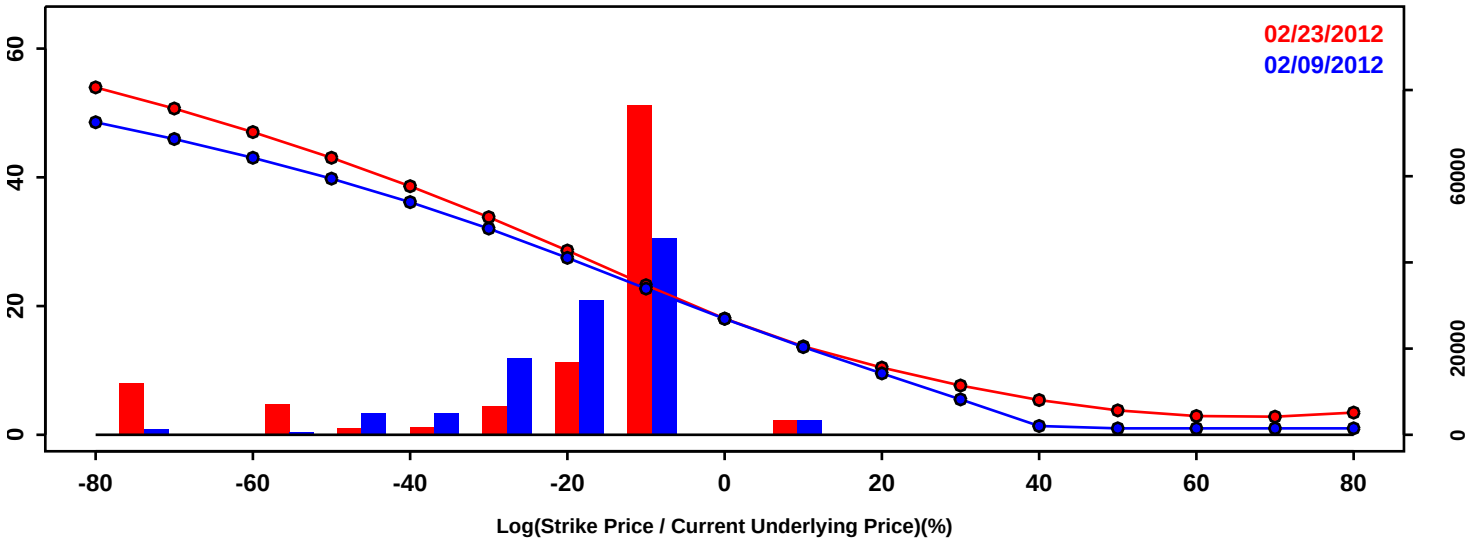
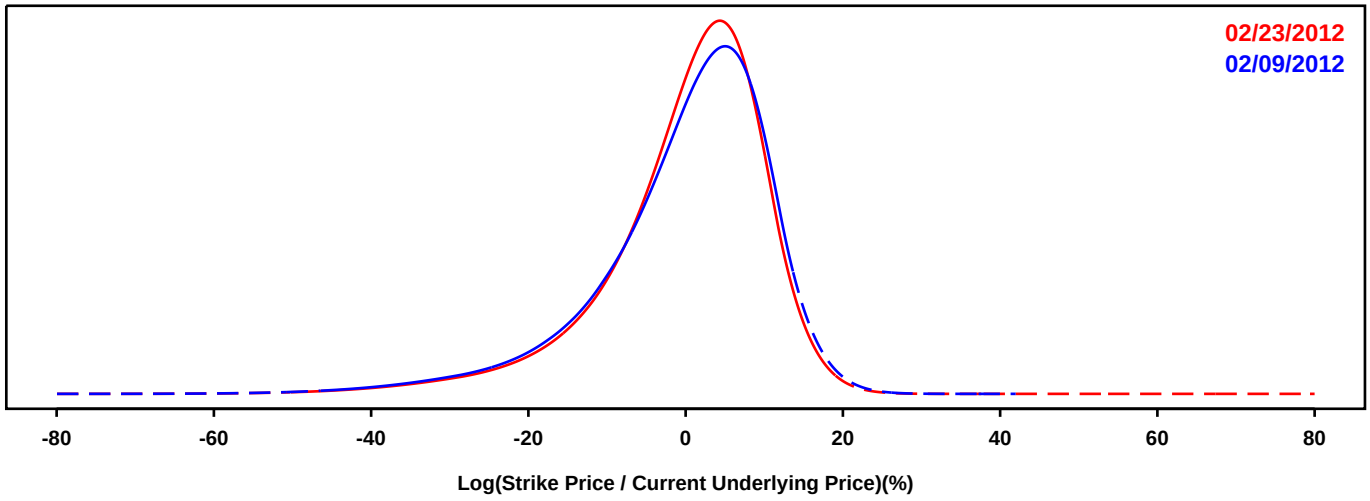
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- S&P 500

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

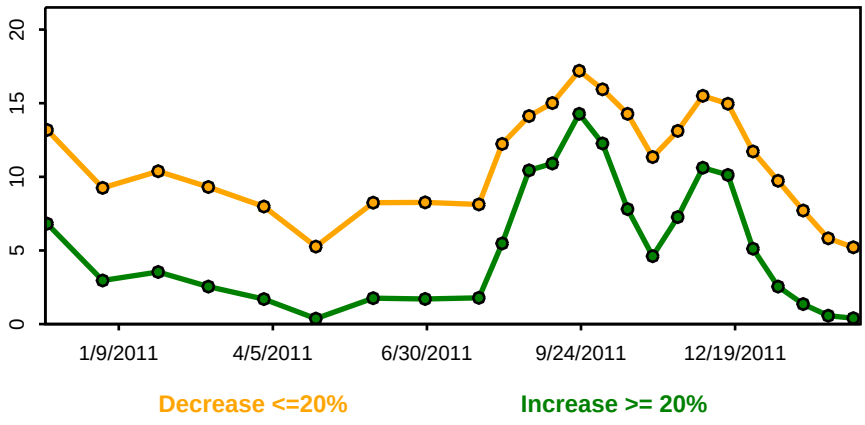
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



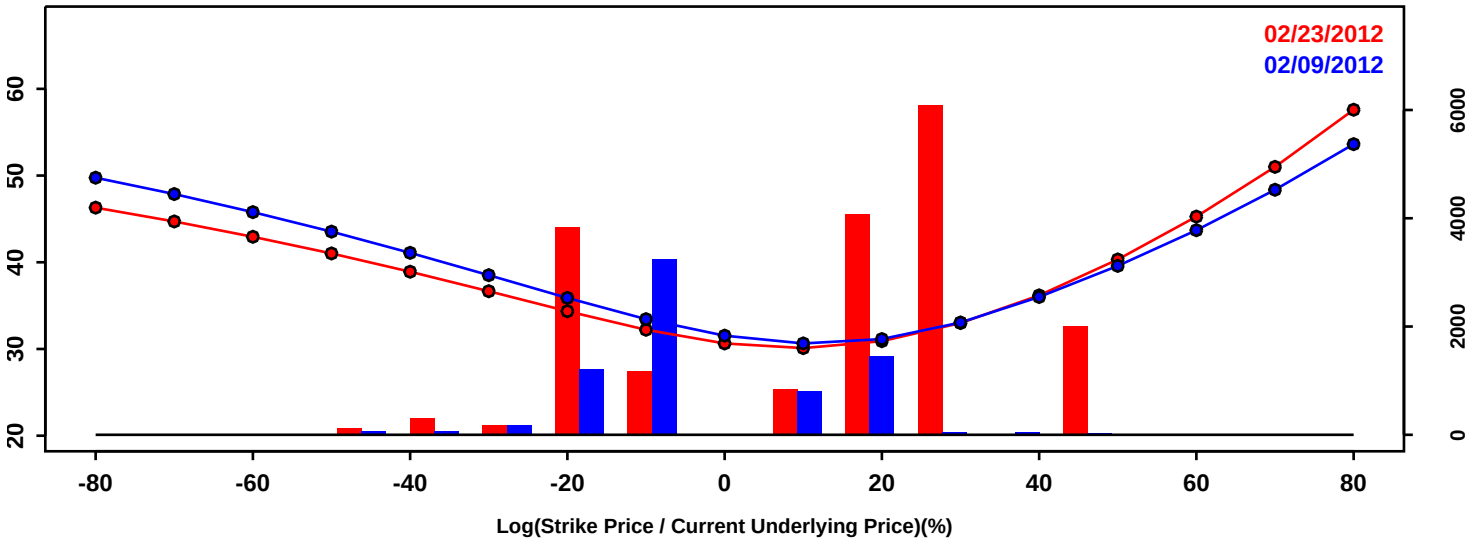
Statistics of the Log Return Distributions

