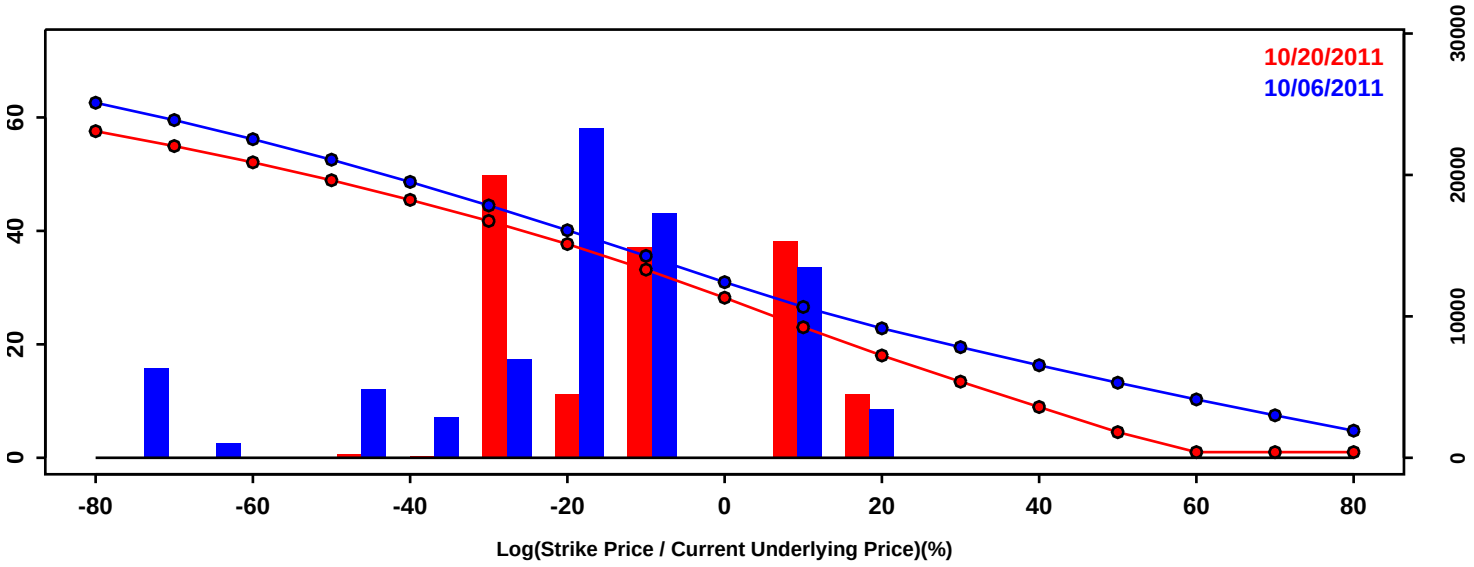
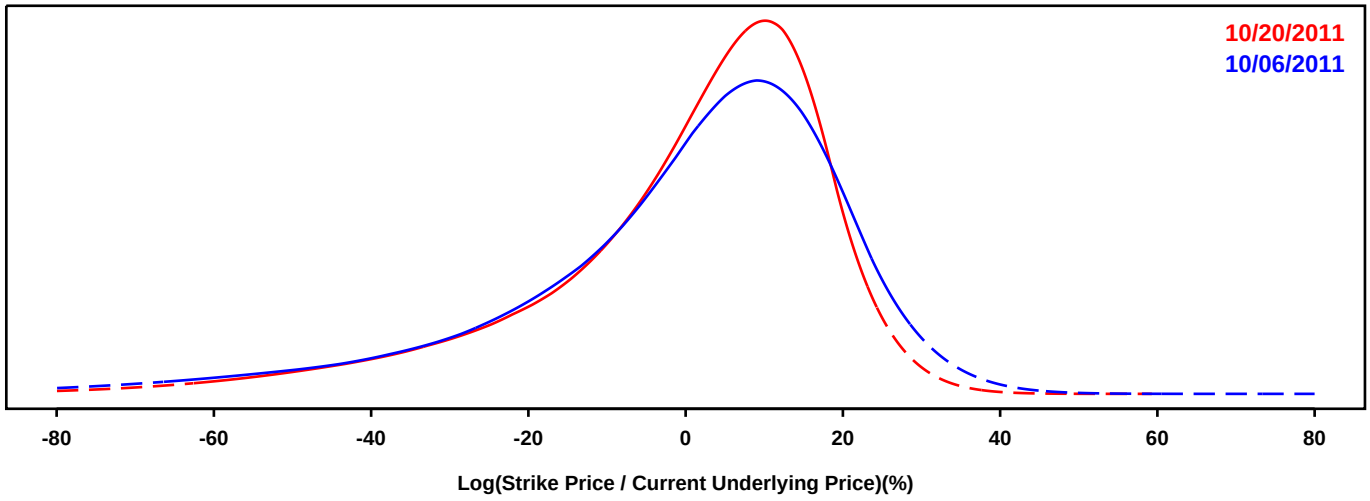
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- S&P 500

