CME Group Fundamental Analysis Market Education

Understanding A Market's

Economic Environment

Goal Of Section

- Develop a framework for thinking about fundamental analysis, the trading of markets based on economic and industry information
- Understand what its limitations are
- Understand how it relates to other forms of analysis
- Understand where in the economic and political environment fundamental news develops and where to start looking for it

Introduction

- Fundamental analysis is a state of mind
- The task, then, is to interpret new information arriving in the market as either supporting or countering existing trends in price

Fundamental Valuation Relationships

- All market fundamental valuations can be stated in deceptively simple terms
- For each market, the basic relationship invites a stream of “yes, but” objections, and this is exactly the point

Absolute Vs. Relative Valuation

- Few markets exist in a trading vacuum
- Many market prices are inputs into other markets' fundamental equation
- Many markets define the risk parameters used in other markets

Technical Vs. Fundamental

- This is a not an either-or proposition
- Timeframe is key dividing the two forms of analysis
- Great traders use both. It raises confidence levels when multiple approaches agree

The Approach

- Too many traders approach fundamental analysis from a “guess the number” standpoint
- Most important, markets are discounting mechanisms where expectations for a given report have been capitalized into the price

The Assumptions

- While market reactions go in cycles, certain assumptions tend to remain constant over time and define how traders process information
- Other assumptions have changed radically over time

Assumptions (Cont.)

- The correct question is not, “What is important?” but rather, “What is important today?”
- Oftentimes, all key policymakers need to do is hint they are looking at a number or set of numbers for a heretofore obscure indicator to acquire a sudden and often temporary importance

Assumptions (Cont., 2)

- Assumptions often change in intermarket relationships
- Never assume a permanence in relationships. Once again, it is not what is important, it is what the market considers to be important today

News And Reaction To News

Market news can be divided into a 2 x 2 matrix:

- News that affects both price and underlying economic value
- News that affects price but does not affect underlying economic value
- News that affects underlying economic value, but does not appear to affect price, and
- News that affects neither price nor underlying economic value

News And Reaction To News (Cont.)

- The first category generally occurs within the context of a market reversal, a single shift in market direction because the world has changed
- The second category generally occurs within a trading range and produces a price reaction soon reversed
- The third category generally occurs within an existing trend
- The fourth category can be ignored

News Interpretations

- Markets can develop a “bad news is good” or vice-versa syndrome
- “The price is the news” is critical. The market will tell you how news has been interpreted and how its sense of what is important has changed