	02/09/2012	02/23/2012	Change
10th Pct	-14.48%	-13.48%	1.01%
50th Pct	1.93%	1.78%	-0.15%
90th Pct	11.52%	10.84%	-0.68%
Mean	-0.12%	-0.09%	0.03%
Std Dev	11.14%	10.57%	-0.57%
Skew	-1.24	-1.31	-0.07
Kurtosis	2.52	2.93	0.41

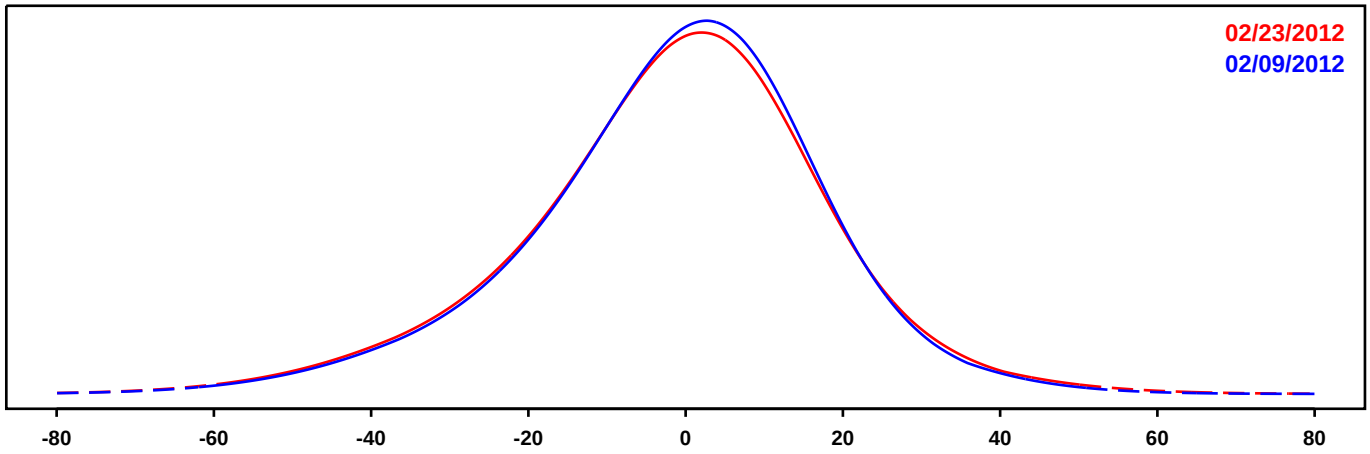
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- CRUDE OIL FUTURES

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

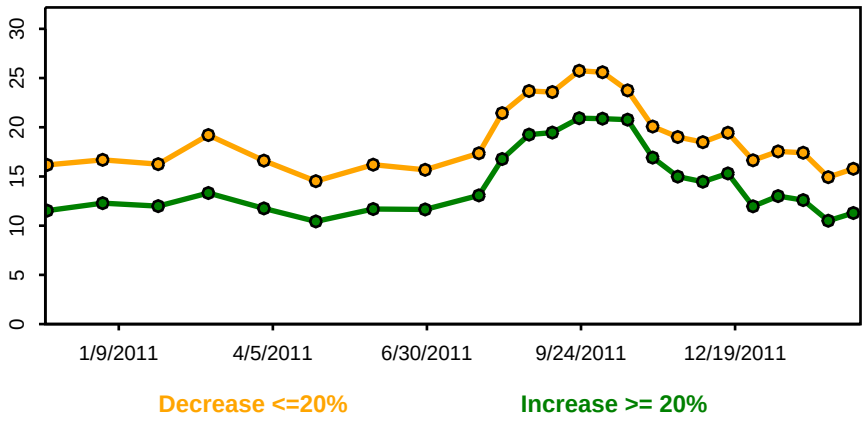
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



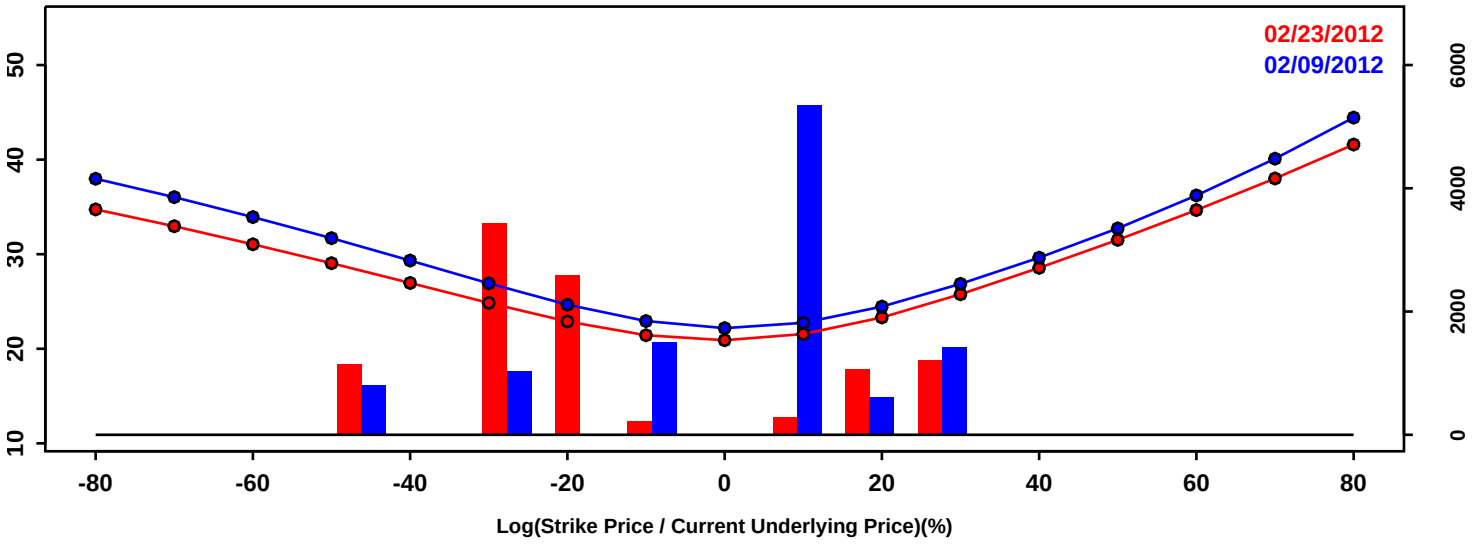
Statistics of the Log Return Distributions

	02/09/2012	02/23/2012	Change
10th Pct	-25.76%	-26.80%	-1.04%
50th Pct	0.14%	-0.21%	-0.35%
90th Pct	20.46%	21.27%	0.81%
Mean	-1.34%	-1.49%	-0.15%
Std Dev	18.84%	19.60%	0.76%
Skew	-0.41	-0.32	0.09
Kurtosis	0.81	0.82	0.01