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

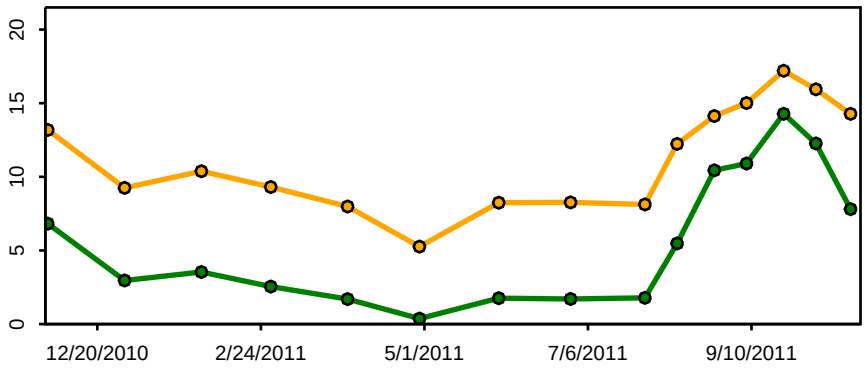
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



Decrease <=20% Increase >= 20%

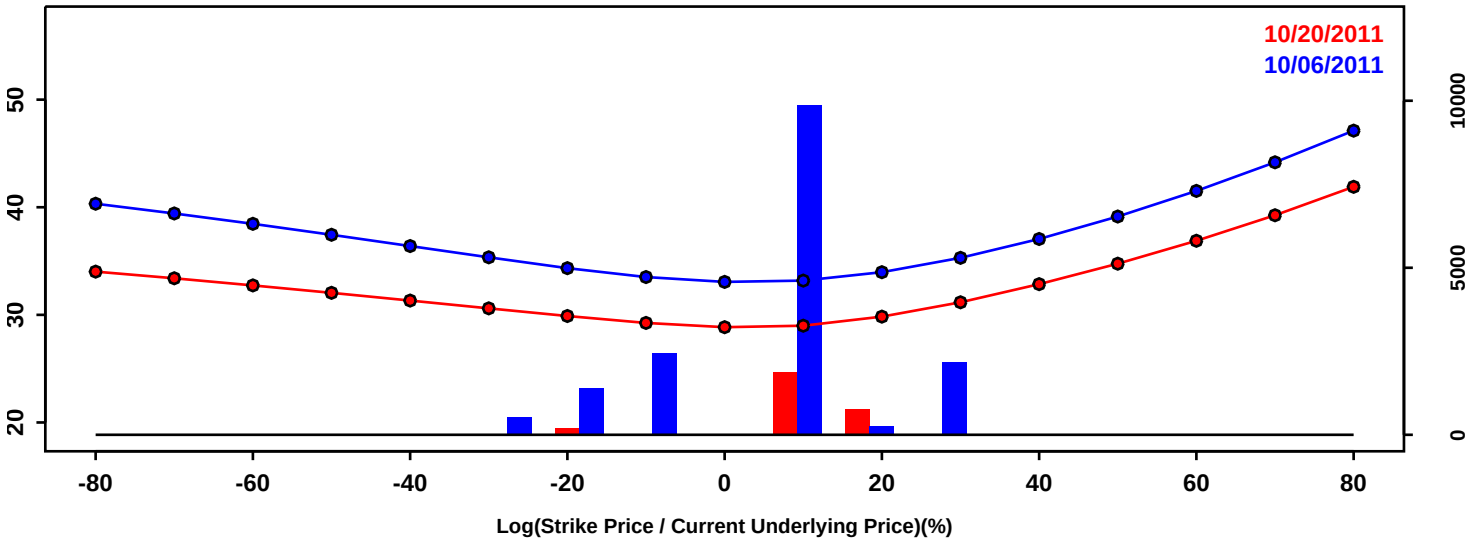
Statistics of the Log Return Distributions