Policy Developments

The Economic & Policy Culture

- A culture is nothing but a set of shared beliefs
- These are not symmetric

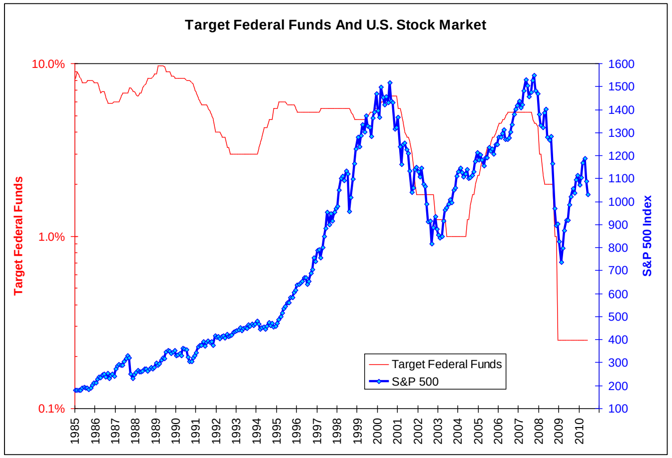
Monetary Policy

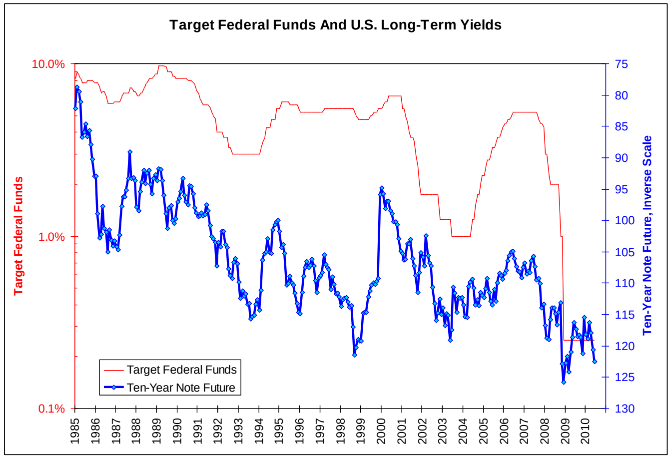
- Monetary policy includes both the price of money (short-term interest rates controlled by the central bank) and the quantity of the money
- The target interest rates established by the world's principal central banks are the single most important set of fundamentals for financial markets

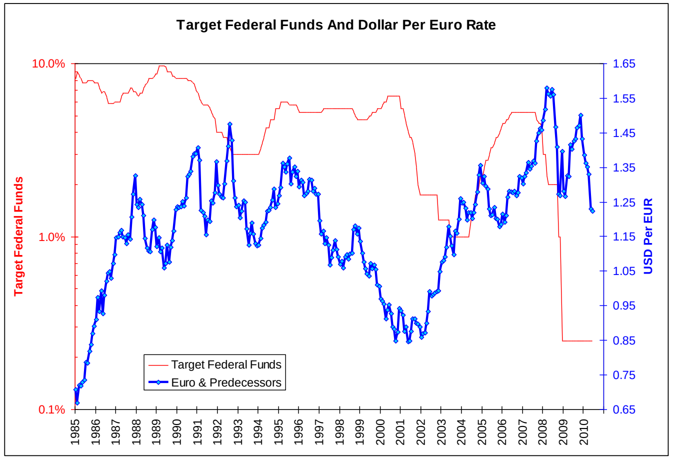
Target Federal Funds Rate's Impact

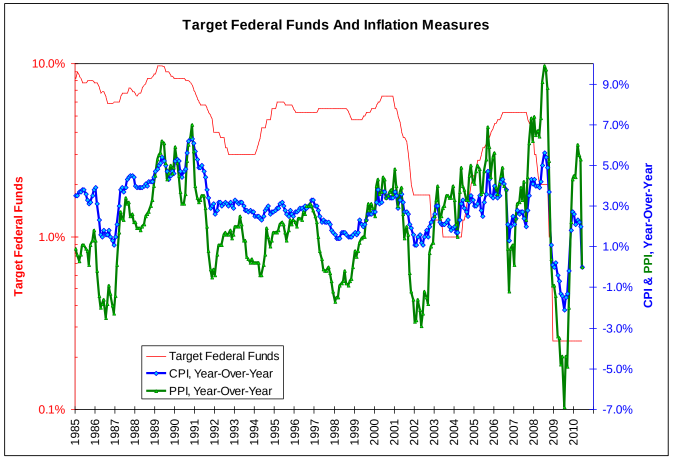
- For years, the assumptions were simple: A higher target federal funds rate would slow the demand for credit
- The intentions may have been bullish, but the results were not