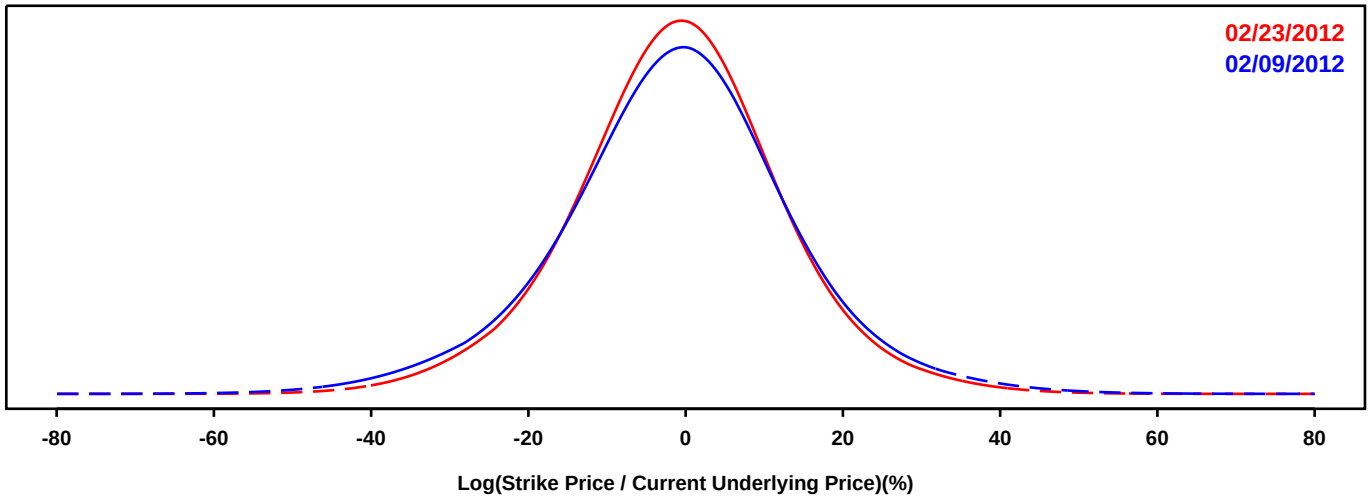
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- GOLD FUTURES

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

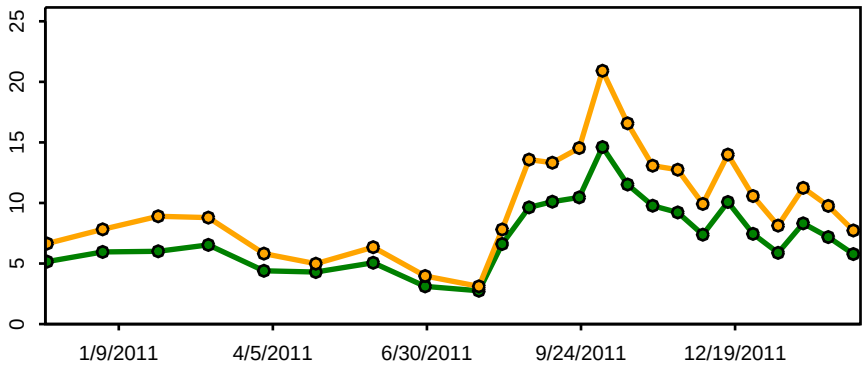
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



Decrease <=20% Increase >= 20%

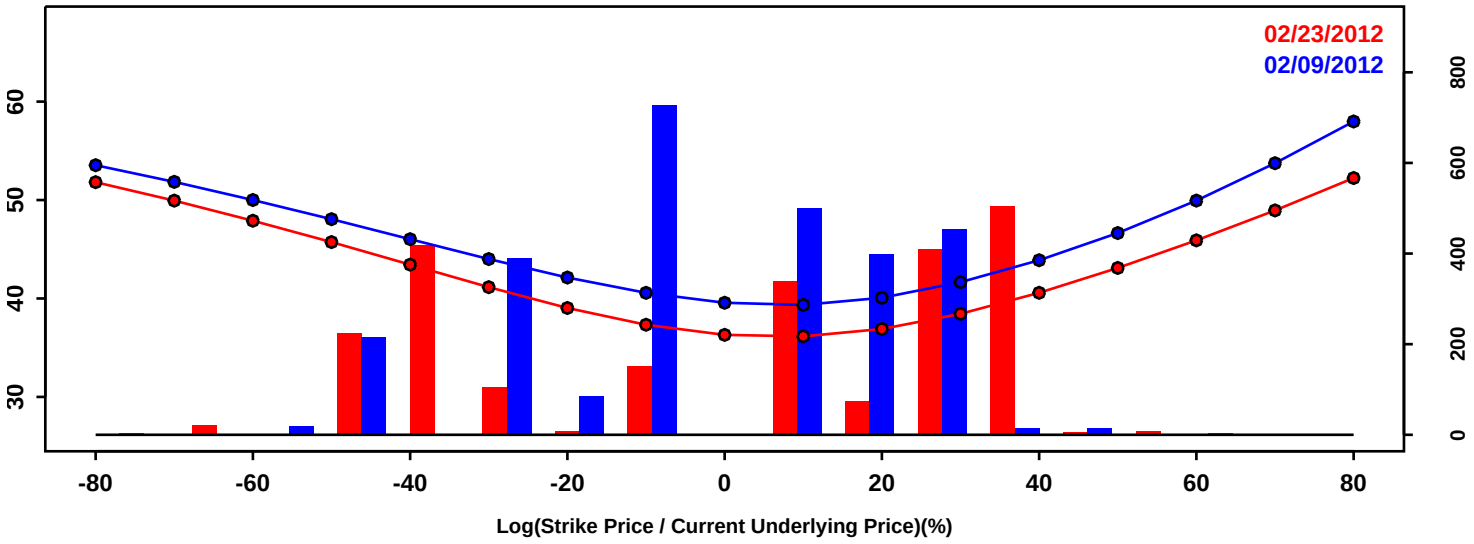
Statistics of the Log Return Distributions

	02/09/2012	02/23/2012	Change
10th Pct	-19.73%	-17.80%	1.93%
50th Pct	-0.81%	-0.86%	-0.05%
90th Pct	17.02%	15.61%	-1.40%
Mean	-1.06%	-0.92%	0.14%
Std Dev	15.08%	13.56%	-1.52%
Skew	-0.06	-0.01	0.06
Kurtosis	0.85	0.66	-0.19

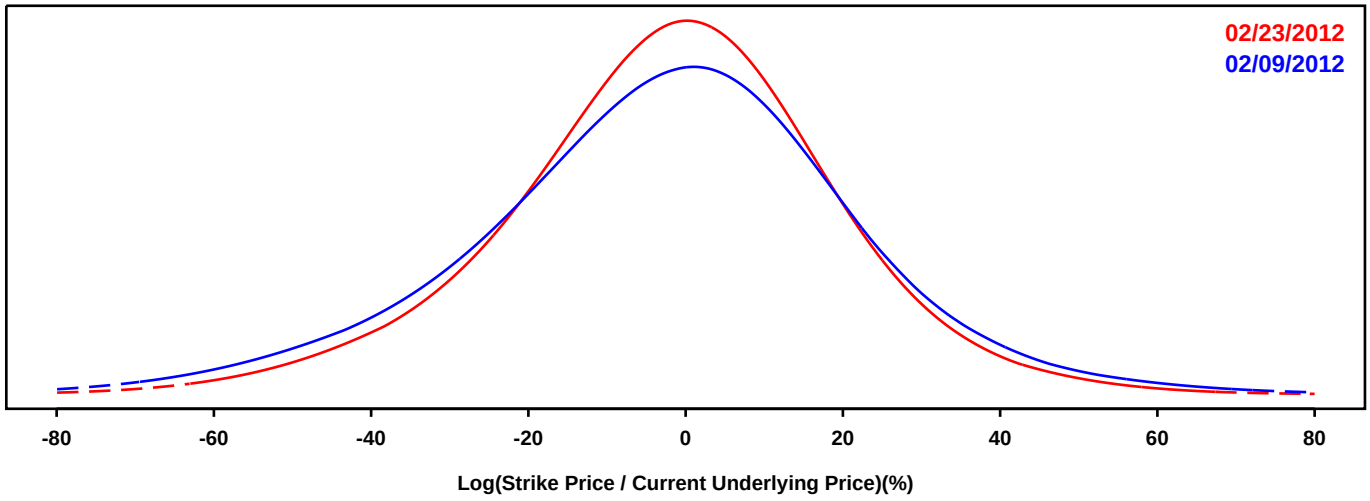
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- SILVER FUTURES

