# **Intermarket Analysis**



#### **Table of Contents**

#### • Intermarket Analysis

Intermarket analysis is a branch of technical analysis that examines the correlations between four major asset classes: stocks, bonds, commodities, and currencies. In his classic book on Intermarket Analysis, John Murphy notes that chartists can use these relationships to identify the stage of the business cycle and improve their forecasting abilities. There are clear relationships between stocks and bonds, bonds and commodities, and commodities and the Dollar. Knowing these relationships can help chartists determine the stage of the investing cycle, select the best sectors and avoid the worst performing sectors. Much of the material for this article comes from John Murphy's book and his postings in the Market Message at Stockcharts.com.



## Inflationary Relationships

The Intermarket relationships depend on the forces of inflation or deflation. In a "normal" inflationary environment, stocks and bonds are positively correlated. This means they both move in the same direction. The world was in an inflationary environment from the 1970's to the late 1990's. These are the key Intermarket relationships in an inflationary environment:

- A POSITIVE relationship between bonds and stocks
- Bonds usually change direction ahead of stocks
- An INVERSE relationship between bonds and commodities

An INVERSE relationship between the US Dollar and commodities

POSITIVE: When one goes up, the other goes up also. INVERSE: When one goes up, the other goes down.



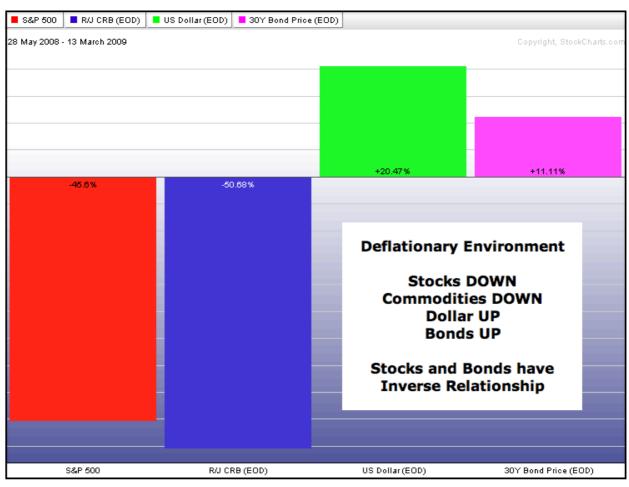
In an inflationary environment, stocks react positively to falling interest rates (rising bond prices). Low interest rates stimulate economic activity and boost corporate profits. Keep in mind that an "inflationary environment" does not mean runaway inflation. It simply means that the inflationary forces are stronger than the deflationary forces.

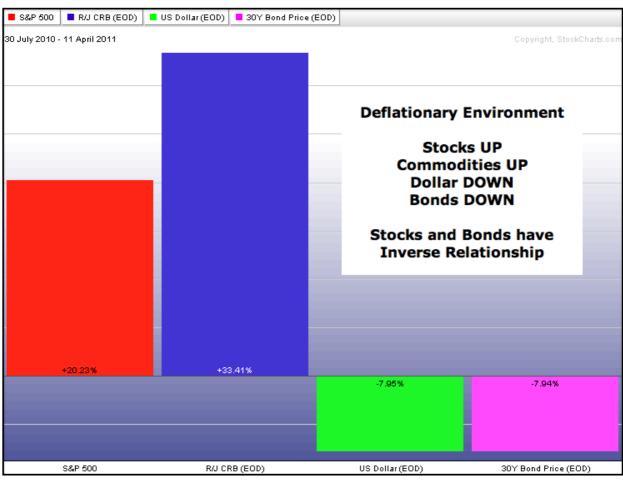
## **Deflationary Relationships**

Murphy notes that the world shifted from an inflationary environment to a deflationary environment around 1998. It started with the collapse of the Thai Baht in the summer of 1997 and quickly spread to neighboring countries to become known as Asian currency crisis. Asian central bankers raised interest rates to support their currencies, but high interest rates choked their economies and compounded the problems. The subsequent threat of global deflation pushed money out of stocks and into bonds. Stocks fell sharply, Treasury bonds rose sharply, and US interest rates declined. This marked a decoupling between stocks and bonds that would last for many years. Big deflationary events continued as the Nasdaq bubble burst in 2000, the housing bubble burst in 2006, and the financial crisis hit in 2007.



