

# The Euro And Asymmetric Risk

*“Remember, Ginger Rogers did everything Fred Astaire did, but she did it backwards and in high heels.”*  
– Faith Whittlesey

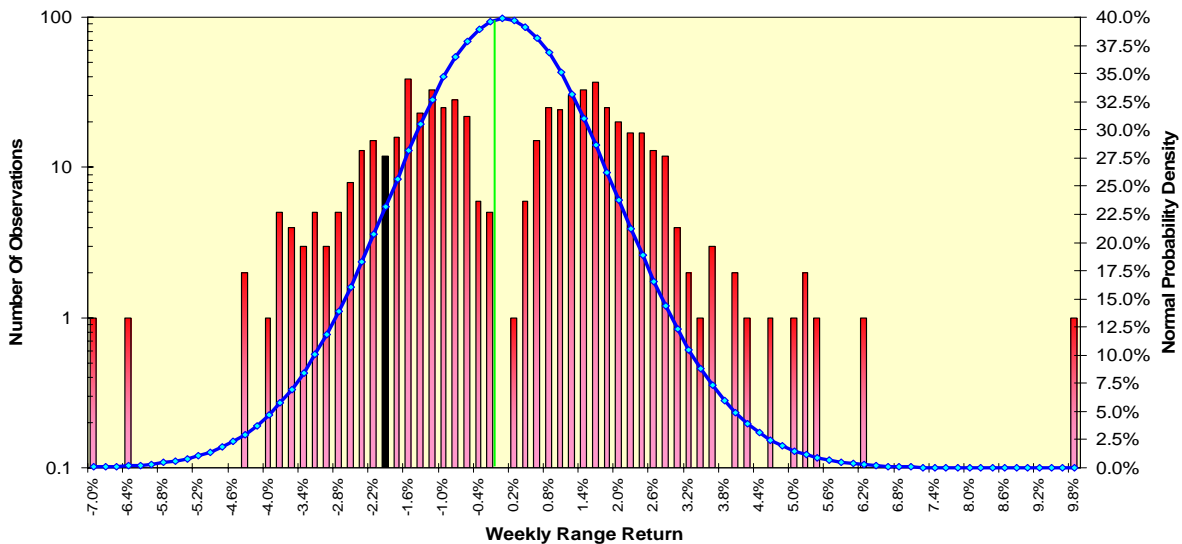
I suggested [last Friday](#) anyone who could produce a weekly candlestick chart of the euro should do so and observe the asymmetry of the euro’s movements over time. It is not quite as bad as some of those soft commodities whose charts can be described as “three months up; three minutes down,” but the concept is the same. Let’s produce such a chart with the green bodies depicting up-weeks and the red bodies depicting down-weeks; the shadows are suppressed to reduce visual clutter.

**Candles In The Wind: Weekly Chart For Euro**



The data can be rearranged to produce weekly range returns; these are the percentage changes from the current week’s high or low against the previous week’s last trade. If we display these as a histogram, a rather remarkable picture emerges. The returns are not distributed normally, as one might expect and as shadowed by a blue normal probability density curve, but are complete bimodal in nature and skewed heavily toward a preponderance of negative returns. Last week’s decline in the euro occurred in the range depicted by the black column.