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

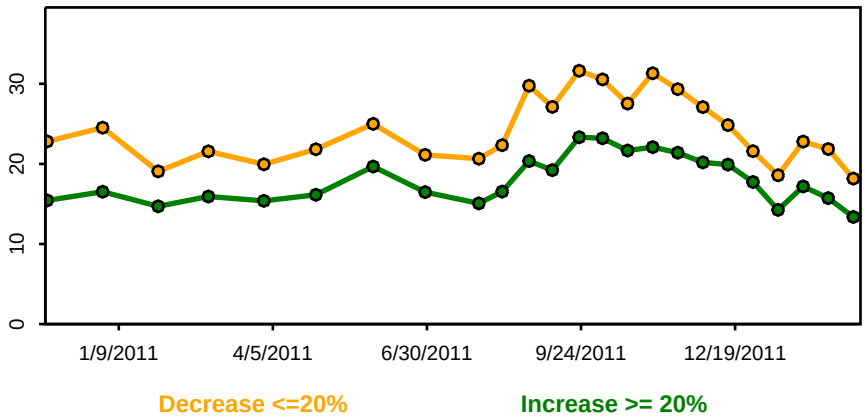
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



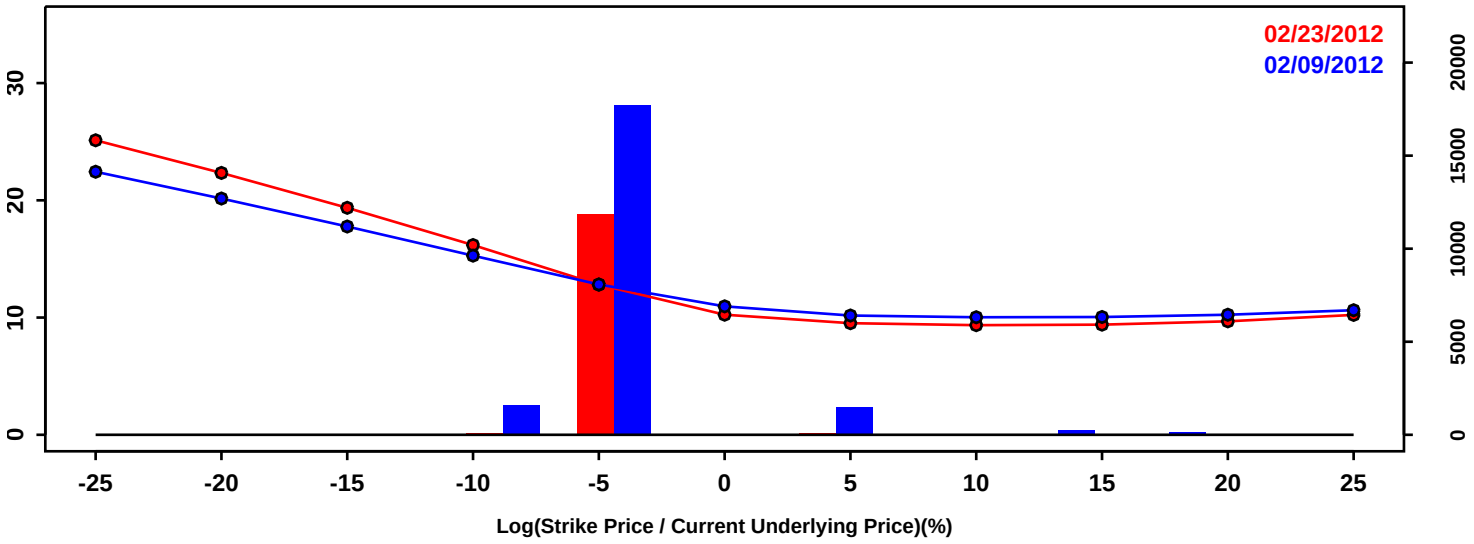
Statistics of the Log Return Distributions

	02/09/2012	02/23/2012	Change
10th Pct	-34.19%	-29.05%	5.15%
50th Pct	-1.57%	-1.16%	0.41%
90th Pct	26.39%	23.55%	-2.84%
Mean	-2.70%	-1.99%	0.71%
Std Dev	24.52%	21.27%	-3.26%
Skew	-0.21	-0.20	0.01
Kurtosis	0.63	0.62	-0.01

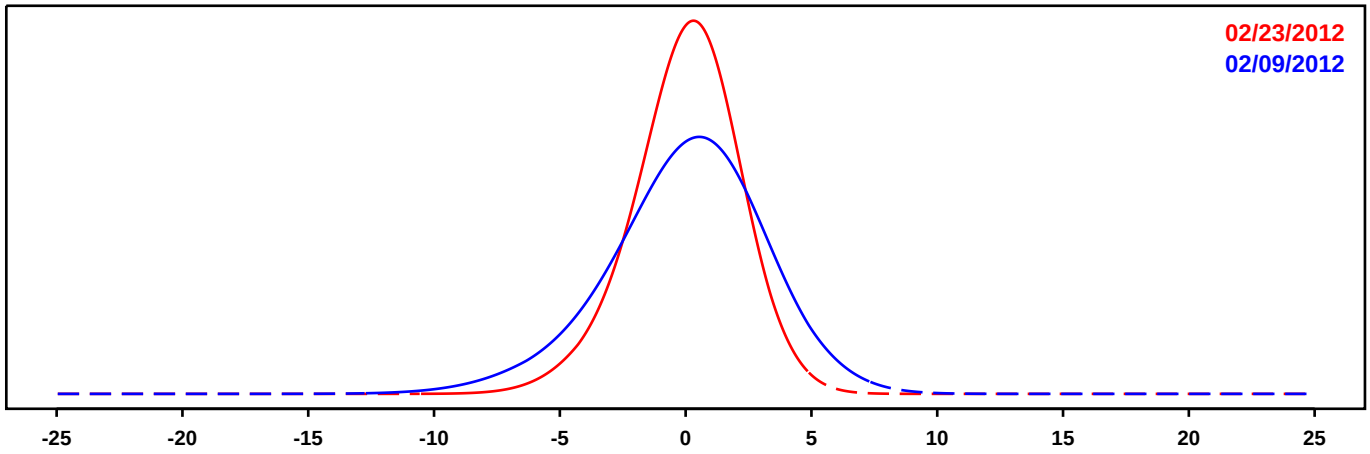
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- DOLLAR-EURO EXCHANGE RATE FUTURES

Log returns are based on the risk neutral density function of the underlying asset derived from options that expire in approximately 3 months.

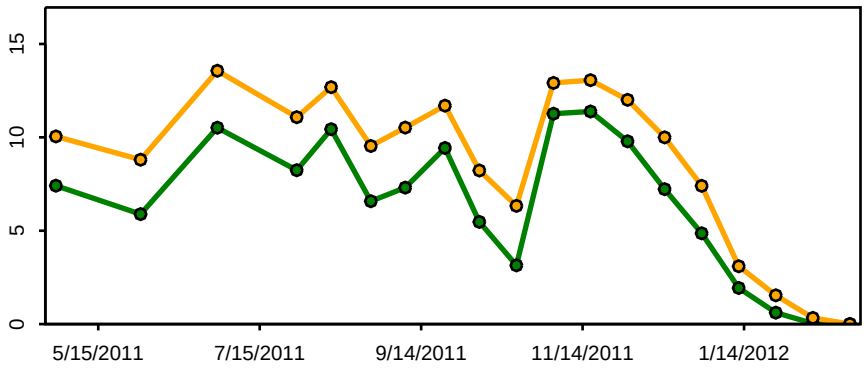
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



