

# Asset Revolution(s) & the Sources of Volatility

by Robert McGarvey

Although economic volatility can have many causes, it has historically been most common in those periods of adjustment when a new class of assets with unknown and unfamiliar risks is being incorporated into the economy.

At the time of the Commercial Revolution during the 17<sup>th</sup> and 18<sup>th</sup> centuries, for example, there were several notable episodes of economic volatility associated with growing international ‘trade’; the most famous of which was the South Sea Bubble.



The South Sea Company was chartered in 1711, granted a monopoly for trading in the South Atlantic. Speculation around this new ‘monopoly’ enterprise was swift and excited. Unfortunately for the South Sea Company, Britain and Spain went to war again in 1718, undermining the trading opportunities with Spanish colonies in South America. But like many a modern day business, the significance of these commercial reverses were not immediately apparent to investors.

Indeed so popular was the stock that investors ignored the bad news and kept buying. As a result the stock kept rising rapidly, encouraging more buyers and creating a momentum of growth that seemed unstoppable. Behind the scenes however, South Sea Company management, (like the more recent Enron management) could see the writing on the wall and soon began to dump their shares into the rising market. Eventually word got out, the bubble burst, and panic selling initiated a market crash and economic crisis in England.

Although many see the South Sea bubble as simply a case of stock market greed, it was in many ways a function of unfamiliarity of risk—there was ignorance on the part of management, investors, securities regulators and the public at large with the nature and scale of trading risks. A new class of assets was being incorporated into a medieval economy that had been very slow moving and predictable; the Tulip bubble in Holland

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and the South Sea bubble were part of a steep learning curve associated with such changes.

A similar period of extraordinary volatility was experienced in the United States when industrial assets were being incorporated into the economy. The years 1819, 1837, 1857, 1873, and 1893 marked the beginnings of periods of grave economic disturbance that were caused by currency fluctuations, stock market crashes, banking and liquidity crises, and trade difficulties. The 1819 depression was one of the most volatile. The industrial era began in the United States with a great burst of nationalism. During the early 19<sup>th</sup> century several major economic reforms including the establishment of a national bank and protective tariffs, were undertaken to protect fledging American industries.

Beginning in 1819 with cotton prices already declining sharply, strict credit restrictions were imposed by the new Bank of the United States; although designed to curb inflation these restrictions triggered a financial panic that swept across the economy.

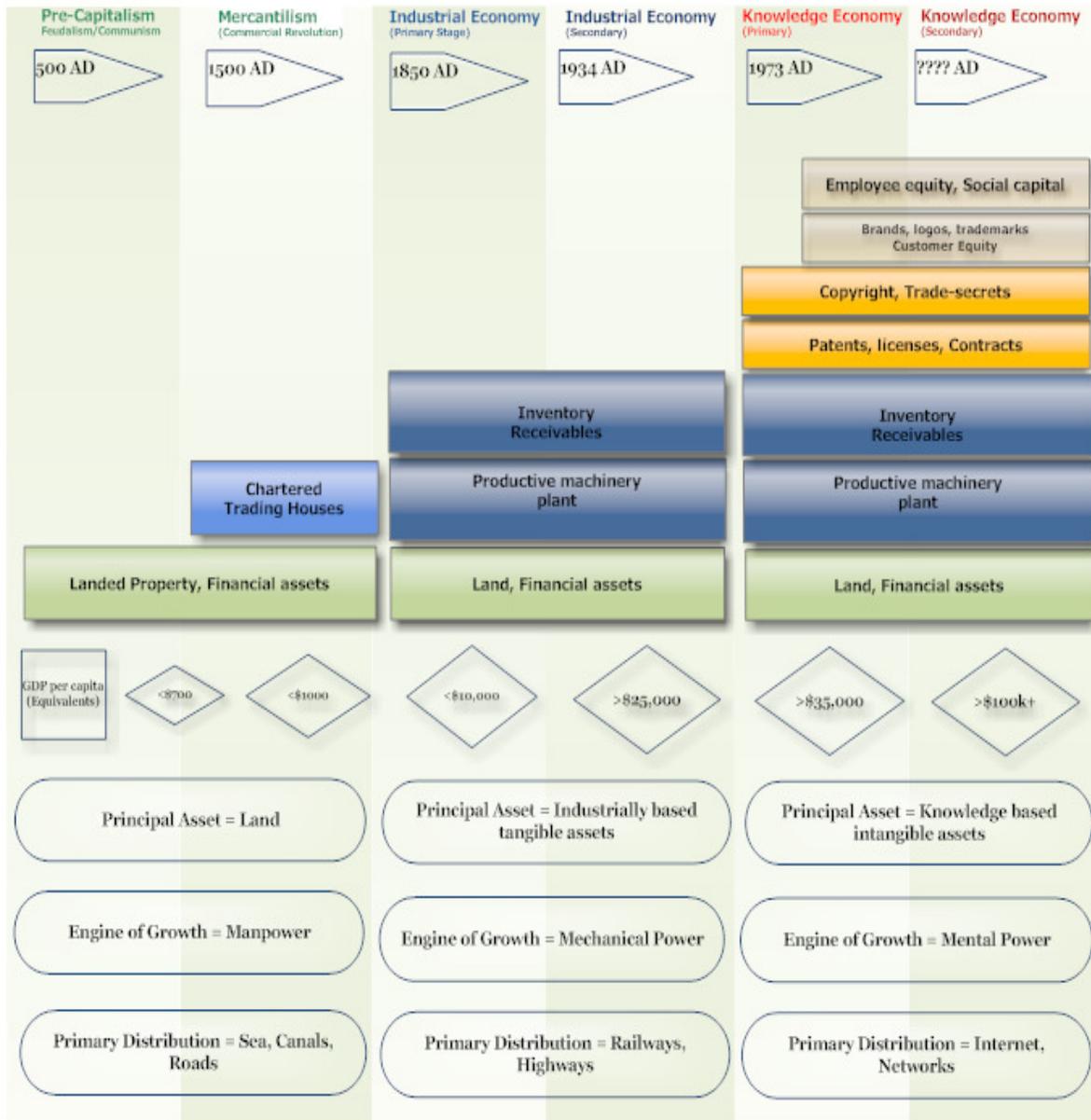
Unemployment rose rapidly, banks failed, prices fell and investment collapsed. Much was learned from this self-inflicted wound, but more learning was required, as volatile swings in economic fortunes became regular features of the early Primary Stage of industrialization in the United States.