The Target Rate And Key Markets







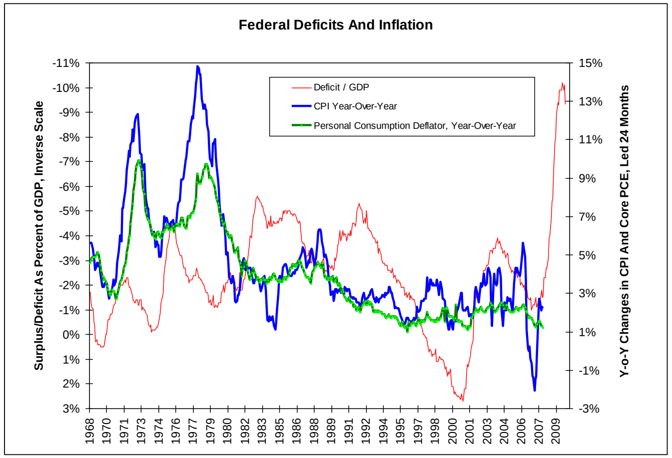


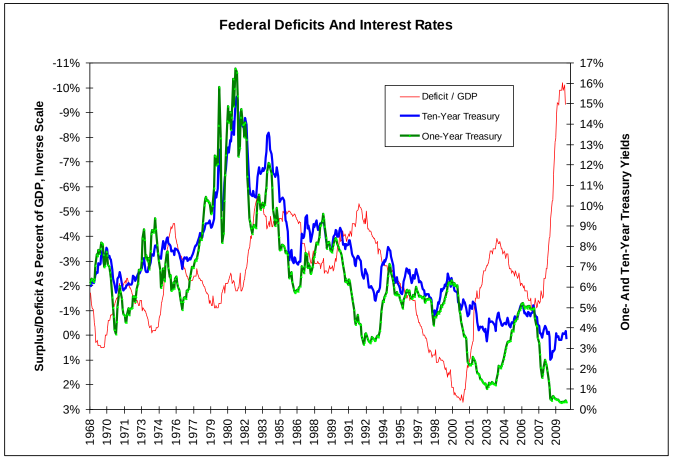
Fiscal Policy

- Fiscal policy refers to issues related to taxation and government spending
- The U.S. has run federal deficits as a matter of course since the mid-1960s with the prominent exception of the late 1990s
- One assumption that has changed drastically since the early 1980s is higher levels of federal borrowing lead to higher interest rates on Treasury debt

Do Federal Deficits Matter?

- The federal deficit as a percentage of GDP fell from the early 1980s into 2000 and rose sharply thereafter
  - The effect on inflation measures led by 24 months (top chart) has been almost non-existent
  - Both long- and short-term Treasury rates (bottom chart) fell while deficits expanded
- No one would have believed this possible in 1980



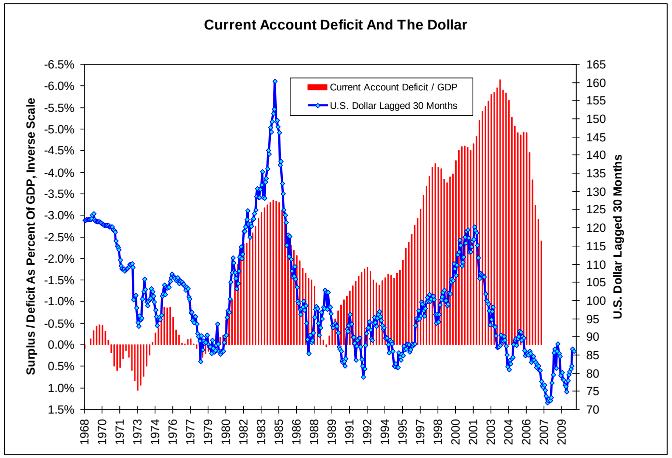


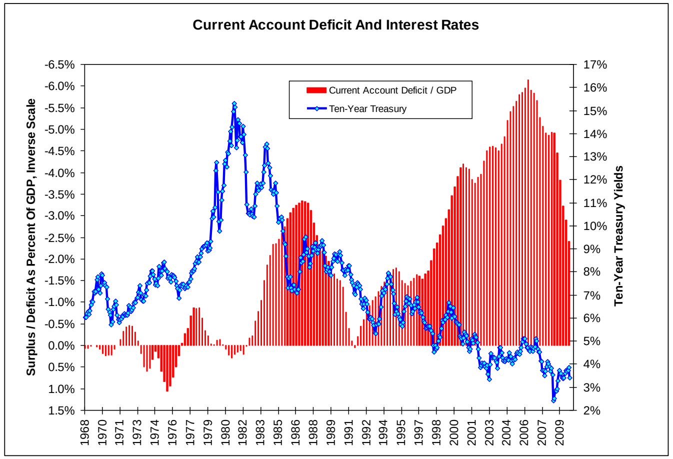
Current Account (Trade) Deficit

- The U.S. has run current account deficits almost continuously since the early 1980s
- Once again, the old assumption of higher deficits leading to a weaker dollar and higher interest rates has collapsed over time

Does The Current Account Deficit Matter?