Decrease <=10% Increase >= 10%

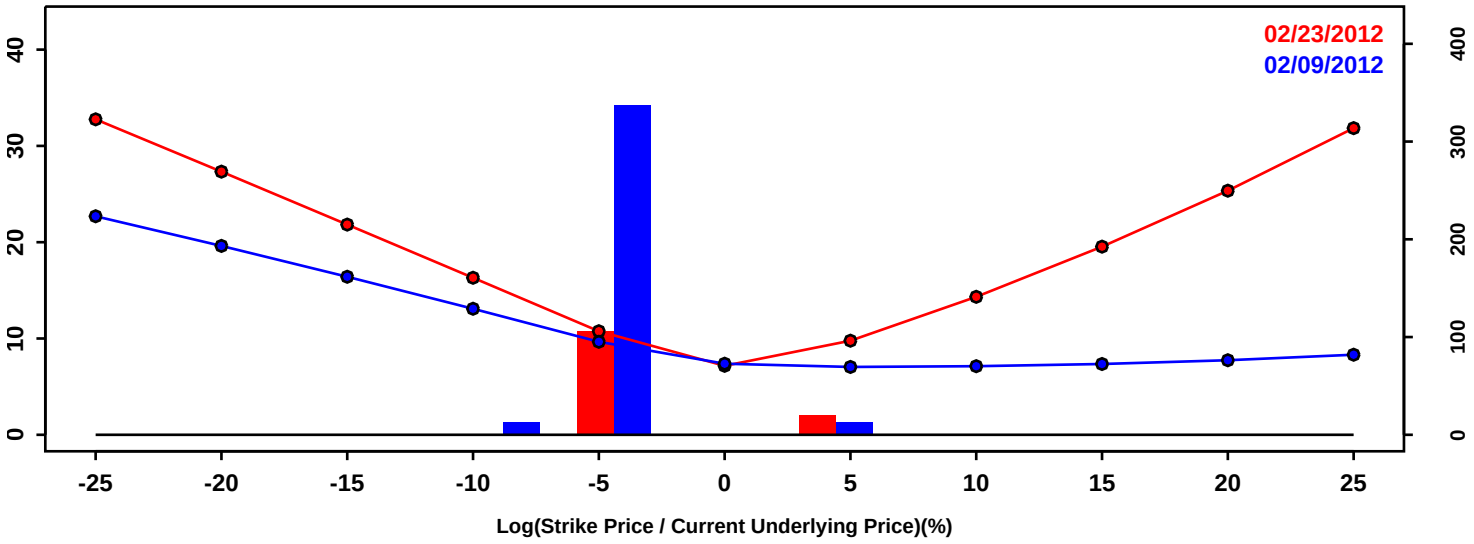
Statistics of the Log Return Distributions

	02/09/2012	02/23/2012	Change
10th Pct	-4.09%	-2.74%	1.35%
50th Pct	0.19%	0.14%	-0.05%
90th Pct	3.87%	2.66%	-1.21%
Mean	0.06%	0.05%	-0.01%
Std Dev	3.17%	2.16%	-1.01%
Skew	-0.35	-0.30	0.05
Kurtosis	0.44	0.38	-0.06

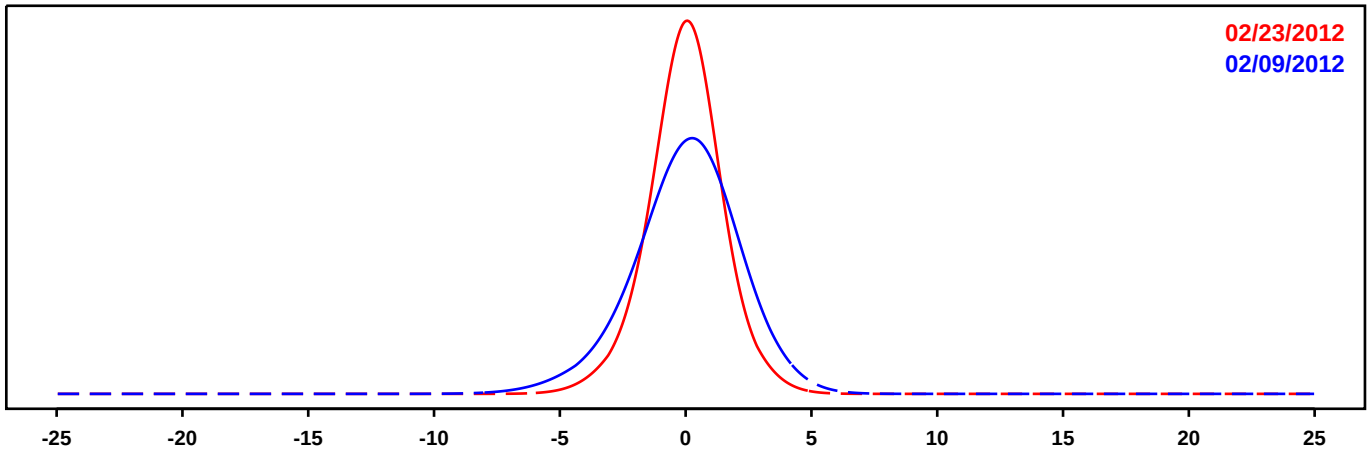
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- DOLLAR-POUND EXCHANGE RATE FUTURES

Log returns are based on the risk neutral density function of the underlying asset derived from options that expire in approximately 3 months.

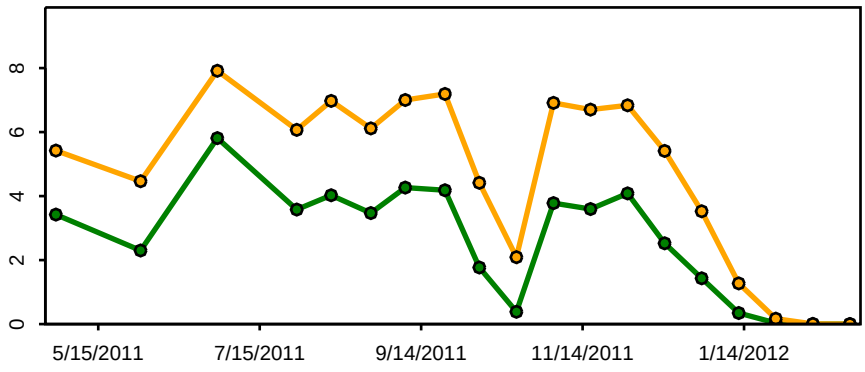
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



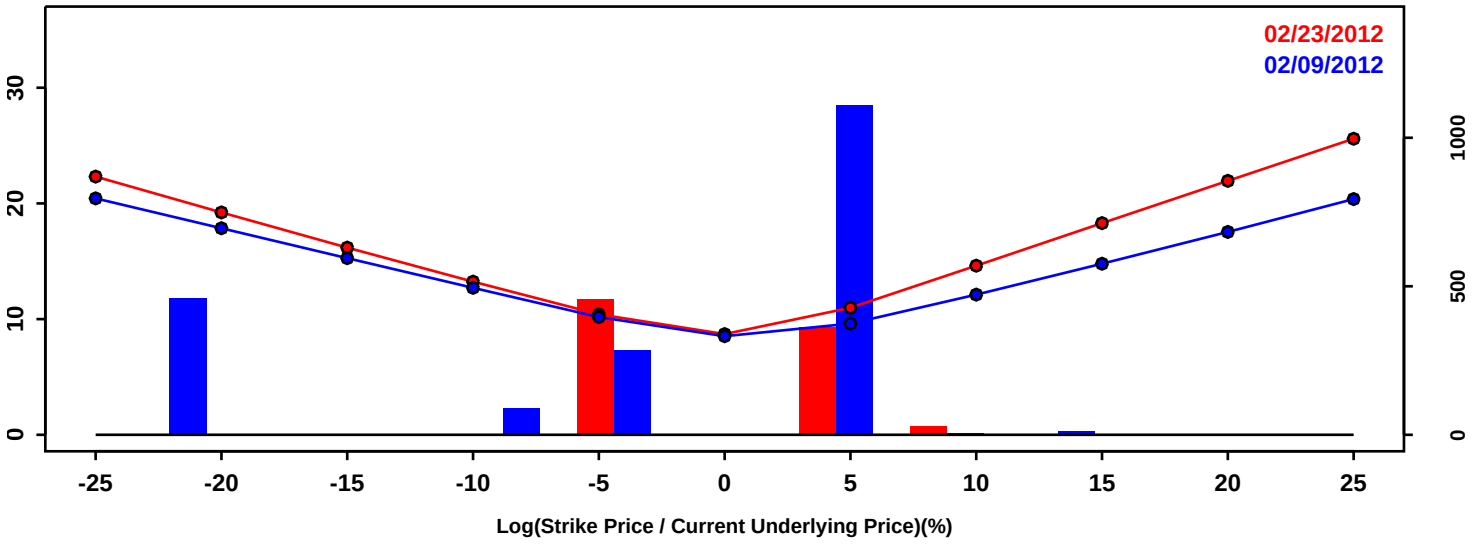
Statistics of the Log Return Distributions