	10/06/2011	10/20/2011	Change
10th Pct	-29.99%	-27.08%	2.91%
50th Pct	3.73%	4.06%	0.34%
90th Pct	21.47%	18.65%	-2.82%
Mean	-0.87%	-0.51%	0.36%
Std Dev	22.04%	19.33%	-2.71%
Skew	-1.31	-1.34	-0.02
Kurtosis	2.51	2.30	-0.21

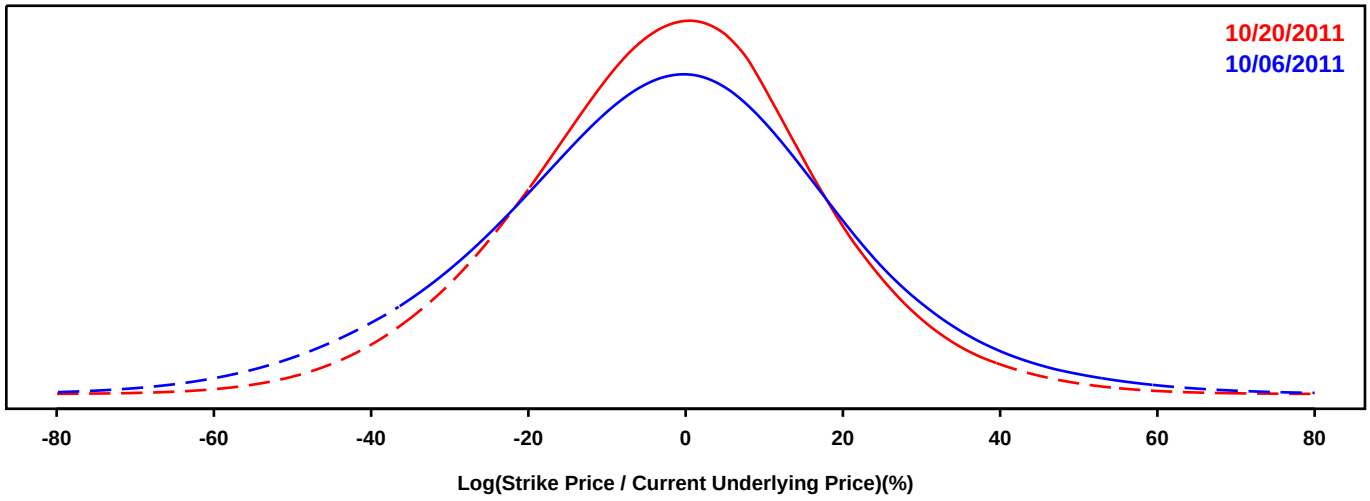
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- GOLD FUTURES

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

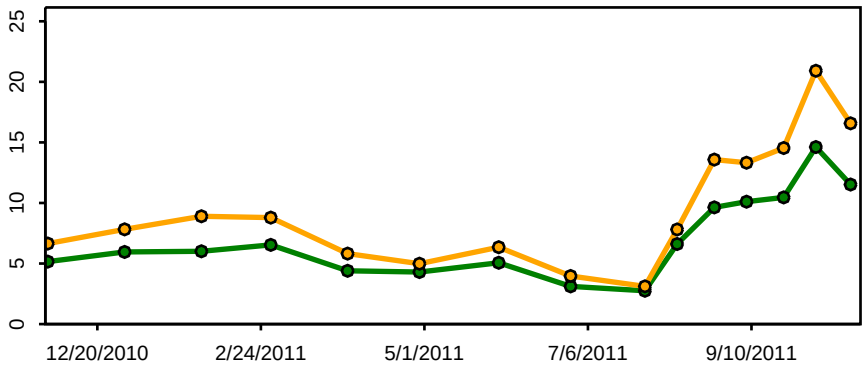
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



