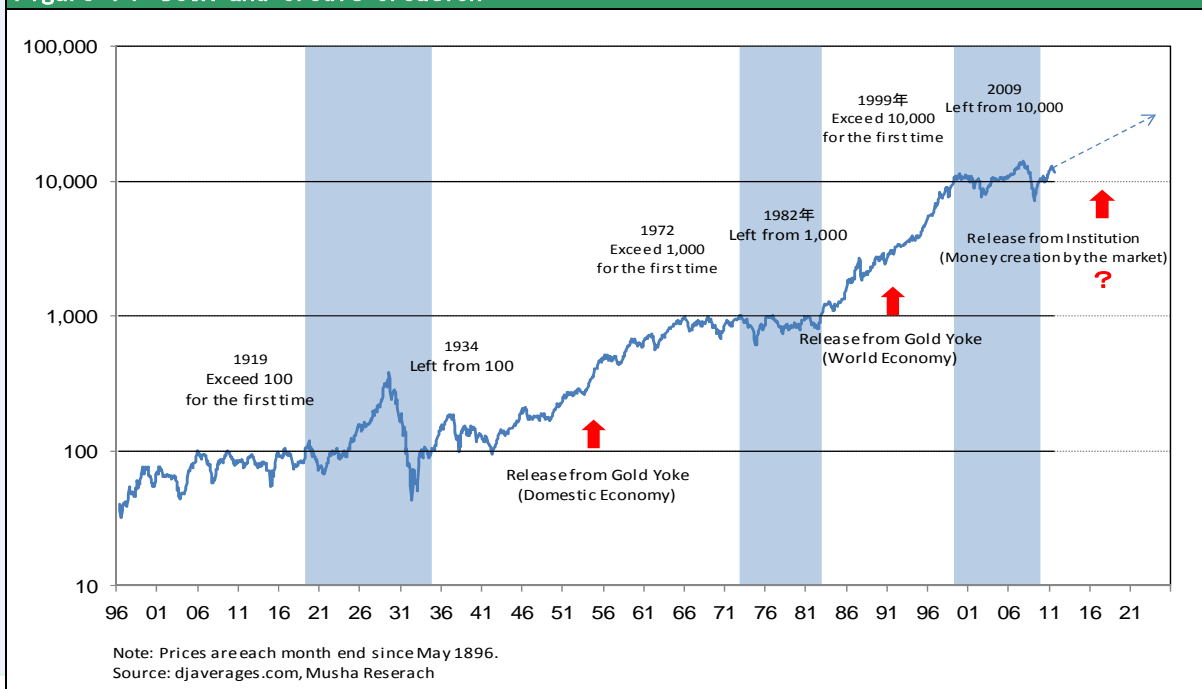
**The link between stock prices and economic stagnation and growth**

Figure 1 shows the DJIA over the past 100 years using a logarithmic scale. There is an unmistakable repetition of long periods of stagnation in stock prices followed by strong rallies. (1) Stock prices increased until 1920 and (2) were then flat between 1920 and 1934 (or even until 1942). (3) Between 1934 (or 1942) and 1972 (or 1966), there was a powerful upswing in stock prices. This was followed by (4) stagnation from 1972 (or 1966) until 1982 and then (5) another sharp upturn between 1982 and 1999. We are now (6) in the midst of a period of stagnation that started in 1999. The stock market has probably reached the end (exit?) of (6) the current extended period with no direction.

**\$100, \$1000 and \$10000 are major barriers**

Strangely, each period of extended stagnation started after the DJIA reached the significant milestones of \$100, \$1000 and \$10000. The average does not move well above these levels for 10 to 20 years. But we have seen a repetitive pattern in which a rally begins once the DJIA does move well above a milestone that boosts the average by 10 times. We should focus our attention entirely on answering the following two questions. First, what were the factors behind the two long-term bull markets over the past century that raised the DJIA by 10 times and will this happen again? Second, what type of phase is the stock market in right now?

**Figure 1 : DJIA and Credit Creation**



**Correlation with the Price of Gold**

I will have to entrust a thorough examination of economic history to the specialists. However, I believe that I can come up with an overall perspective of past events for the time being. The DJIA ended a long period of stagnation and started a powerful rally in the late 1930s and early 1940s and in the early 1980s. An event that happened at both times was an upturn in the price of gold. In fact, upward movement in the gold market was a precursor of a bull market that continued for many years

**The three requirements for prosperity: (1) A geopolitical regime**

Let's take a look to see what factors came together when a long-term bull market started in the United States. Looking back at past stock market upturns indicates that at least three events occurred at the same time. A summary is presented in Figure 2. First is a geopolitical regime. Second is an improvement in productivity (that is, an increase in supply capacity) fueled by a technology revolution. Third is a currency system that functions as a mechanism for creating demand.

Let's take a closer look at the first requirement. A political foundation that supports unrestricted commerce and provides a financial guarantee is vital to economic prosperity. Since the 1940s, the U.S. leadership of the Western world (Pax Americana) was the primary element of this foundation. Furthermore, prosperity in the 1980s and 1990s was backed by the extension of U.S. power to a global scale due to the collapse of communist countries. The American standard became the global standard as the United States established an overwhelming presence as the world's only superpower.