	02/09/2012	02/23/2012	Change
10th Pct	-2.69%	-1.87%	0.82%
50th Pct	0.09%	0.04%	-0.05%
90th Pct	2.61%	1.83%	-0.78%
Mean	0.04%	0.02%	-0.02%
Std Dev	2.13%	1.51%	-0.62%
Skew	-0.31	-0.12	0.19
Kurtosis	0.51	0.76	0.25

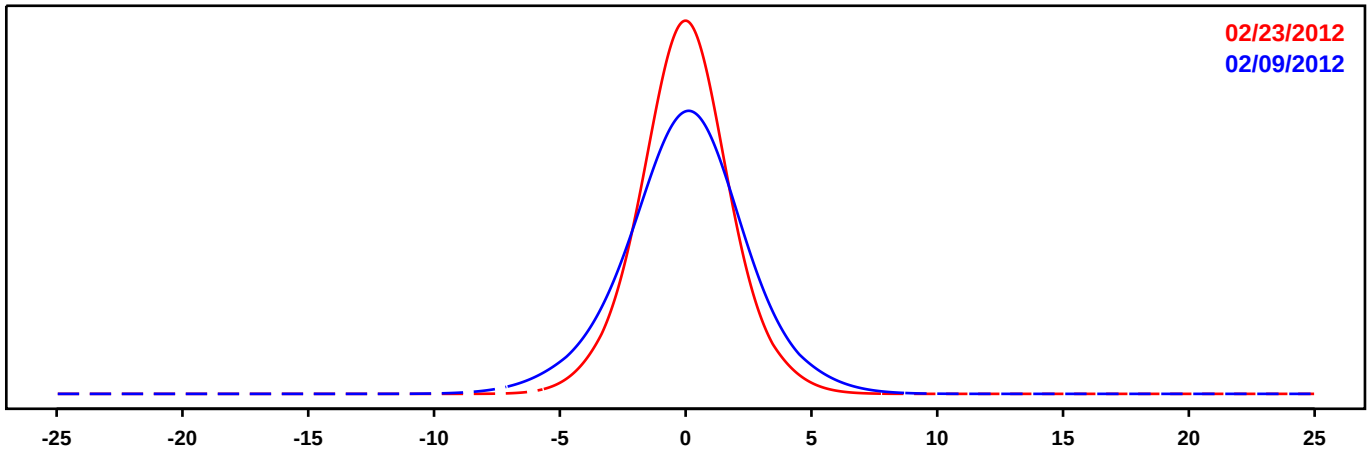
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- YEN-DOLLAR EXCHANGE RATE FUTURES

Log returns are based on the risk neutral density function of the underlying asset derived from options that expire in approximately 3 months.

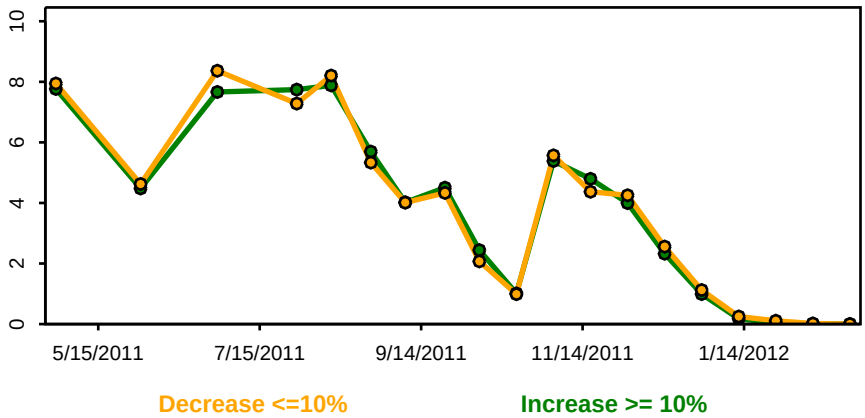
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



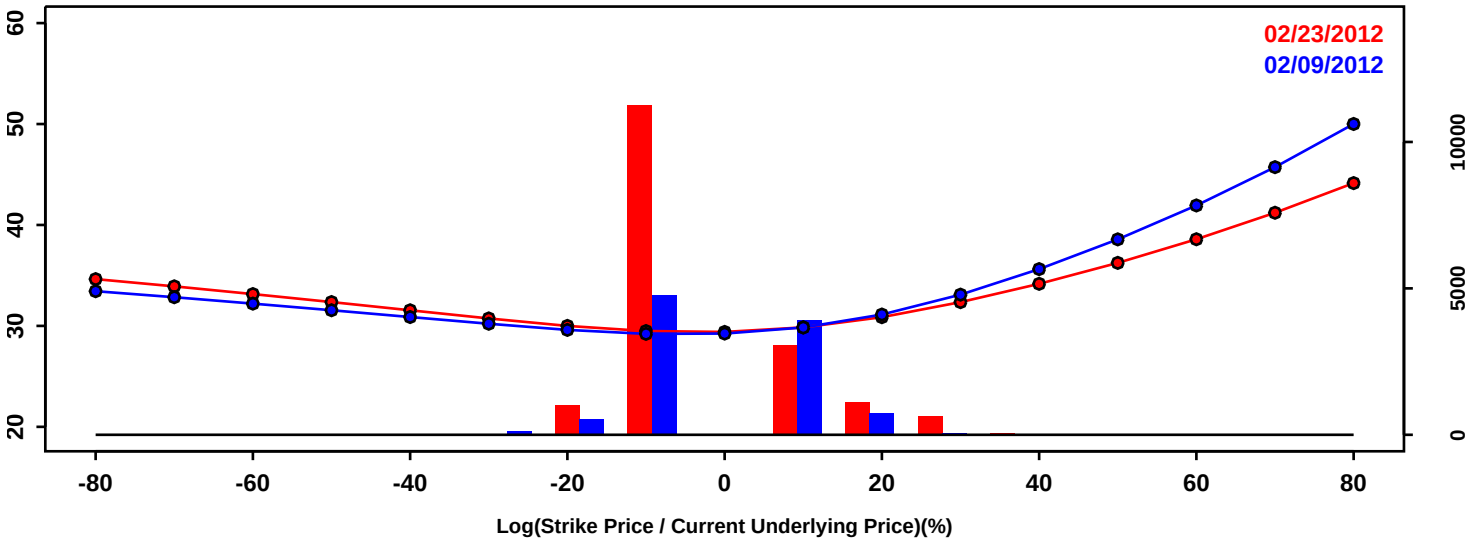
Statistics of the Log Return Distributions

	02/09/2012	02/23/2012	Change
10th Pct	-3.10%	-2.28%	0.82%
50th Pct	0.04%	-0.01%	-0.05%
90th Pct	3.00%	2.27%	-0.73%
Mean	0.01%	0.00%	-0.01%
Std Dev	2.45%	1.83%	-0.62%
Skew	-0.12	0.02	0.13
Kurtosis	0.57	0.47	-0.09