Decrease <=20% Increase >= 20%

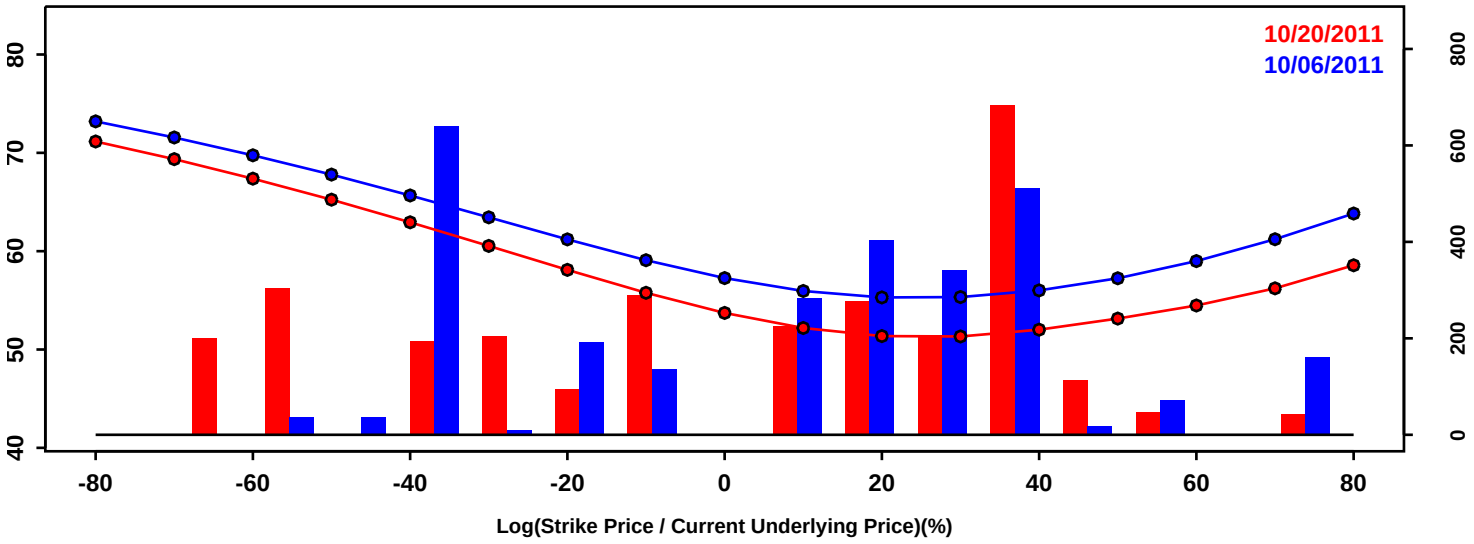
Statistics of the Log Return Distributions

	10/06/2011	10/20/2011	Change
10th Pct	-31.79%	-26.34%	5.45%
50th Pct	-1.95%	-1.47%	0.48%
90th Pct	25.21%	21.63%	-3.58%
Mean	-2.54%	-1.87%	0.67%
Std Dev	22.81%	19.05%	-3.76%
Skew	-0.06	-0.04	0.02
Kurtosis	0.46	0.33	-0.13

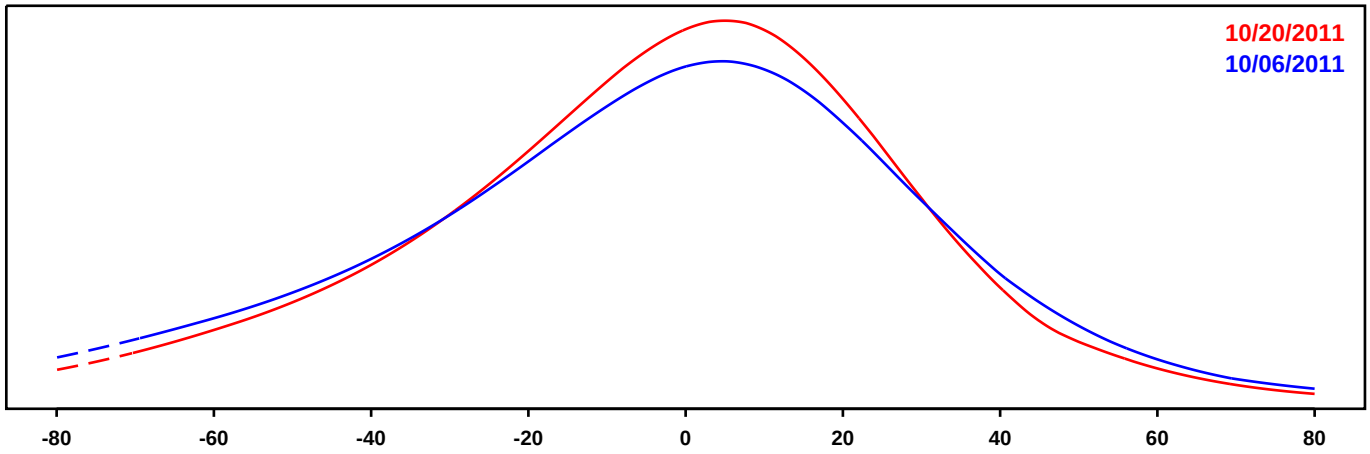
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- SILVER FUTURES