- The dollar (top chart) has led the current account deficit as a percentage of GDP by about two and one-half years, but the link is not a strong one
- Long-term interest rates (bottom chart) have almost no connection to the current account deficit
- Once again, it is hard to look at these charts and believe how strongly the opposite opinions were held once





Comments On The “Twin Deficits”

- Why did the previous assumptions regarding deficits collapse?
- A set of assumptions held throughout the trading culture can become self-defeating. They were not intrinsically correct; they were simply held to be correct at the time

Legislative & Regulatory Changes

- As laws and regulations define the rules under which all commerce occurs, every market is affected
- Change is permanent: In a representative system of government where the freedom to petition the government is protected, all policies are, to a certain extent, temporary

Laws & Regulations (Cont.)

- Treaties take precedence over domestic law and can have significant effects on domestic markets
- The legislative process can create uncertainties with macroeconomic effects

Laws & Regulations (Cont., 2)

- The financial services industry has been regulated heavily since the 1930s
- The financial crisis of 2007-2009 has prompted a set of legislative and regulatory changes that affect all participants and institutions

Non-U.S. Laws & Regulations

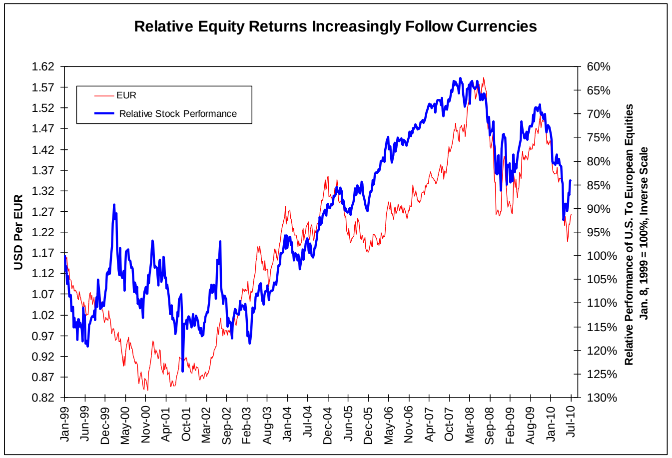
- The non-U.S. legal & regulatory environment can be just as important
- European Union anti-trust policies have affected mergers & acquisitions and hence the value of U.S. stock indices

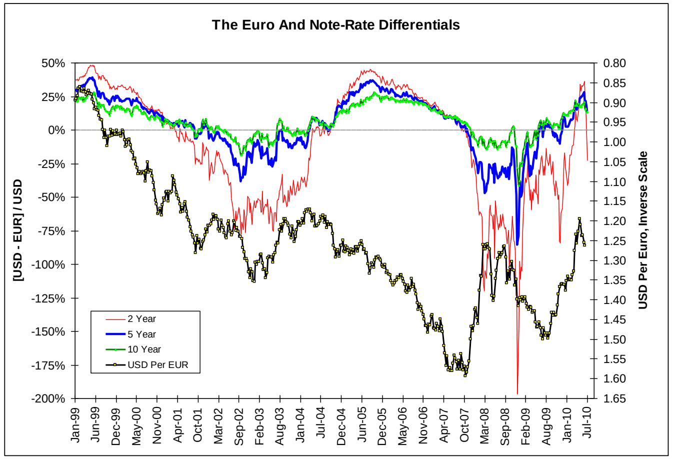
International Economics & Politics

- Currency traders must, by definition, live in an international environment
- Currencies in turn affect all markets, whether global or not, as exchange rates also affect the allocation of resources within a domestic economy

International Economics & Politics (Cont.)

- The relative performance of national stock markets (top chart) increasingly follows currency rates
- Those currency rates in turn are affected by and affect note-horizon interest rate differentials (bottom chart)
- The movements of currencies thus affect all capital markets and therefore the allocation of resources within the respective economies





International Economics & Politics (Cont., 2)

- National policies on currencies are never constant
- The experience with floating exchange rates since 1971 has been no one is happy with their or key trading partners' currency levels for very long