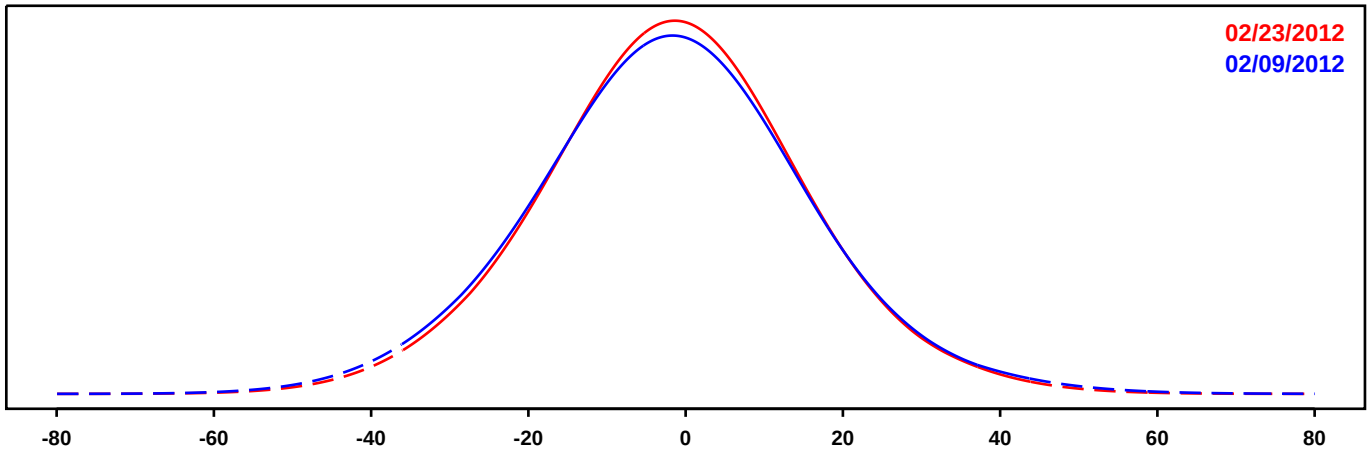
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- CORN FUTURES

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

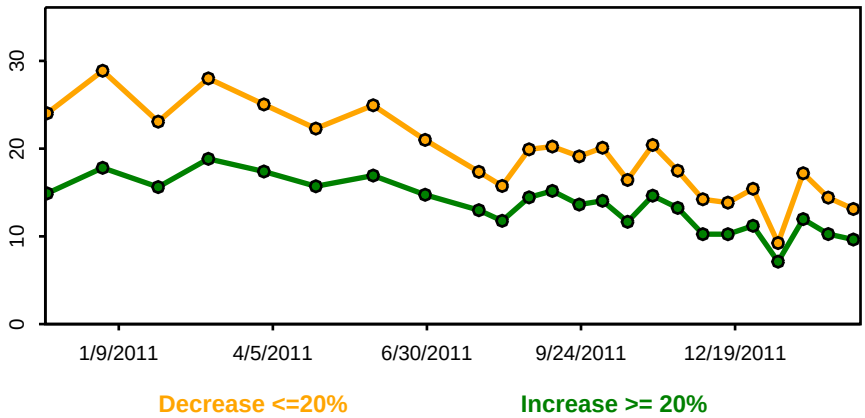
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



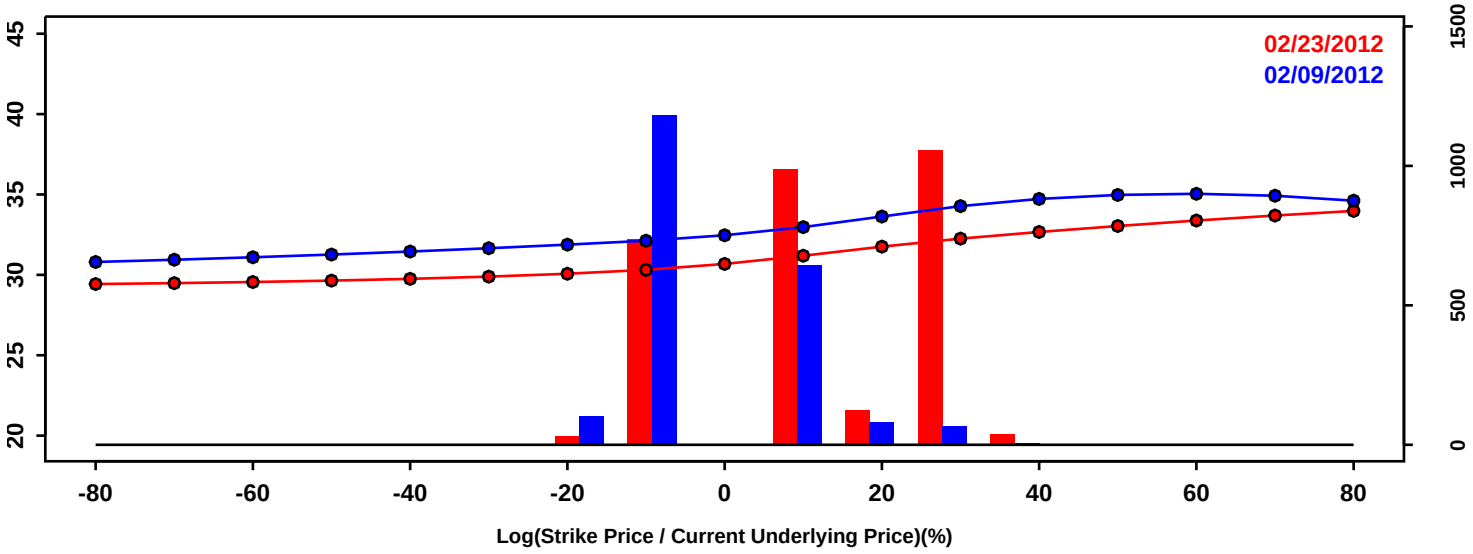
Statistics of the Log Return Distributions

	02/09/2012	02/23/2012	Change
10th Pct	-23.96%	-22.83%	1.14%
50th Pct	-1.77%	-1.52%	0.25%
90th Pct	20.29%	19.64%	-0.66%
Mean	-1.70%	-1.47%	0.23%
Std Dev	17.66%	16.84%	-0.82%
Skew	0.07	0.03	-0.04
Kurtosis	0.39	0.29	-0.10

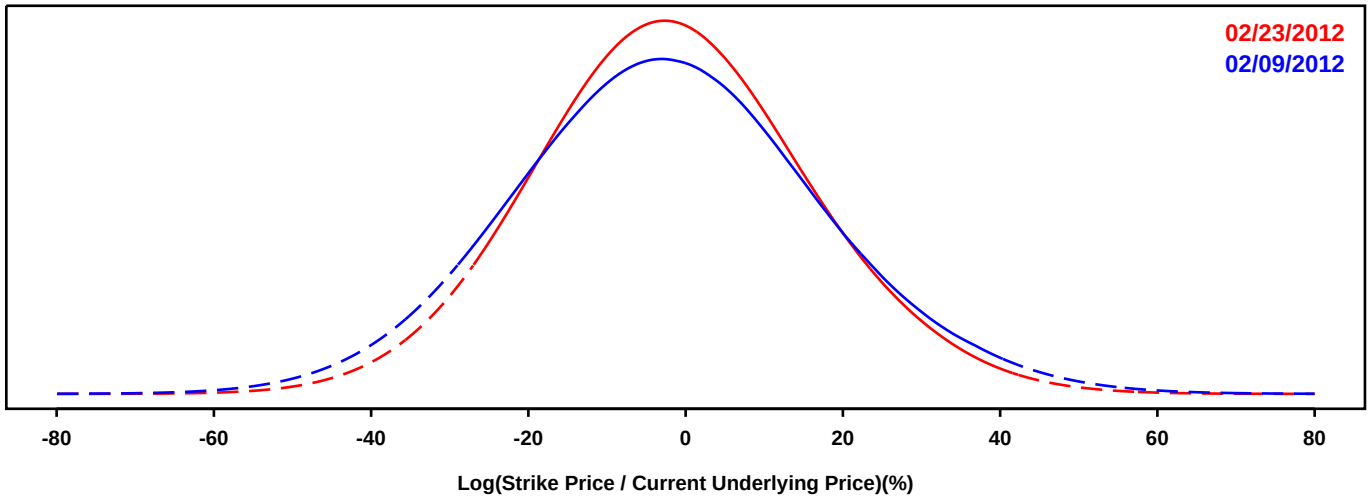
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- WHEAT FUTURES

