

## Waypoint Research Paper: World Economy Perspective

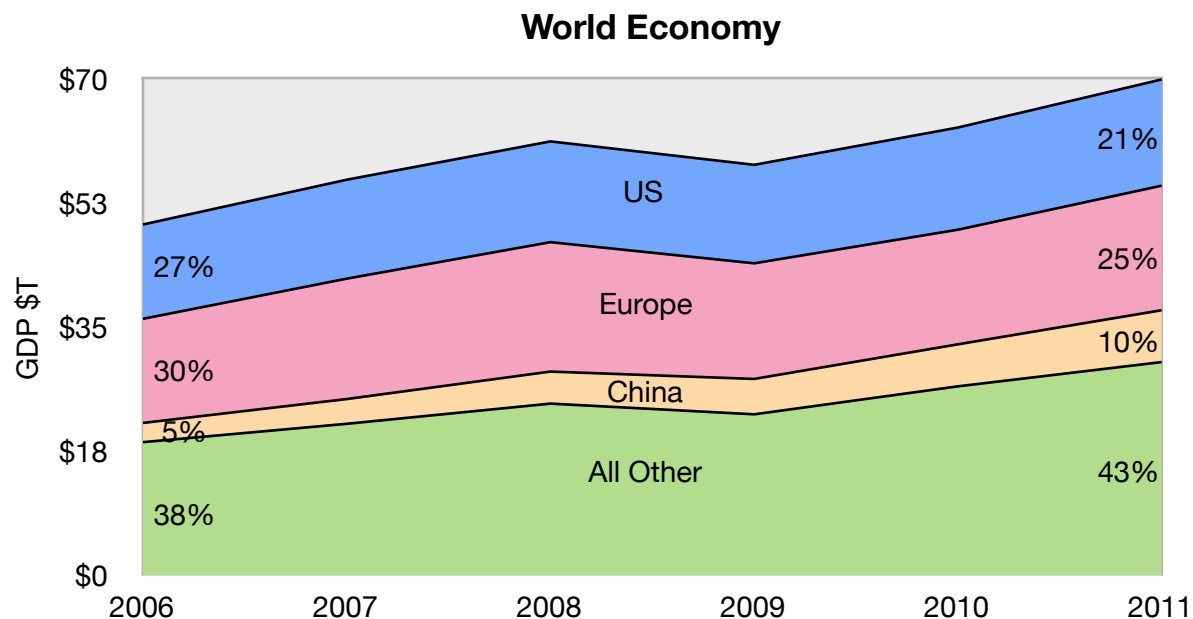
February 2013

Questions Answered:

- The US economy is what percentage of the world economy?
- How does the US economy compare to China?
- How has the share of major economies changed in the past few years?
- Over the past 35 years, how has the world economy grown?
- What are the implications for investors?

As residents of the US, we naturally have a US-centric view of the world. So when we guess at how big the US economy is compared to the world, we might think it's 30%, 40% or even 50%. But it's only 21% and getting smaller as a percentage.

This chart shows the recent history of the world economy.



source: World Bank at <http://data.worldbank.org/indicator/NY.GDP.MKTP.CD>

In 2011 the US economy was about 21% of the total world economy, measured by Gross Domestic Product (GDP). That share has dropped from 27% just 5 years ago, and is on a general downward trend over a period of decades, having peaked recently at 32% in 2002. The US economy has grown in absolute terms. But as a share of world economy, it is declining.

Europe's economy (the European Union countries) is larger than the US. But it is also declining relative to the World.

China is growing fast. While half the size of the US economy in 2011, China's economy has doubled in share over the past 5 years—*doubled*.

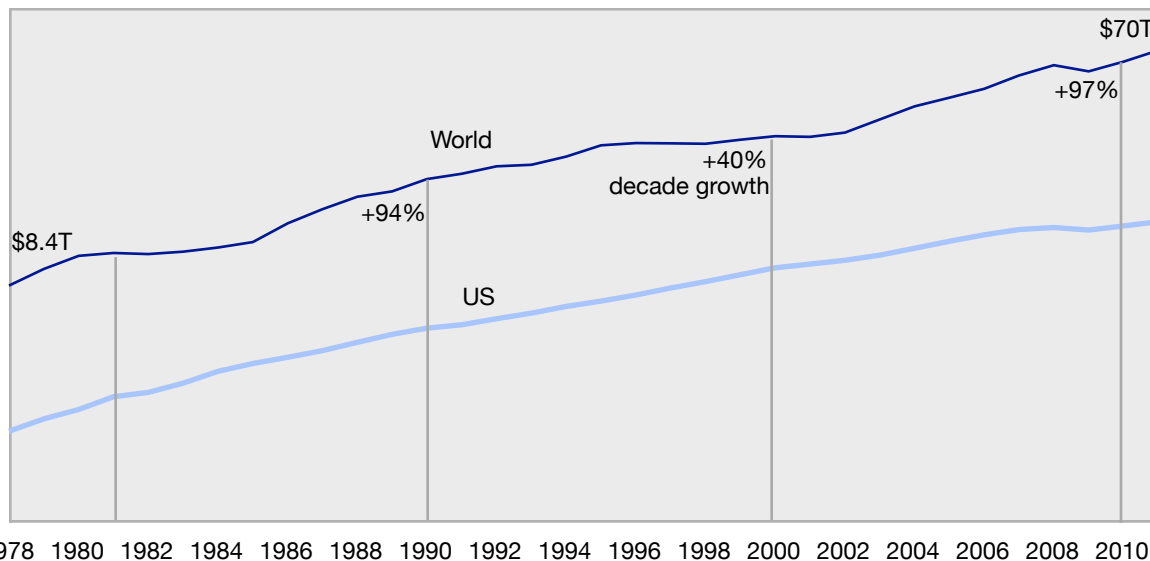
The other countries of the world are growing as well compared to US and Europe—now 43% of the World economy, up from 38% just 5 years ago.