The Intermarket relationships during a deflationary environment are largely the same except for one. Stocks and bonds are inversely correlated during a deflationary environment. This means stocks rise when bonds fall and vice versa. By extension, this also means that stocks have a positive relationship with interest rates. Yes, stocks and interest rates rise together.





Obviously, deflationary forces change the whole dynamic. Deflation is negative for stocks and commodities, but positive for bonds. A rise in bond prices and fall in interest rates increases the deflationary threat and this puts downward pressure on stocks. Conversely, a

decline in bond prices and rise in interest rates decreases the deflationary threat and this is positive for stocks. The list below summarizes the key Intermarket relationships during a deflationary environment.

- An INVERSE relationship between bonds and stocks
- An INVERSE relationship between commodities and bonds
- A POSITIVE relationship between stocks and commodities
- An INVERSE relationship between the US Dollar and commodities

## **Dollar and Commodities**

While the Dollar and currency markets are part of Intermarket analysis, the Dollar is a bit of a wildcard. As far as stocks are concerned, a weak Dollar is not bearish unless accompanied by a serious advance in commodity prices. Obviously, a big advance in commodities would be bearish for bonds. By extension, a weak Dollar is also generally bearish for bonds. A weak Dollar acts an economic stimulus by making US exports more competitive. This benefits large multinational stocks that derive a large portion of their sales overseas.



What are the effects of a rising Dollar? A country's currency is a reflection of its economy and national balance sheet. Countries with strong economies and strong balance sheets have stronger currencies. Countries with weak economies and big debt burdens are subject to weaker currencies. A rising Dollar puts downward pressure on commodity prices because many commodities are priced in Dollars, such as oil. Bonds benefit from a decline in commodity prices because this reduces inflationary pressures. Stocks can also benefit from a decline in commodity prices because this reduces the costs for raw materials.

#### Industrial Metals and Bonds

Not all commodities are created equal. In particular, oil is prone to supply shocks. Unrest in oil producing countries or regions usually causes oil prices to surge. A price rise due to a supply shock is negative for stocks, but a price rise due to rising demand can be positive for stocks. This is also true for industrial metals, which are less susceptible to these supply shocks. As a result, chartists can watch industrial metals prices for clues on the economy and the stock market. Rising prices reflect increasing demand and a healthy economy. Falling prices reflect decreasing demand and a weak economy. The chart below shows a clear positive relationship between industrial metals and the S&P 500.



Industrial metals and bonds rise for different reasons. Metals move when the economy is growing and/or when inflationary pressures are building. Bonds decline under these circumstances and rise when the economy is weak and/or deflationary pressures are building. A ratio of the two can provide further insights into economic strength/weakness or inflation/deflation. The ratio of industrial metal prices to bond prices will rise when economic strength and inflation are prevalent. This ratio will decline when the economic weakness and deflation are dominant.



### Conclusions

Intermarket Analysis is a valuable tool for long-term or medium-term analysis. While these Intermarket relationships generally work over longer periods of time, they are subject to draw-downs or periods when the relationships do not work. Big events such as the Euro crisis or the US Financial crisis can throw certain relationships out of whack for a few months. Furthermore, the techniques shown in this article should be used in conjunction with other technical analysis techniques. The Industrial Metals/Bond Ratio chart could be part of a basket of broad market indicators designed to assess the overall strength or weakness of the stock market. One indicator or one relationship should not be used on its own to make a sweeping assessment of market conditions.

## PerfChart

John Murphy's Intermarket Study PerfChart allows chartists to compare the performance of the S&P 500, CRB Index, US Dollar Index, and the 30-Year US Treasury Bond. The slider at the bottom of the chart makes it easy to go back in time and see the relationship changes as they happen. Click here for a live Intermarket PerfChart

## **Additional Resources**

#### **Articles**

• Sector Rotation Analysis

# Further Study