More recently and as a consequence of another Asset Revolution, the United States has experienced two great bubbles: first in line, the great Dotcom bubble in 2000, and more recently the 2007 financial derivatives bubble. In both cases new asset risk was unknown and unforeseen: in the case of the Dotcoms, it was the Internet with its strange “intangible” and seemingly unlimited potential that captivated so many for so long. In the case of sophisticated financial derivatives (where there were real earnings), a clever form of self dilution in the form of securitization, insurance like credit default swaps and globalization created a perception of security where it did not exist.

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## Capitalism's Expanding Asset Foundation



The capitalist economy has progressed through a series of economic revolutions in its 500 year journey from feudal, agricultural economies to the unprecedented prosperity we enjoy today. At various stages the economy experienced a change in its underlying 'engine of growth', agricultural – industrial – knowledge. In the process of incorporating new classes of assets in the economy Western economies experienced vast increases in productivity and GDP per capita along the way. Unfortunately at each transition point

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there is a steep learning curve, resulting in periods of increased volatility as the economy adjusts to the incorporation of a new and unfamiliar risks.

## ASSET REVOLUTION #1: The Emerging Economies

Unfortunately for global stability there is more than one Asset Revolution going on at the moment. If Foreign Direct Investment (FDI) and international trade statistics are anything to go by, industrialization in China, India and several of other Asian economies is expanding rapidly. FDI in developing economies is directed largely to ‘Greenfield’ industrial development, where as FDI in USA, and other developed economies, is largely directed toward corporate takeovers.

As a consequence the ‘BRIC’ markets (Brazil, Russia, India and China), with combined populations of roughly 2.5 billion people (representing approximately 40% of the world’s population) are experiencing rapid- Primary Stage – industrial growth

Over the course of the next few decades these nations can be expected to industrialize along predictable pathways, with considerable growth interspersed with recessions and possibly depressions eventually increasing their GDP per capita by

Infrastructure Development in China		
	China 2006	Planned Development
Cities > 1.0 Million 	117	147
Expressways 	45,300 Km	>100,000 Km
Railways 	77,100 Km	>92,500 Km
Subways 	602 Km	>2,300 Km
Airports 	142	42 New 138 Expansions
Ports 	3.4 billion tonnes Capacity	>5.4 billion tonnes Capacity
Oil Pipelines 	24,136 Km	45,500 Km
Gas Pipelines 	24,000 Km	60,000 Km
Power 	623 GW	1,400 GW

