

## Currencies And Conventional U.S. Investments

The question “what does the dollar affect” was addressed from macroeconomic and broad market points of view last month. To summarize very briefly, the currency exchange rate in both the United States and in every other country or bloc with its own currency is the economy’s single most important price. If it is “wrong,” no matter how you wish to define right or wrong when no single rate can solve all market relationships simultaneously, everything else in the economy will have to adjust.

A second conclusion is the relationship between currencies and other financial markets tends to be far weaker and much more unstable than believed. We live, for better or worse, in a culture that rewards and even demands sound-bite answers to even the most complex and arcane issues. If you see a day when the greenback moves more than 1% against, say, the euro, you can be assured a financial reporter will want to know what it means for “stocks,” as if stocks really are a monolithic entity. Some of the rarer and more specialized journalists might ask about bonds, as if the entire world of fixed-income could be compressed into the yield on Treasury bonds and nothing more.

### A Market Of Stocks

Even though indexation has driven the behavior of individual stocks together in a manner contrary to the fondest hopes and dreams of the world’s fundamental analysts - really, when you buy or sell an index exchange-traded fund such as the SPDR for the S&P 500 (SPX) or the QQQQ for the NASDAQ 100, do you analyze the prospects for all 500 or 100 issues? - significant differences remain over time. No one could dispute the rise and fall of the technology sector during the 1998-2002 timeframe or the huge upward movement of energy and mining firms from 2003 onwards. All we need are divergences at the margin to justify the old Wall Street chestnut it is a market of stocks, and not a stock market.

Standard & Poor’s has divided the SPX into ten different economic sectors and into 130 (at present, the number changes frequently) different industry groups beneath those sectors. The ten economic sectors and the three largest members of each are presented below. How can we ascertain the impact at the margin of various currency changes on the behavior of those sectors and groups?

<u>Economic Sector</u>	<u>Largest Three Members</u>
Basic Materials	DuPont, Dow Chemical, Monsanto
Consumer Discretionary	Comcast, Home Depot, Time Warner
Consumer Staples	Procter & Gamble, Altria, Wal-Mart
Energy	ExxonMobil, Chevron, ConocoPhillips
Financial	Citigroup, Bank of America, AIG
Healthcare	Pfizer, Johnson & Johnson, Merck
Industrial	General Electric, United Parcel, United Technologies
Technology	Microsoft, Cisco, IBM
Telecommunications	AT&T, Verizon, BellSouth
Utilities	Exelon, Duke Energy, TXU

First, let’s concentrate on the relative performance of each group relative to the SPX itself. This ratio can then be converted into a series of daily returns, or percentage price changes and regressed against a time series of the daily returns for selected currencies such as the euro, Japanese yen and Canadian dollar. The time period over which the regressions will be run begins in April 2004, the time when the Federal Reserve’s rate-hike course was established. We should filter out all relationships below a certain confidence interval, in this case 90%. The resulting regression coefficients, or betas, can then be sorted into those with statistically significant positive and negative relationships to the currencies.

A table of these is presented below. Negative betas imply that the relative performance of the group selected falls when the currency strengthens; positive betas imply that the relative performance of the group rises when the currency strengthens. The more negative or positive the beta, the more acute the relationship is. For example, the relative performance beta of the S&P 500 Airlines group, which is 100% Southwest Airlines if you are interested, is a negative 0.361. At the lower right-hand corner of the table, the relative performance beta of the Gold group, which is 100% Newmont Mining, to the euro is a strongly positive 1.457.