It's interesting to note that the Great Recession of 2008-2009 in the US was truly global as all economies shrank. But just two years later, all economies had regained and exceeded pre-recession levels. That may be a surprise considering the current headlines about the continuing struggles of the US economy. In terms of GDP, the economy is back.

The basic message here is that developed country economies are growing, but not nearly as fast as other countries of the world.

What about the longer term perspective?

**World GDP Over 35 Years**



source: World Bank at <http://data.worldbank.org/indicator/NY.GDPMKTP.CD>, using log scale on Y-axis

The world economy has grown substantially over the past 35 years, doubling in size two of the three decades on the chart. There are notable periods of flat growth, but the overall trend is clearly up. The world economy was \$8.4 trillion in 1978; by 2011 it grew to \$70 trillion—over 8 times the size it was 35 years ago.

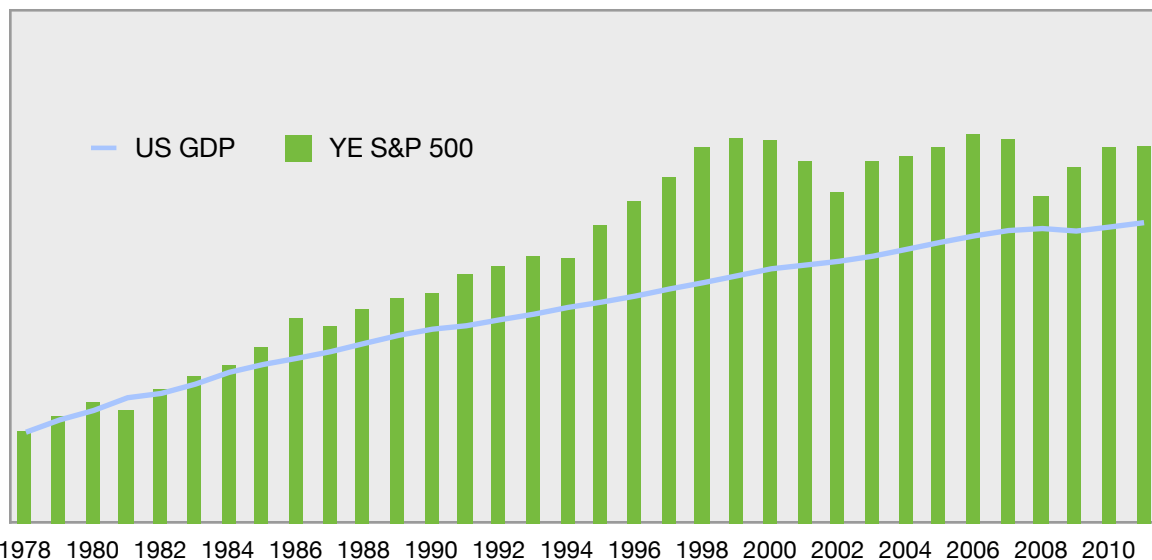
The US economy has grown as well over 35 years, and the growth is remarkably consistent despite several periods of recession and economic troubles.

### Implications for Investors

Over long periods of time, the value of stocks is related to the underlying profitability of companies. *Generally*, profitability rises against the backdrop of a growing economy. But stock markets are speculative in the short-term and exhibit much more volatility than the economy.

This chart compares US GDP to the year-end value of the S&P 500 index (the largest 500 companies in the US) over 35 years.

**US GDP vs. Year-End S&P 500 Index**



source: World Bank at <http://data.worldbank.org/indicator/NY.GDP.MKTP.CD>, and <http://finance.yahoo.com> adjusted year-end close and normalized for comparison.

This chart is *not* meant to suggest when US stocks are over- or under-valued. But it does basically show that a growing economy is generally correlated to growing stock values over a multi-decade period.

(Perhaps two reasons for the higher growth in the S&P 500 are: 1) the ability of companies to gain productivity—hence profitability—over time due to technology and improved processes, and 2) the increasingly global focus of large US companies over the past several decades, thereby taking advantage of higher growth outside the US.)

Stocks in emerging markets countries have historically been much more volatile—gaining and declining more than US stocks. And the data about high growth in emerging markets is well-known, therefore probably priced-in to those stocks.

Nonetheless, over long periods investors have benefited from US and global economic growth, and the recent trends show more growth outside the traditional developed markets of the US and Europe.

Short periods of recession are especially memorable, but they seem relatively minor in a long-term perspective.

Investors may benefit from a proportional international allocation, especially with recent trends of worldwide GDP growth.

#### *About the Data*

This analysis is based on data from the World Bank. Non-US economic figures are converted to dollars using the then-current currency conversion rate. GDP figures are inflation-adjusted to the value of the 2011 US dollar; other countries would have different inflation rates. Other data sources such as the International Monetary Fund, United Nations or the US Central Intelligence Agency use different means of gathering data so their figures are somewhat different but essentially consistent in ranking. (Wikipedia has a [table](#) of GDP from various data sources.)

The y-axis of the chart World GDP Over 35 Years uses a log-scale because of the wide range of data represented. This scale makes the visual comparison of data look correct.

S&P 500 index data is year-end only, and normalized to compare to 1978 GDP figures.

#### *Disclosures*

*This document contains generalized financial planning and investment information of an educational nature and is not specific financial planning or investment advice for a particular client. Past performance does not guarantee future results; future results will be different. A diversified portfolio does not guarantee investment gains over any period of time. This document is based on data believed to be reliable, but it may contain inadvertent errors.*