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

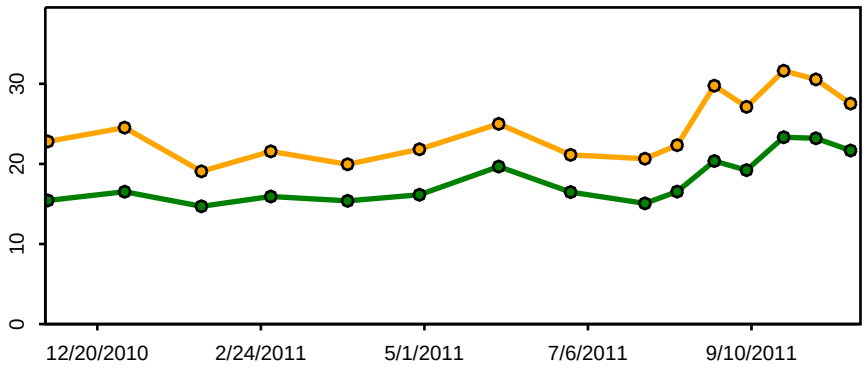
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



Decrease <=20% Increase >= 20%

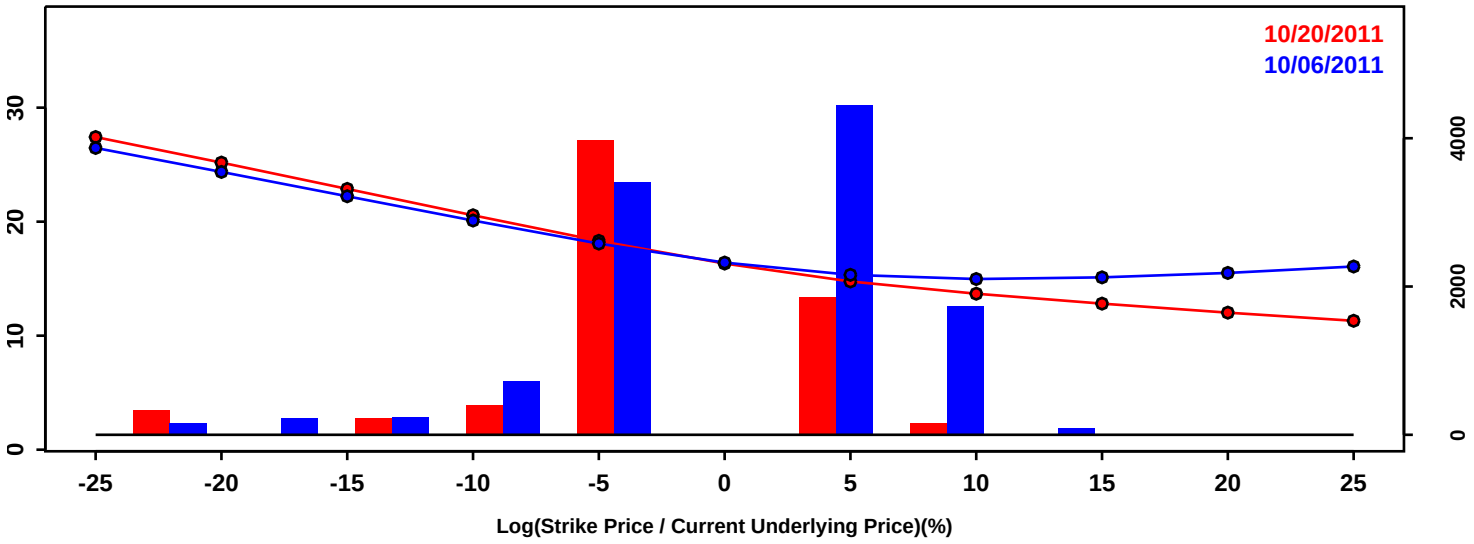
Statistics of the Log Return Distributions