International Organizations

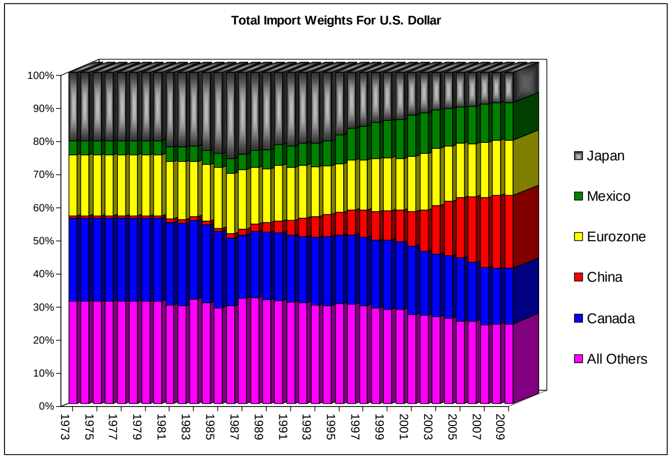
- International cooperation at the head-of-government level has become more frequent and important in recent years.
- Supranational institutions such as the Bank for International Settlements have set the standards for bank capitalization
- The International Monetary Fund has transformed its mission to include providing critiques of national economic policy

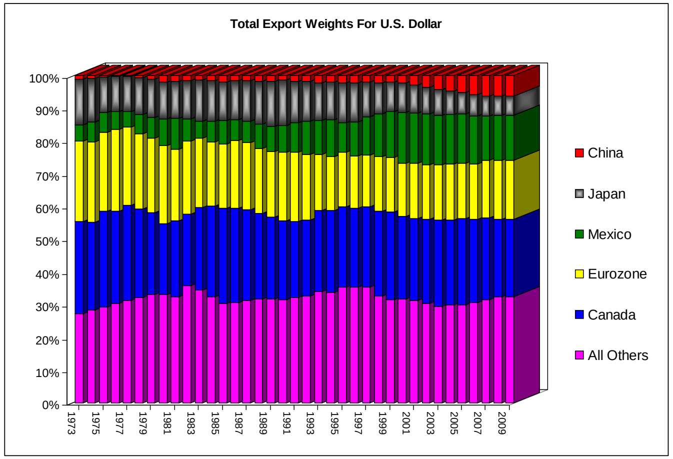
The Largest Global Change

- The emergence of the so-called BRIC quartet (Brazil, Russia, India and China) is the largest change in the global economic landscape since the emergence of the United States between the Civil War and World War I

China’s Expanding Role In U.S. Trade

- China’s expanding role in the Federal Reserve’s import (top chart) weights for the U.S. dollar has accelerated at the expense of Japan and Canada
- China’ share of export weights (bottom chart) has been slower, but it also is coming at the expense of Japan
- Both physical and financial commodity traders increasingly will be reacting to trans-Pacific as opposed to trans-Atlantic developments