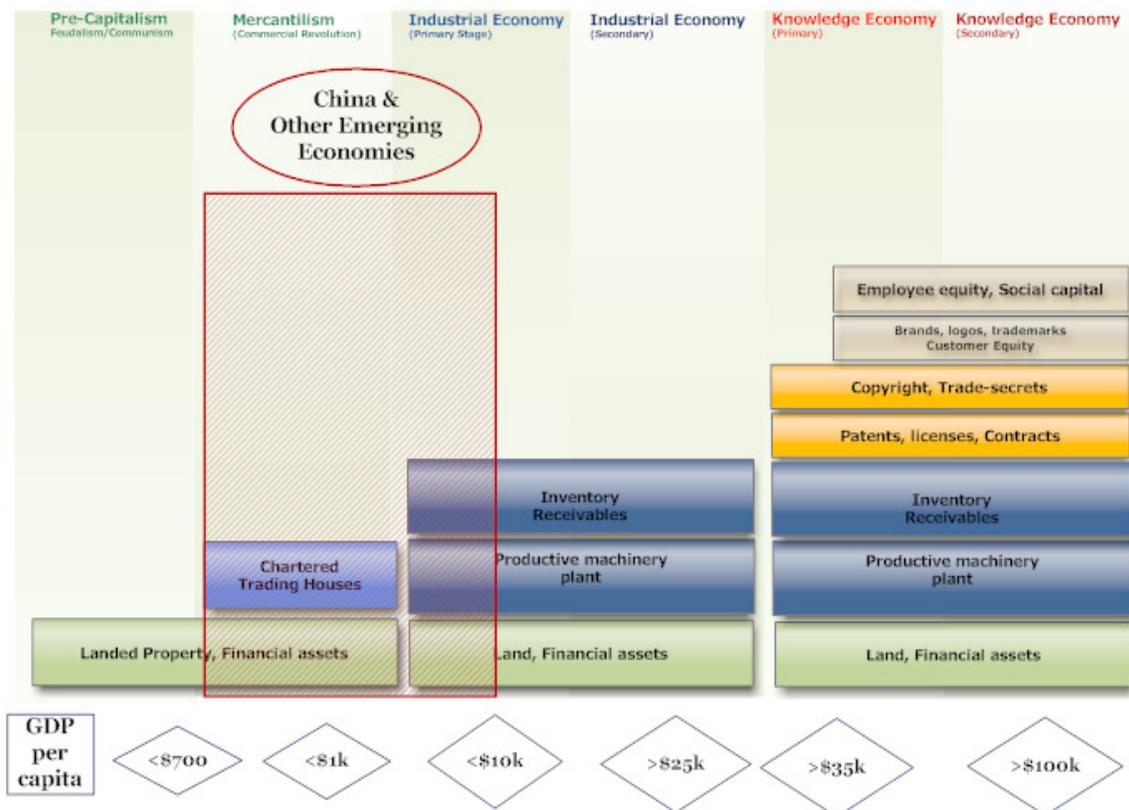
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roughly an order of magnitude.<sup>1</sup> The impact of these quantum leaps in purchasing power is expected to dramatically increase global demand for basic commodities.

East Asia is not the only part of the world experiencing massive primary industrialization; there are many of the later developing economies in going through the same stage of development. Foreign Direct Investment (FDI) in South America is growing. Inflows in 2004 to Brazil \$18 billion, Chile \$8 billion, Argentina \$4 billion, all are twice the levels of 2003. Inflows to Russia, having already picked up in 2003 gained further speed in 2004. As in earlier years, much investment went to the Hydrocarbon sectors but there is a growing tendency towards consumer goods lately.

## Emerging Economies Accelerated Industrial Revolution



<sup>1</sup> If western development models are repeated GDP per capita will increase from under a \$1000 per capita to approximately \$10,000 per capita as the transition from agricultural to industrial economies.