## Relative Performance Of S&P 500 Industry Groups

<u>Canadian Dollar</u>		<u>Japanese Yen</u>		<u>Euro</u>	
<u>Group</u>	<u>Beta</u>	<u>Group</u>	<u>Beta</u>	<u>Group</u>	<u>Beta</u>
Airlines	(0.361)	Photo Products	(0.240)	Drug Retailers	(0.300)
Drug Retailers	(0.302)	Motorcycle Manufacturing	(0.234)	Food Distributors	(0.284)
Food Distributors	(0.252)	Drug Retailers	(0.208)	Casinos & Gaming	(0.192)
Wireless Services	(0.252)	Food Distributors	(0.206)	Healthcare Supplies	(0.190)
Home Entertainment Software	(0.250)	Wireless Services	(0.203)	Specialty Stores	(0.189)
Distributors	(0.221)	Publishing & Printing	(0.186)	Department Stores	(0.189)
Air Freight & Logistics	(0.211)	Household Products	(0.172)	Leisure Products	(0.155)
Pharmaceuticals	(0.206)	Hypercenters & Superstores	(0.162)	Apparel & Accessories	(0.155)
Environmental Services	(0.200)	Biotech	(0.148)	General Merchandising	(0.153)
Food Retailers	(0.198)	Leisure Products	(0.137)	Household Products	(0.147)
Office Electronics	(0.185)	Apparel & Accessories	(0.133)	Environmental Services	(0.147)
General Merchandising	(0.185)	Data Processing	(0.123)	Wireless Services	(0.133)
Tobacco	(0.183)	Integrated Telecommunications	(0.108)	Data Processing	(0.132)
Publishing & Printing	(0.183)	Food Retailers	(0.106)	Home Improvement Retail	(0.131)
Household Products	(0.181)	Packaged Foods	(0.102)	Tobacco	(0.129)
Casinos & Gaming	(0.166)	Healthcare Equipment	(0.100)	Advertising	(0.122)
Department Stores	(0.156)	Pharmaceuticals	(0.098)	Food Retailers	(0.121)
Healthcare Services	(0.151)	Distributors	(0.095)	Hypercenters & Superstores	(0.116)
Brewers	(0.151)	Office Services & Supplies	(0.091)	Publishing & Printing	(0.110)
Multiline Insurers	(0.136)			Computer Hardware	(0.103)
Restaurants	(0.135)			Packaged Foods	(0.090)
Soft Drinks	(0.134)			Integrated Telecommunications	(0.084)
Apparel & Accessories	(0.132)				
Advertising	(0.125)				
Packaged Foods	(0.124)				
Data Processing	(0.119)				
Healthcare Equipment	(0.119)				
Integrated Telecommunications	(0.115)				
Home Improvement Retail	(0.113)				
Hypercenters & Superstores	(0.111)				
Industrial Conglomerates	(0.070)				
Industrial Machinery	0.077	Diversified Banks	0.069	Diversified Banks	0.092
Asset Management	0.085	Other Diversified Financial Services	0.098	Electric Utilities	0.098
Electric Utilities	0.107	Thriffs & Mortgages	0.104	Asset Management	0.110
Building Products	0.129	Industrial Machinery	0.112	Auto Parts & Equipment	0.172
Industrial Gases	0.140	Investment Banking	0.115	Fertilizers & Agricultural Chem.	0.254
Construction & Farm Machinery	0.153	Communications Equipment	0.125	Integrated Oil & Gas	0.285
Diversified Chemicals	0.156	Building Products	0.127	Aluminum	0.307
Investment Banking	0.157	Household Appliances	0.132	Oil & Gas Exploration	0.339
Metal & Glass Containers	0.172	Specialized Finance	0.140	Steel	0.353
Paper Packaging	0.173	Asset Management	0.159	Oil & Gas Drilling	0.378
Forest Products	0.186	Home Furnishings	0.186	Oil & Gas Equipment	0.388
Construction Materials	0.205	Computers & Electronics	0.204	Homebuilding	0.395
Fertilizers & Agricultural Chem.	0.252	Oil & Gas Refining	0.213	Oil & Gas Refining	0.482
Agricultural Products	0.364	Trading Companies	0.215	Diversified Metals & Mining	0.860
Integrated Oil & Gas	0.407	Aluminum	0.265	Gold	1.457
Homebuilding	0.409	Steel	0.352		
Aluminum	0.533	Homebuilding	0.428		
Oil & Gas Equipment	0.572	Diversified Metals & Mining	0.570		
Oil & Gas Exploration	0.650	Gold	0.889		
Steel	0.663				
Oil & Gas Drilling	0.683				
Oil & Gas Refining	0.827				
Diversified Metals & Mining	1.284				
Gold	1.383				

What themes emerge from this analysis? Let's start with those groups hurt by a weaker U.S. dollar. They are concentrated in the economic sector known as Consumer Staples, those goods and services considered the most recession-proof and defensive investments. The top cells of the table include Drug Retailers, Food Distributors, Food Retailers, Tobacco, Brewers, Soft Drinks, Packaged Foods and Household Products. The Consumer Discretionary sector and Pharmaceuticals are represented as well.