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

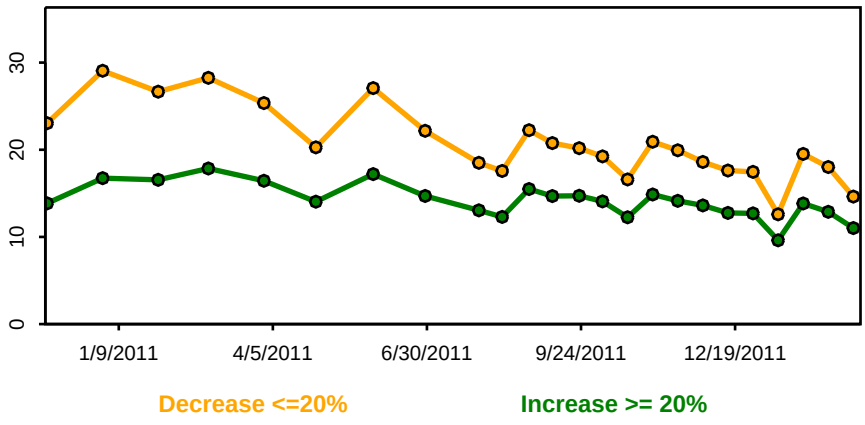
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



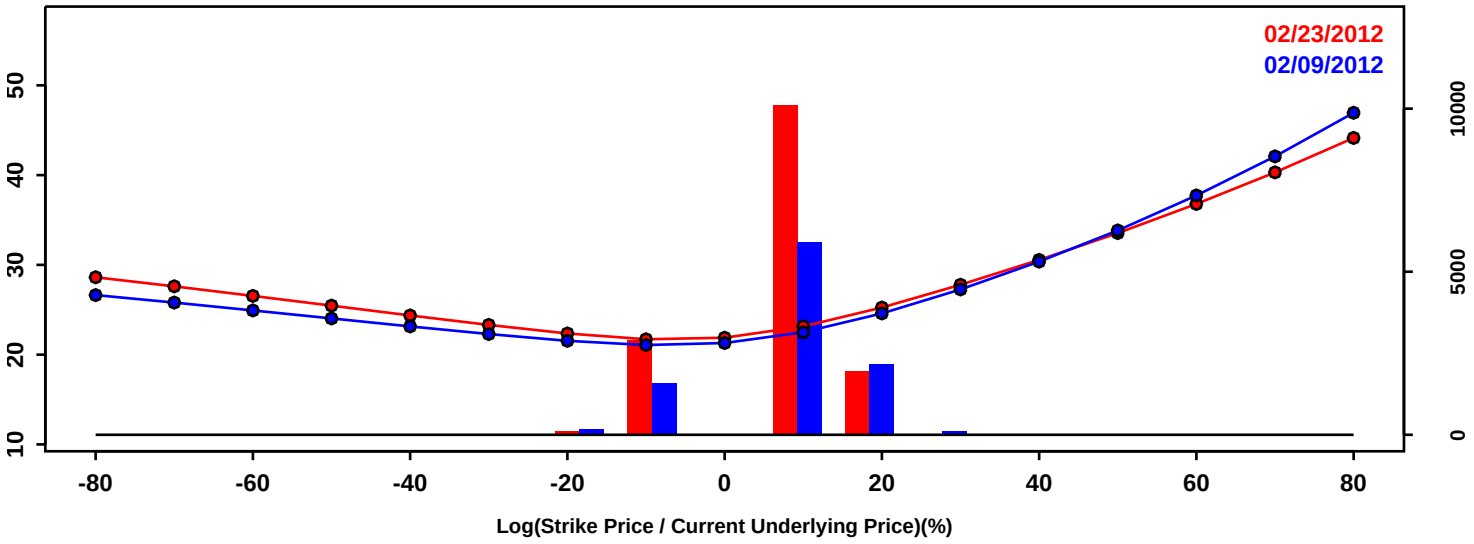
Statistics of the Log Return Distributions

	02/09/2012	02/23/2012	Change
10th Pct	-27.00%	-23.90%	3.10%
50th Pct	-2.49%	-2.03%	0.46%
90th Pct	23.19%	21.07%	-2.12%
Mean	-2.11%	-1.65%	0.46%
Std Dev	19.67%	17.59%	-2.08%
Skew	0.11	0.10	-0.01
Kurtosis	0.11	0.08	-0.03

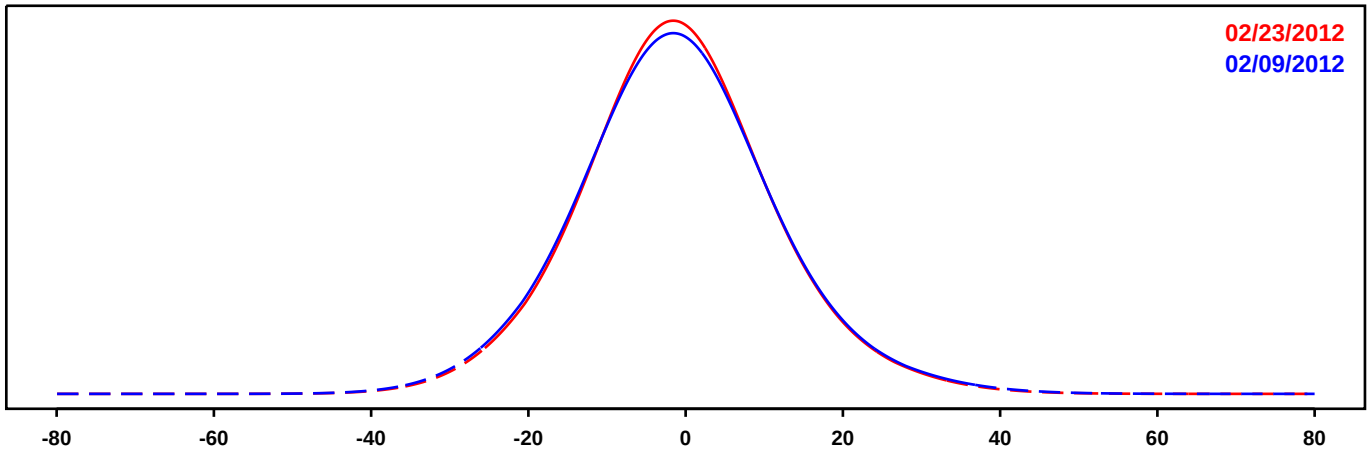
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- SOYBEAN FUTURES

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

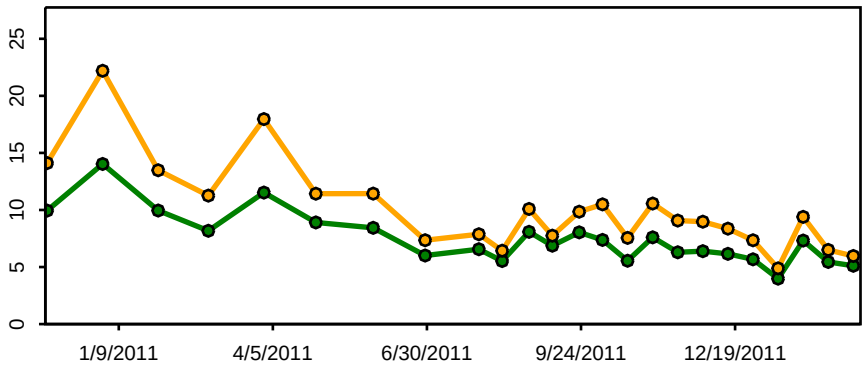
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



Decrease <=20% Increase >= 20%

Statistics of the Log Return Distributions

	02/09/2012	02/23/2012	Change
10th Pct	-16.91%	-16.38%	0.53%
50th Pct	-1.31%	-1.21%	0.10%
90th Pct	15.10%	14.75%	-0.34%
Mean	-0.99%	-0.92%	0.06%
Std Dev	12.87%	12.50%	-0.36%
Skew	0.19	0.18	-0.02
Kurtosis	0.55	0.53	-0.02