**Euro's Distribution Of Weekly Range Returns**



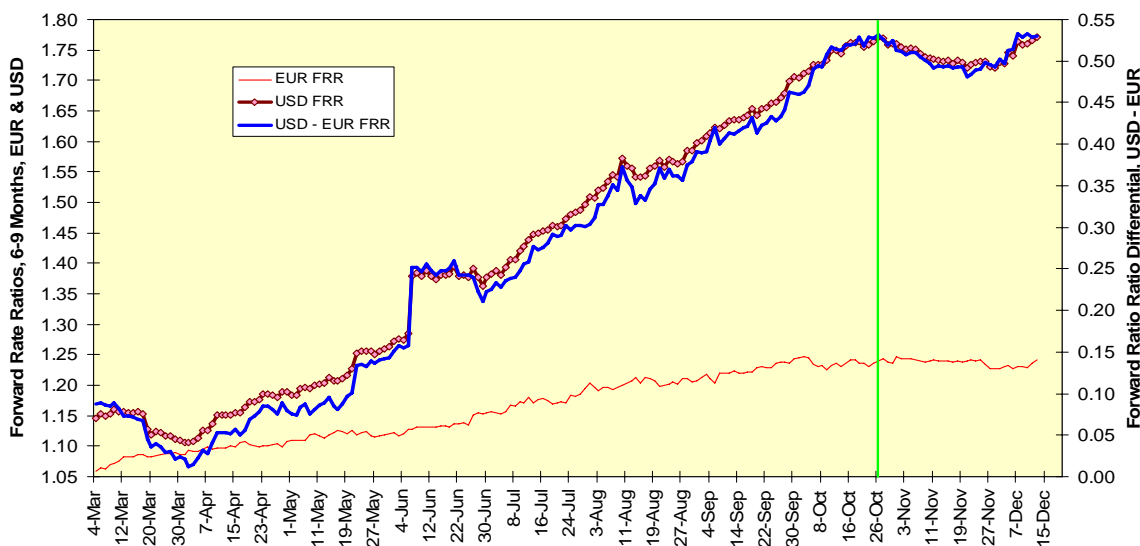
Not only has the market been conditioned since mid-2002 to consider the dollar in a downtrend against the euro, the dollar has assumed the role of a funding currency in carry trades similar to that of the [Japanese yen](#). Just as the yen has had violent retracement rallies linked to real or imagined unwinding of carry trades ever since Japanese interest rates began their long slide in the early 1990s, the dollar will have similar violent upturns to join its history of upturns against the euro. In fact, the stage is set for a series of such rallies moving forward.

### Interest Rate Expectations

While the dollar bloc and the euro bloc define a bipolar currency world, the heavy lifting on the expected interest rate differential between the two currencies has been done by the dollar so far in 2009. We can measure these expectations by the forward rate ratio between six and nine months for each currency; this is the rate at which we can lock in borrowing for three months starting six months from now divided by the nine-month rate itself. The difference between the two FRRs has been a function of the USD FRR; the EUR FRR has been much flatter.

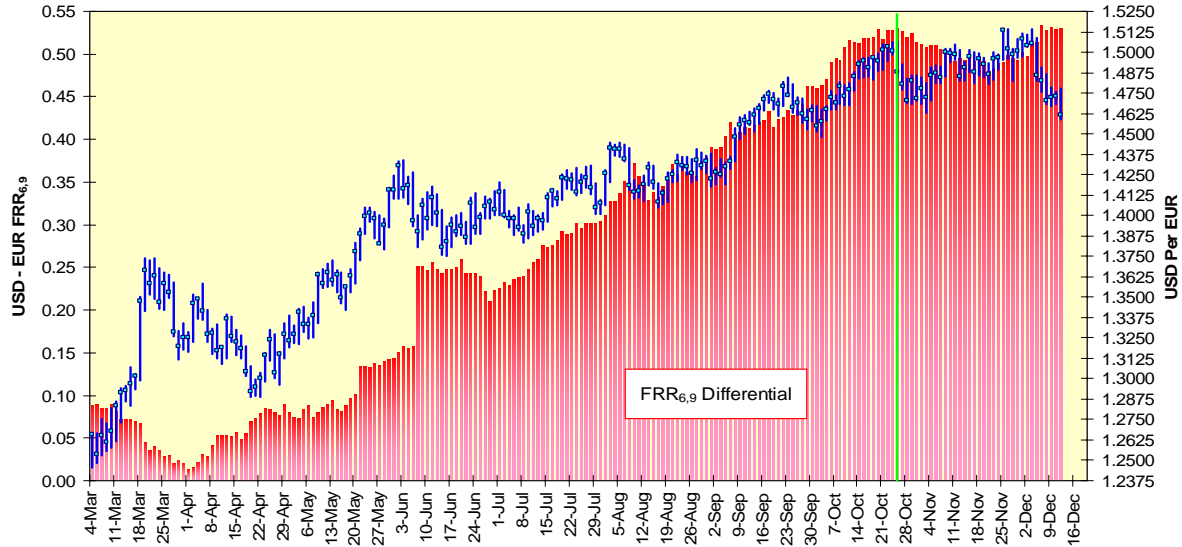
The euro and the FRR differential between the USD and EUR hit resistance on October 26, 2009; marked with a green vertical line in the next two charts. The relative flattening of the USD LIBOR curve was sufficient to signal a change in relative interest rate expectations even as U.S. short-term interest rates continued to drive toward new lows over the next month. A second and higher high for the euro was hit on November 25; the Dubai story hit the next day and the euro has started to come unglued since then.