Do these groups have a strong import/export component? No, and therein lies a surprise. Many analysts regard a weak dollar as benefiting these firms to the extent they repatriate earnings into dollars and therefore acquire more dollars when it weakens. This always has been an illusion, the idea that more of a weaker currency is a benefit, and we demonstrated it thus. Moreover, many of these multinational consumer firms have large expenditures in foreign currencies and therefore see their real, currency-adjusted operating expenses rise when the dollar weakens. Finally, we need to remind ourselves a weaker dollar means reduced spending power in the hands of the American consumer. As the currency weakens, the consumer is impoverished thereby.

What about those groups whose relative performance improves when the dollar weakens? The list here is dominated by firms in the Basic Materials, Energy and Financial sectors. Two common threads emerge here, one the strong global economic growth underway since April 2004 and the still-stimulative monetary policy over the period. Even though the Federal Reserve was raising rates, it was raising them too slowly to crimp either growth or inflationary expectations. These below-neutral interest rates contributed to the profitability of the financial sector.

In addition, it is fair to say that when the Federal Reserve stimulated the American consumer with low interest rates, the increased demand was met by Chinese exports, and China had to build the infrastructure necessary to ramp up production. This required both energy and raw materials, hence the strong performance of these sectors.

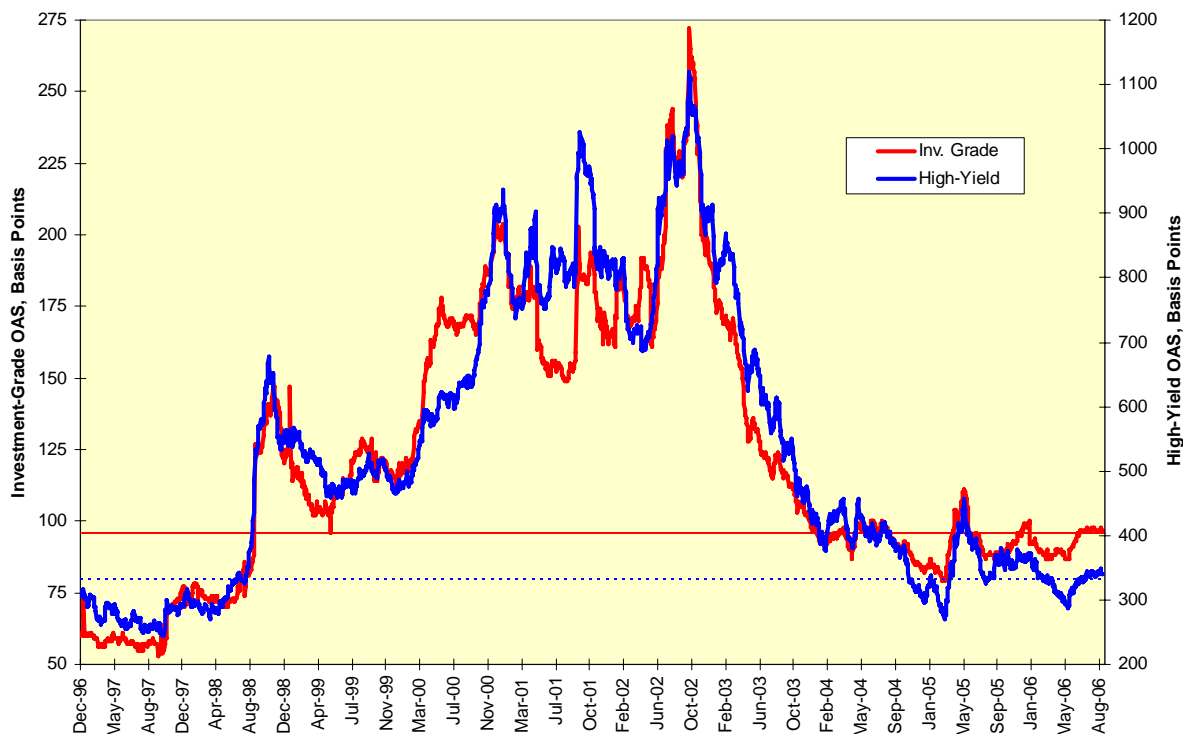
In both cases, those for groups affected positively and negatively by the dollar we see sufficient statistically significant differentiation to be able to answer the question, "What is the effect on stocks?" with more than a grunt and a simple up-or-down answer. Currencies affect stocks in sector-specific ways.