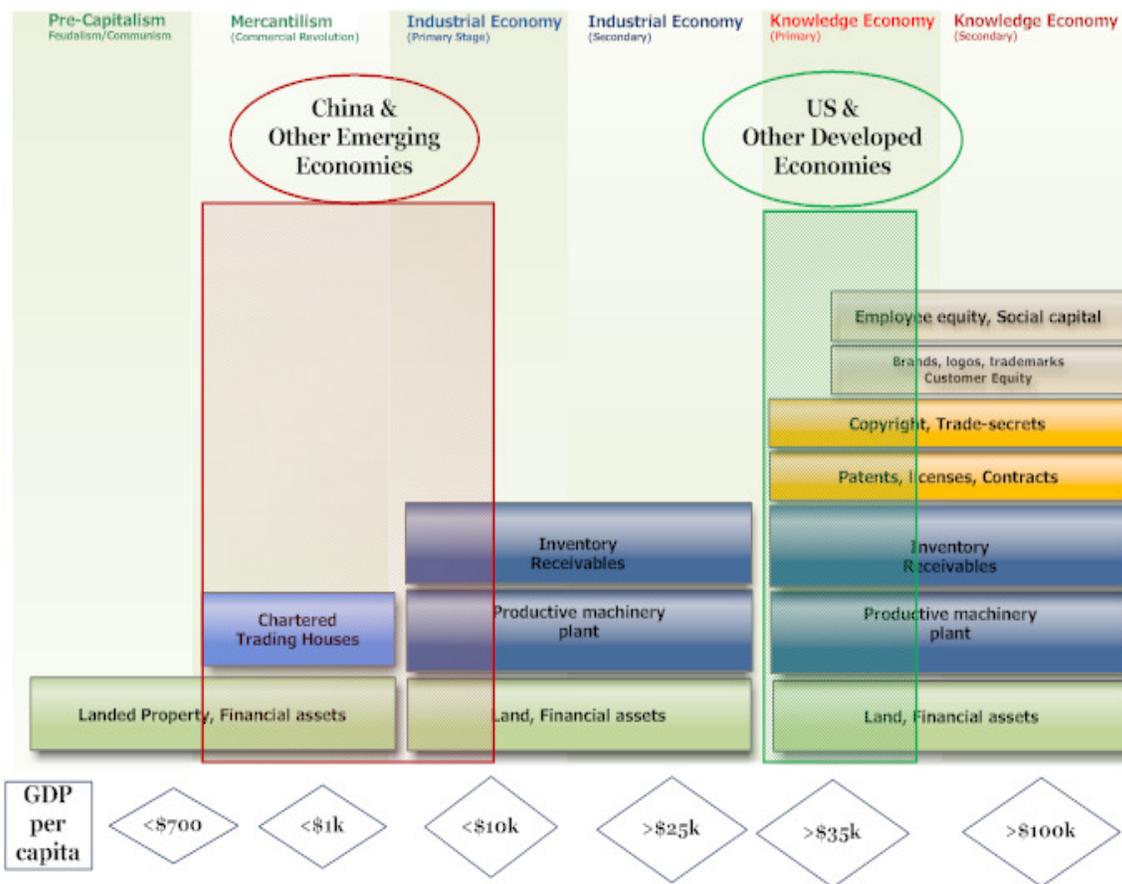
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## ASSET REVOLUTION #2 The Developed World

Although many would agree that Asia is industrializing few appreciate the massive system changes taking place in Western economies. Since the 1970's, there have been revolutionary changes taking place as Western economies transition from economies largely underpinned by familiar industrial assets to economies dominated by 'intangible' knowledge and relationship-based assets.