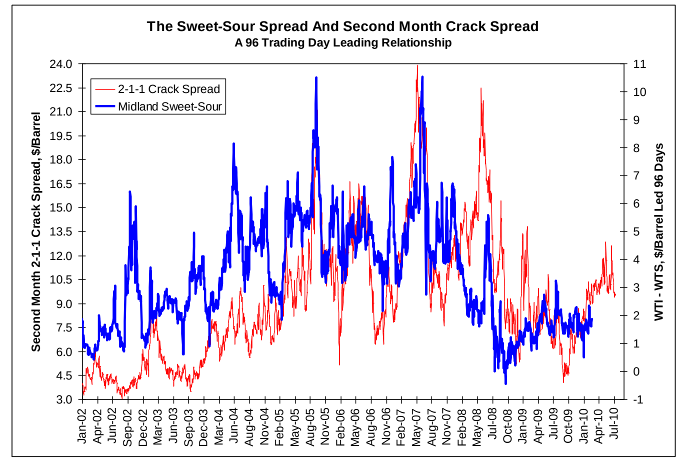


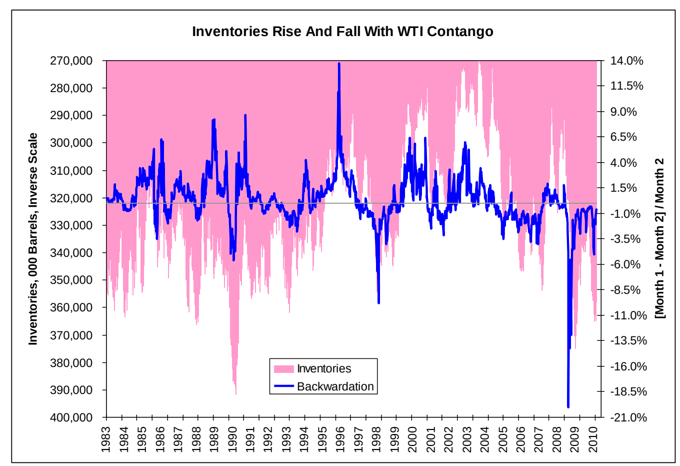
Industry Economics

- Many physical commodities are a process input and are not a final market
- Prices used to rise and fall in general response to processing margins, but the growth of commodity index investments opened up the previously rare contango storage trade

Sample U.S. Crude Oil Indicators

- The Gulf Coast 2-1-1 refining margin measures refining profitability; changes in this margin lead the spread between sweet and sour crude oil (top chart)
- The traditional backwardation, or premium of first to second month futures, shifted into frequent contango once commodity index investments helped push back-month futures prices higher. Inventories grew in response





Financial Health Of Key Institutions

- One hard lesson repeated frequently in the last two decades is a large institution that runs into trouble creates problems for others
- The leveraged exposures of large financial institutions and their intertwined exposures create rapid transmission of distress

Trading Technology

- Trading used to be a person-to-person business where “know your customer” was literally common
- The rise of algorithmic and high-frequency trading has taken the person-to-person checks out of the system
- Fragmented liquidity pools, especially in the securities arena, may have contributed to the May 2010 “flash crash”

Trading Technology (Cont.)

- Expanded trading hours and the greater stamina and order-processing capacity of electronic trading systems have allowed a greater distribution of trades over time
- Combined with the growing importance of Asian and Latin American markets, these expanded hours are both creating greater opportunities and placing greater burdens on trading organizations
- Fundamental information can arrive at any time from any source and be reacted to instantly and in commercial size in a way impossible previously

Technological Developments

- Technological breakthroughs in commodities often fall into the category of news that affects price without affecting value
- Corporations can and do change fairly rapidly with technological innovations; these often have a direct and lasting impact on stock indices

Investment Cycles

- The adage “buy-low, sell-high” tends to be honored in the breach at the industry economic level as well
- Agricultural production and planting intentions often lag prices; a period of high prices is followed by large planting intentions and a subsequent price decline as new supplies come to market

Industrial Organization Response

- Industries facing large capital investment needs often find it easier to acquire competitors first
- These consolidations are enabled by technological developments such as enterprise software systems, global supply chain management and Internet-based management

Weather: The Constant Fundamental

- Not only do weather events affect energy consumption, crop yields, livestock weights and other obvious commodity-related markets, weather increasingly affects patterns in seasonal employment, retail sales, construction activity and other macroeconomic data
- Catastrophic weather events such as hurricanes can affect regional economies for years; the effects of outsized hurricane seasons in 2004-2005 are still being felt
- Many hedge funds and investment banks employ staff meteorologists now and trade on both short- and long-term weather forecasts

Seasonality And Cycles

- Agricultural futures markets arose to smooth out the effects of the seasonal crop cycles
- As in the case of weather factors, seasonal factors are quite dominant in both agricultural and energy markets
- Many important economic numbers, such as employment and retail sales, are adjusted seasonally

When In Rome…

…Do as the Romans do. While the first step in successful fundamental analysis may be a deep understanding of a market's supply and demand balances, industry economics, technological change and the external political and global environment, all is for naught if the market's assessment of what is important changes.

A market must be followed on a real-time basis to see how it reacts to new information. This allows you to get in synch with what is driving the price.

Be A Skeptic

Many explanations of what is important are available for free and are well worth the price. The first explanation often does not pass analytic muster. The key principle is a reason must hold at all times and under all circumstances except when it is overwhelmed by another factor operating.

Financial markets are data-rich, and relationships are easy to test. Always test the conventional wisdom; you will find it is wrong a great deal of the time. This is the only way you can get ahead of the market instead of reacting to news.