**Euro Reacting To American Monetary Expectations**



We can map the course of the euro itself against the FRR differential. What is interesting is the differential hit its high on Monday, December 7, 2009 even as the euro was breaking. This was due solely to the continued drop in USD LIBOR: Incredibly, even in the face of improving economic news both the three- and six-month USD LIBOR rates hit their lows last Friday and the nine-month LIBOR rate hit its low on Thursday. This continued drop in short-term interest rates and the continued steepening of the LIBOR yield curve is approaching a natural limit from which the USD yield curve will have to flatten against the EUR LIBOR curve, especially if the European Central Bank has to remain easier than it would like given the situations in Greece and Spain.

### The Euro And The Forward Rate Ratio Differential



### Stock Market Impact

Now let's return to an analysis first introduced in [February 2005](#) on assessing the impact of factor prices on S&P industry groups, and add the twist introduced in [November 2006](#) on weighting these factors by the groups' representation in the index, we can construct a table of groups both helped and hurt by the euro at a 90% confidence interval.

A total of 51 industry groups in the S&P 1500 Supercomposite accounting for 50.11% of the index' capitalization have a negative beta to the euro; their net relative weighted beta is -12.80%. These groups are concentrated in the consumer-related, utility and healthcare sectors. Forty-nine industry groups accounting for 30.50% of the index' capitalization have a positive beta to the euro; their net relative weighted beta is 15.76%. These groups are concentrated in the energy, financial and industrial sectors.

The net relative weighted beta is 2.96%. This net positive beta means every 1% decline in the euro, about 146 points at Friday's close, should lead to a decline of 2.96% in the S&P 1500, all else held equal. Not only is this partial contribution surprisingly large, it confirms what many have suspected for months: The impact of dollar liquidity on a range of markets has been considerable.

It also underscores the dangers posed by withdrawal of that liquidity: Any reduction in the carry between the dollar and other currencies and any reduction in the carry along the dollar yield curve is likely to produce strong reactions that will send the dollar higher and bond prices lower. You are free to assess for yourselves what the stock market's initial reaction to those combined moves will be.