### Corporate Bonds

Can we see a similar differentiation in the world of corporate bonds? Corporate bonds traditionally traded as a spread to Treasuries; investment-grade issues were quoted as such and even high-yield bonds could be expressed as a measure known as option-adjusted spread (OAS). OAS, expressed in basis points, accounts for all the embedded call, put and sinking fund features common in corporate bonds and makes them equivalent to Treasuries.

OAS levels reflect credit stress in the world of corporate bonds. They rise during recessions and during bear markets and fall when the opposite obtains. Yet in an unusual turn of history, they have been in a tight trading range for more than two years.

### U.S. Corporate Bond Spreads



The answer as to why this trading range has persisted involves a major structural change in the corporate bond market. The advent of credit default swaps (CDS) means bond investors no longer trade the fairly illiquid corporate bonds but buy the CDS instead. A CDS acts much like a put option on a bond; the buyer of protection can put the bond or cash equivalent back to the protection seller at par in the event of a credit default such as a bankruptcy or a material downgrade. As the bonds remain intact, their OAS remains flat and the action shifts to the costs of the CDS, also expressed in basis points.

We can construct an index of CDS costs for each of the S&P economic sector's CDS. Just as we did for the relative performance of stocks, we can regress the returns for these indices against the returns on the currencies. A positive coefficient means credit stress rises for the sector as the currency strengthens; a negative coefficient means credit stress falls as the currency strengthens. The results for each sector are displayed below.

<u>Economic Sector</u>	<u>CAD</u>	<u>JPY</u>	<u>EUR</u>
Basic Materials	(0.254)	(0.071)	(0.005)
Consumer Discretionary	(0.207)	(0.162)	(0.080)
Consumer Staples	(0.107)	(0.092)	(0.105)
Energy	(0.044)	(0.023)	(0.045)
Financial	(0.249)	(0.117)	(0.050)
Healthcare	0.086	0.061	0.207
Industrial	(0.131)	0.141	(0.108)
Technology	(0.136)	(0.149)	0.051
Telecommunications	(0.270)	(0.357)	(0.099)
Utilities	(0.102)	(0.088)	(0.099)

The results are rather extraordinary. Healthcare is the only sector wherein credit costs rise in a weak-dollar environment. Beyond that, there are only two more cases of a weaker dollar causing higher corporate credit stress, Industrials with respect to the Japanese yen and Technology with respect to the euro.

Several sectors appear to do very well indeed during weak dollar environments. Basic Materials, Financials and Telecommunications all benefit when the Canadian dollar firms. Telecommunications also sees much lower credit stress during a strong Japanese yen environment. And the euro, for all of the time and attention devoted to its movements, has no strongly negative relationship with the credit stress of any sector.

If stocks float on a sea of corporate bonds - you will not be interested in buying the stock of a firm whose bonds are in trouble - then we should conclude that a weaker dollar has little negative impact on either the corporate bond market or by extension the stock market.

There we have it: The next time a breathless financial pundit proclaims the world did not end that day "in spite of a weaker dollar," you can smile knowingly. The relationship simply does not exist in the data.