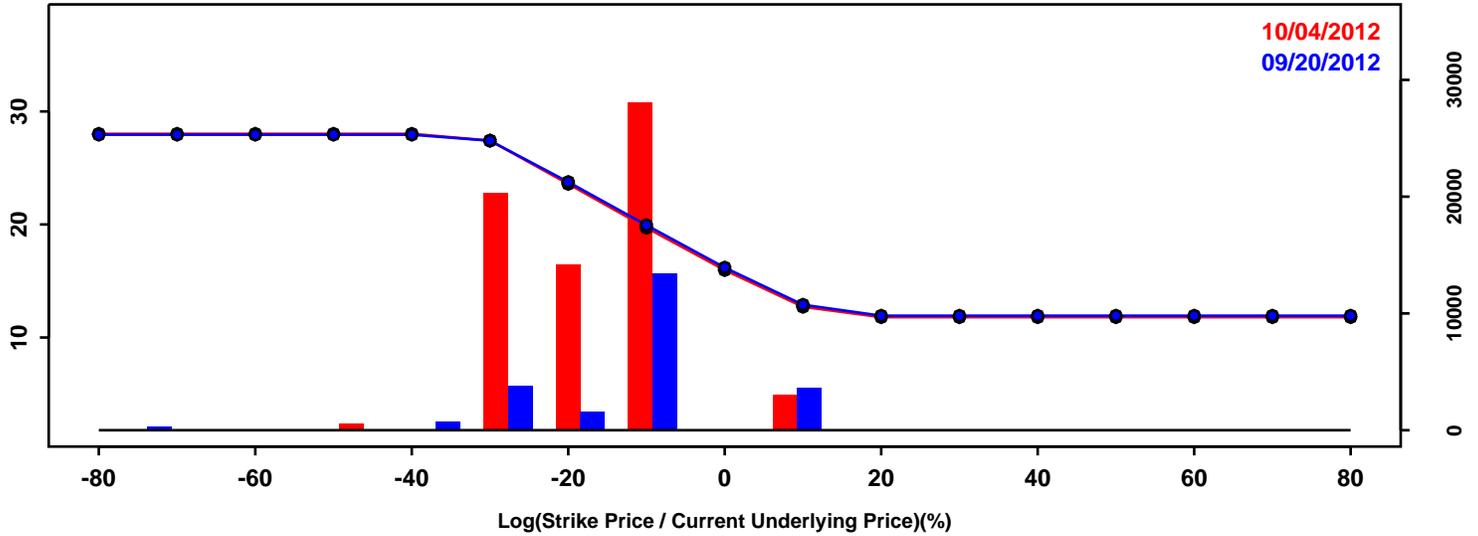


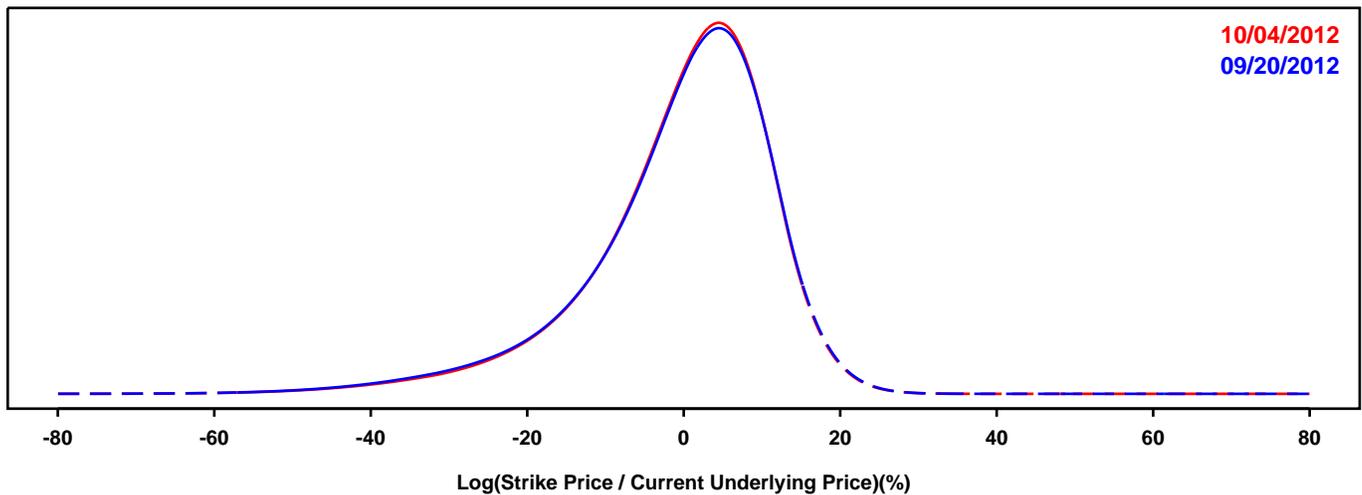
# RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- S&P 500

Log returns are based on the risk neutral density function of the underlying asset derived from options that expire in approximately 6 months.

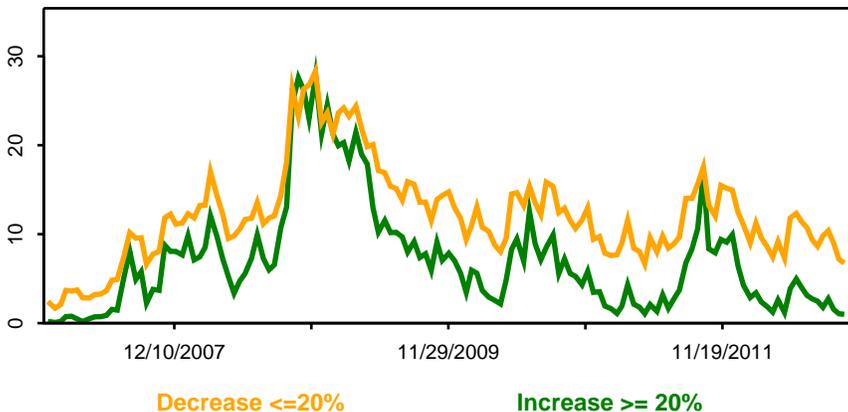
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



Statistics of the Log Return Distributions			
	09/20/2012	10/04/2012	Change
10th Pct	-16.26%	-15.74%	0.52%
50th Pct	1.57%	1.59%	0.02%
90th Pct	12.18%	12.11%	-0.07%
Mean	-0.56%	-0.44%	0.13%
Std Dev	12.12%	11.86%	-0.26%
Skew	-1.19	-1.19	0.00
Kurtosis	2.33	2.41	0.08