## Dual Asset Revolutions



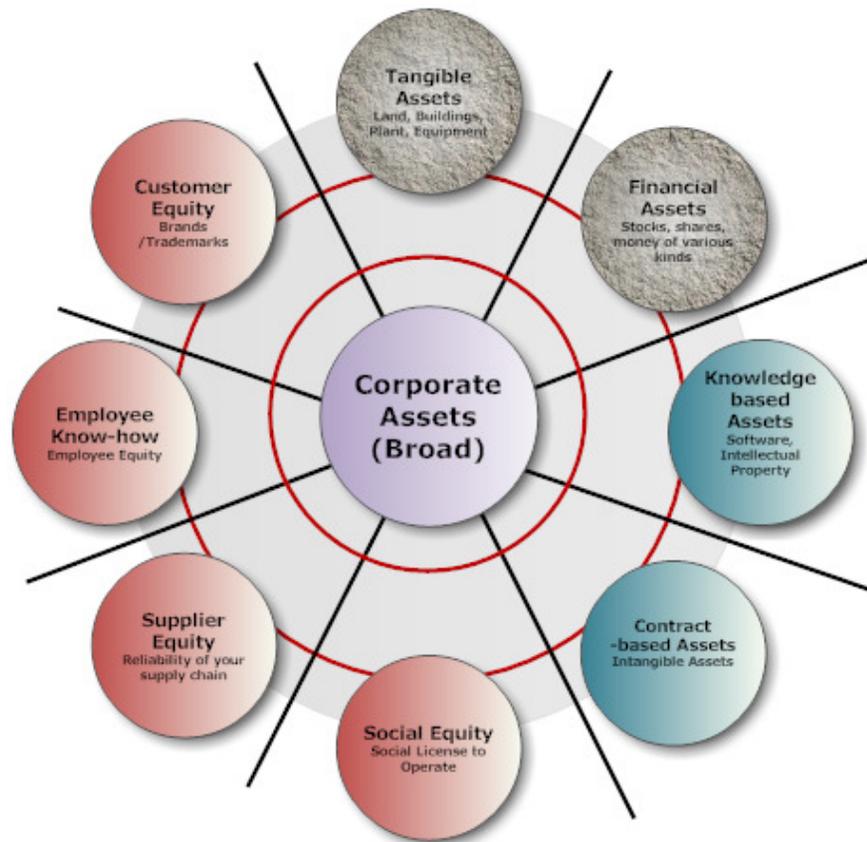
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For those who doubt that major changes are impacting the economy, consider that between 1995 and 2002 the world's 20 largest economies lost 22 million industrial jobs. Nevertheless, despite the shrinking of their industrial work forces, the output in these countries as a measure of GDP increased by an astonishing 50%. Today, in the U.S and other Western economies in particular, market services have displaced industrial production as the primary engine of growth; studies suggest that 'intangible' nontraditional assets are now contributing over three quarters of U.S. GDP.

## Managing New Classes of Assets

It's a simple truth that assets that cannot be identified cannot be managed or protected. It is precisely at the identification stage that many of the modern risk management challenges are accumulating at the moment. Needless to say, this seemingly simple task becomes a



much larger and more difficult in periods of asset transformation like we're experiencing today. Several new intangible asset classifications are emerging. These asset classifications include the more formal forms of knowledge assets, license based (contractual) intangibles, artistic and technology (copyright and patented) based intangibles as well as many other informal brand and customer-equity (contractual and

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quasi-contractual) related intangibles. It is the intention of the International Accounting Standards Board to standardize reporting standards in these new asset classes and to gradually incorporate them into the mainstream of asset management.

## **The Darkening Context of Risk**

The global economy, and the world of risk management, is entering a new and more volatile period. The present period of instability is made worse by the fact that as a global economy we've become conditioned by a prolonged period of Post War era stability. If economic history has anything to teach us there could well be stormy weather ahead. All major economies, in both the developed and emerging nations are transitioning, entering exciting new stages of economic growth. They are all, however, incorporating new (for them) classes of assets; they can be expected to experience the inevitable disruptions associated with that growth. Managing those predictable periods of volatility will require insight and judgment on the part of management and their risk management professionals.

## **A Period of Consolidation, then Return to Growth**

All financial bubbles have their roots in a brave new commercial world, with dreams of staggering new wealth. And as tragic as the financial consequences were at the time, none of these enormous market bubbles had more than temporary impact, they did not reverse the course of economic history.

Growth in trade flourished in spite of these early trading bubbles, conflicts and war. Primary Stage industrialization motored through a staggering number of recessions and depressions before we developed the monetary, accounting, securities and banking competencies necessary to fully optimize the industrial economy. Putting the pieces in place required massive institutional innovation. Major changes occurred in accounting, property law, securities regulations, banking procedures and monetary policy to create what we now call an Industrial Economy backed by familiar 'tangible' assets. All these

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changes were necessary in order to lift industrial assets to the point where they became solid, collateral assets, assets that a bank could realistically hold as security for debt finance, or accountants could identify and realistically value on the balance sheet.

Today, we face a similar challenge and potential reward.

In the short term, and at a minimum, incorporating new models for identifying and analyzing global risk as well as adapting to new higher thresholds of risk, are going to be required in order to prudently take advantage of the undoubted opportunities available in the 21<sup>st</sup> century global economy. More importantly in the longer run we need institutional reform. The challenge we face is similar to the one our ancestors faced in the early stages of the Industrial Revolution, to build a body of experience in these new assets, to undertake necessary institutional reforms, including accounting reforms, banking policy reviews, legal assessments, regulatory changes and top level monetary/fiscal restructuring, so that these new forms of wealth can be fully optimized and effectively managed at all levels. Doing so effectively will unleash a vast economic potential within the Developed economies; transforming once again the global economy and society.