**The three requirements for prosperity: (2) Productivity revolution**

No one can deny technological advances dramatically raises productivity that triggers economic growth. Energy from petroleum was the foundation for the advanced U.S. consumer society that flourished between the 1940s and 1960s. Electricity and automobiles are the symbols of this period. Starting in the 1980s, business models were rewritten as progress in semiconductor technology fueled the information revolution. Naturally, advances in technology and productivity inevitably create growth in the ability to supply goods. If demand did not grow as well, the larger supply resulting from higher productivity would result in excess output capacity and an upturn in unemployment. In fact, an improvement in productivity is a double-edged sword. Higher productivity alone is not enough to support economic prosperity.

**The three requirements for prosperity: (3) Demand creation mechanism and currency system**

Finally, the establishment of a mechanism for creating demand is vital to prosperity. The widening gap between output capacity and insufficient demand was the cause of the Great Depression of the 1930s. The invention of the currency system and growth in credit were most likely the driving forces behind demand creation through economic measures (the only political / imperialistic response to the shortage of demand was to wage wars and control colonies). Emergence of the managed currency system played a key role in the prosperity that lasted from the 1940s to the 1960s. Under the gold standard, money supplies had been restricted by the need to store gold. With this limitation gone, the money supply could grow to the optimum level demanded by the economy. The expansion of credit thus functioned as the mechanism for creating demand. Since the 1980s, there has been a flood of so-called "paper dollars." The cause was the Nixon shock, which ended limitations on the global money supply that had been imposed by U.S. gold holdings. Excessive speculation and the formation of an asset bubble were by-products of this money supply growth. On the other hand, the expanding money supply led to the industrialization of Japan and other Asian countries and rapid economic growth worldwide.

**Figure 2 : A Century of Modern World History - Viewed from the Perspective of the Stock Market**

	Geo political Regime	Technology/ Productivity / Supply power	Currency Creation / Demand Creation
1st step (\$100→\$1,000)	Pax Americana 1 (Western world)	Petro - Auto - Elc. revolution	Managed currency
2nd step (\$1,000→\$10,000)	Pax Americana 2 (All world)	Information revolution	Global papered dollar
3rd step ? (\$10,000→\$100,000)	Global Common wealth	Net / New energy revolution	Market currency

### What about the three requirements now?

The lesson from the past appears to be clear. During periods of prosperity, economies expanded rapidly and stocks moved up for many years when at least three requirements were fulfilled. If this is true, then what is going to happen next in today's stock market? The political regime will probably shift from leadership centered on the United States to a framework of control that could be called a "Global Commonwealth." A transition is about to begin that will change the United States from the world's only superpower to the leader of this commonwealth. Under President George W. Bush, the United States was viewed as a country that forced its values on other countries for better or worse. Now we are seeing a transition to the America of President Obama. Barack Obama is not only the first Black president but also a leader who is overseeing a shift to policies that are significantly influenced by international public opinion. Examples include his call for the elimination of nuclear weapons, the decision to participate in a limited manner in the attack on Libya and his demand for the return of land occupied by Israel since 1967.

Why does the United States want to make these changes? There are three reasons. First is the comparative decline of the U.S. economy and rising influence of emerging countries. Second is the obvious global acceptance of U.S. values and systems. Third, the U.S. is leading the way for changes in technologies and systems behind three trends central to the emergence of a new age for the world: a level playing field for commerce, the global dispersion of business activities, and more open markets. That means the United States is trying to benefit as a nation from the establishment of a "Global Commonwealth." This leads to the question of what the common themes are for the concept that underpins this commonwealth. The most likely agenda includes the following components: (1) democracy and the protection of human rights, (2) a market economy and capitalism, (3) adapting to and using the Internet environment, resulting in a level playing field, (4) protecting the global environment, (5) utilization of "Global Governance" (making countries of the world into night watchman states with the authority to keep the peace). Governments around the world are moving toward dividing among themselves the roles of carrying through with this concept of a "Global Commonwealth."

The second requirement of technological innovation and growth in productivity will probably be a time of advances in Internet technology, culture and economic styles. There will also be a new energy revolution to stop relying on petroleum (and nuclear energy). In addition, there are good prospects for a steady improvement in productivity as globalization continues. The problem is the need to create a third requirement of demand creation mechanism. Past methods for extending credit are about to stop functioning because of a series of financial crises such as the subprime loan crisis and Greek debt crisis. At some point, a third currency and credit system or some other demand creation mechanism will be discovered. When that happens, I believe the world will enter another age of significant growth for economies, employment and stock prices. The rising price of gold fueled by the Fed's quantitative easing may be nothing more than labor pains associated with the birth of financial and currency systems for a new era.

All of these factors indicate that we are most likely close to the exit from the current prolonged period of stagnation that started in 1999. However, we are also in the midst of a phase that requires caution. Upcoming events will depend on how the three requirements can be brought together as the world deals with negative legacies from the past like the financial situation in Greece and elsewhere in Europe, the U.S. housing market problem and the deleveraging of U.S. household finances.