**Euro Beta-Weighted Impact On S&P 1500**

	SPR	EUR	Weighted		SPR	EUR	Weighted
	Weight	Beta	Beta		Weight	Beta	Beta
Pharmaceuticals	5.99%	0.359	0.022	Integrated Oil & Gas	6.26%	0.437	0.027
Household Products	2.44%	0.401	0.010	Oil & Gas Exploration	2.01%	0.919	0.019
Soft Drinks	2.31%	0.367	0.008	Oil & Gas Equipment	16.1%	0.998	0.016
Hypercenters & Superstores	1.32%	0.519	0.007	Other Diversified Financial Services	3.33%	0.424	0.014
Computer Hardware	4.54%	0.141	0.006	Life & Health Insurers	0.93%	0.766	0.007
Biotech	1.55%	0.392	0.006	Construction & Farm Machinery	0.94%	0.579	0.005
Packaged Foods	1.43%	0.420	0.006	Asset Management & Custodial Banks	12.0%	0.452	0.005
Tobacco	1.43%	0.410	0.006	Diversified Metals & Mining	0.31%	1.667	0.005
Healthcare Equipment	2.12%	0.267	0.006	Steel	0.38%	1.156	0.004
Systems Software	3.40%	0.123	0.004	Investment Banking & Brokerage	1.42%	0.298	0.004
Multiline Utilities	1.41%	0.248	0.004	Coal & Cons. Fuels	0.24%	1.661	0.004
Restaurants	1.12%	0.310	0.003	Oil & Gas Drilling	0.34%	1.112	0.004
Aerospace & Defense	2.66%	0.126	0.003	Diversified Chemicals	0.76%	0.423	0.003
Drug Retailers	0.77%	0.403	0.003	Fertilizers & Agricultural Chemicals	0.50%	0.628	0.003
Electric Utilities	2.07%	0.143	0.003	Specialized REITs	0.62%	0.416	0.003
Healthcare Services	0.89%	0.328	0.003	Gold	0.23%	1.090	0.002
Internet Software & Services	1.87%	0.146	0.003	Consumer Finance	0.78%	0.271	0.002
Integrated Telecommunications	2.60%	0.104	0.003	Movies & Entertainment	1.35%	0.156	0.002
Data Processing & Outsourcing	1.16%	0.151	0.002	Construction & Engineering	0.29%	0.708	0.002
Home Improvement Retailers	0.82%	0.203	0.002	Retail REITs	0.43%	0.447	0.002
Healthcare Distributors	0.42%	0.358	0.002	Oil & Gas Storage	0.31%	0.557	0.002
Apparel Retailers	0.64%	0.204	0.001	Aluminum	0.14%	1.200	0.002
Air Freight & Logistics	0.94%	0.121	0.001	Electrical Components & Equipment	0.63%	0.245	0.002
Insurance Brokers	0.24%	0.468	0.001	Office REITs	0.27%	0.563	0.002
Education Services	0.20%	0.578	0.001	Industrial Machinery	1.09%	0.129	0.001
General Merchandise Retailers	0.43%	0.258	0.001	Multiline Insurers	0.37%	0.370	0.001
Internet Retailers	0.58%	0.186	0.001	Industrial Gases	0.42%	0.303	0.001
Life Sciences Tools & Services	0.55%	0.197	0.001	Industrial REITs	0.10%	1.156	0.001
Food Retailers	0.29%	0.295	0.001	Specialized Finance	0.45%	0.249	0.001
Thrifts & Mortgages	0.23%	0.336	0.001	Agricultural Products	0.20%	0.502	0.001
Computer Storage & Peripherals	0.60%	0.129	0.001	Paper Products	0.17%	0.574	0.001
Department Stores	0.38%	0.200	0.001	Residential REITs	0.26%	0.330	0.001
IT Consulting & Services	0.21%	0.329	0.001	Oil & Gas Refining	0.16%	0.485	0.001
Environmental Services	0.34%	0.190	0.001	Hotels	0.29%	0.250	0.001
Food Distributors	0.18%	0.332	0.001	Diversified REITs	0.15%	0.454	0.001
Automotive Retailers	0.20%	0.221	0.000	Gas Utilities	0.39%	0.156	0.001
Airlines	0.12%	0.373	0.000	Casinos & Gaming	0.13%	0.450	0.001
Personal Products	0.24%	0.179	0.000	Broadcast & Cable TV	0.09%	0.584	0.001
Healthcare Suppliers	0.13%	0.322	0.000	Auto Parts & Equipment	0.23%	0.217	0.001
Home Improvement Retailers	0.13%	0.278	0.000	Forest Products	0.09%	0.481	0.000
Leisure Products	0.14%	0.205	0.000	Independent Power Producers	0.15%	0.271	0.000
Distributors	0.08%	0.338	0.000	Motorcycle Manufacturers	0.06%	0.656	0.000
Distillers & Vintners	0.08%	0.315	0.000	Tires & Rubber	0.03%	0.800	0.000
Healthcare Facilities	0.15%	0.163	0.000	Electrical Manufacturing Services	0.11%	0.176	0.000
Brewers	0.07%	0.349	0.000	Multisector Holdings	0.04%	0.506	0.000
Trading Companies	0.17%	0.138	0.000	Commercial Printers	0.05%	0.288	0.000
Healthcare Technology	0.11%	0.183	0.000	Building Products	0.10%	0.137	0.000
Specialized Consumer Services	0.14%	0.131	0.000	Home Entertainment Software	0.06%	0.175	0.000
Trucking	0.12%	0.156	0.000	Marine	0.03%	0.137	0.000
Reinsurance	0.08%	0.236	0.000				
Water Utilities	0.03%	0.403	0.000				
<b>Subtotal:</b>	<b>50.11%</b>		<b>-12.80%</b>	<b>Subtotal:</b>	<b>30.50%</b>		<b>5.76%</b>
				<b>Total:</b>	<b>80.62%</b>		<b>2.96%</b>