	10/06/2011	10/20/2011	Change
10th Pct	-54.50%	-47.26%	7.24%
50th Pct	-2.03%	-0.96%	1.07%
90th Pct	36.33%	33.08%	-3.25%
Mean	-5.77%	-4.17%	1.60%
Std Dev	36.03%	32.13%	-3.90%
Skew	-0.51	-0.49	0.02
Kurtosis	0.49	0.55	0.06

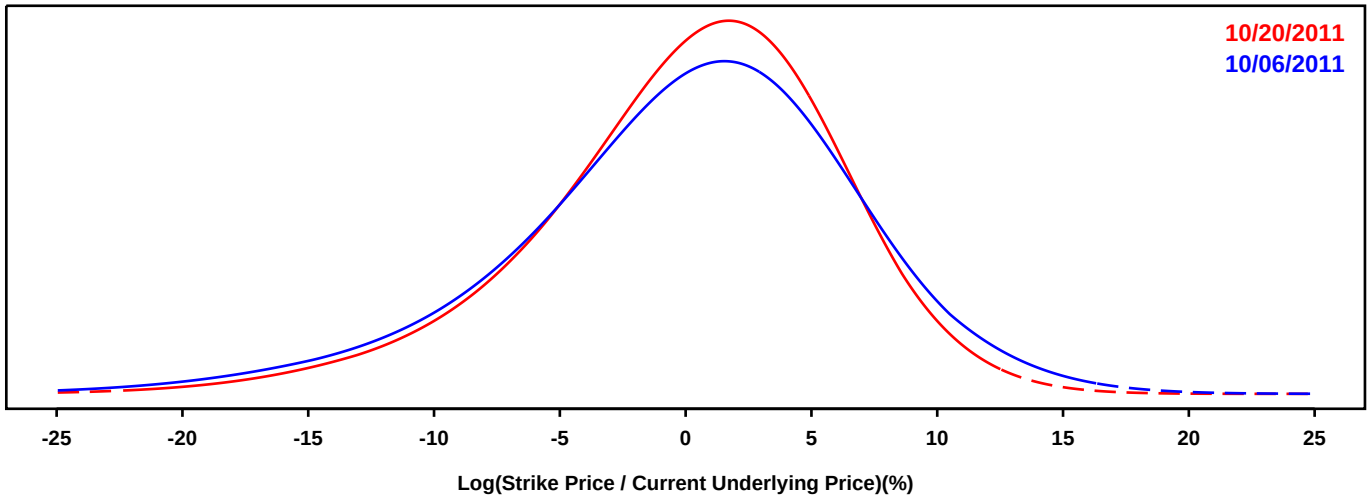
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- DOLLAR-EURO EXCHANGE RATE FUTURES

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

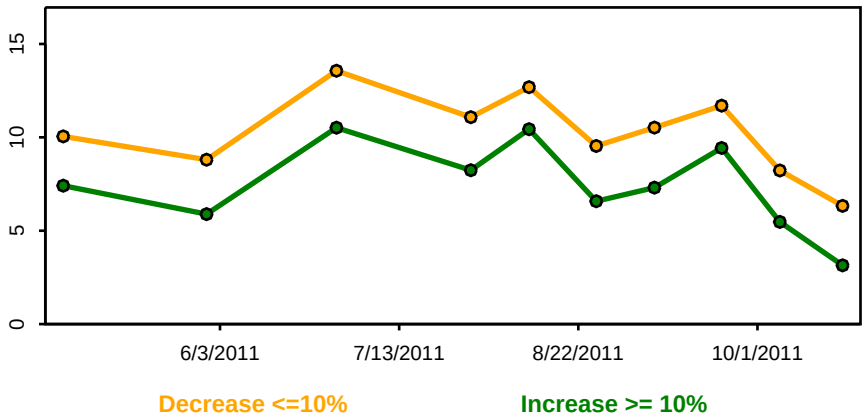
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



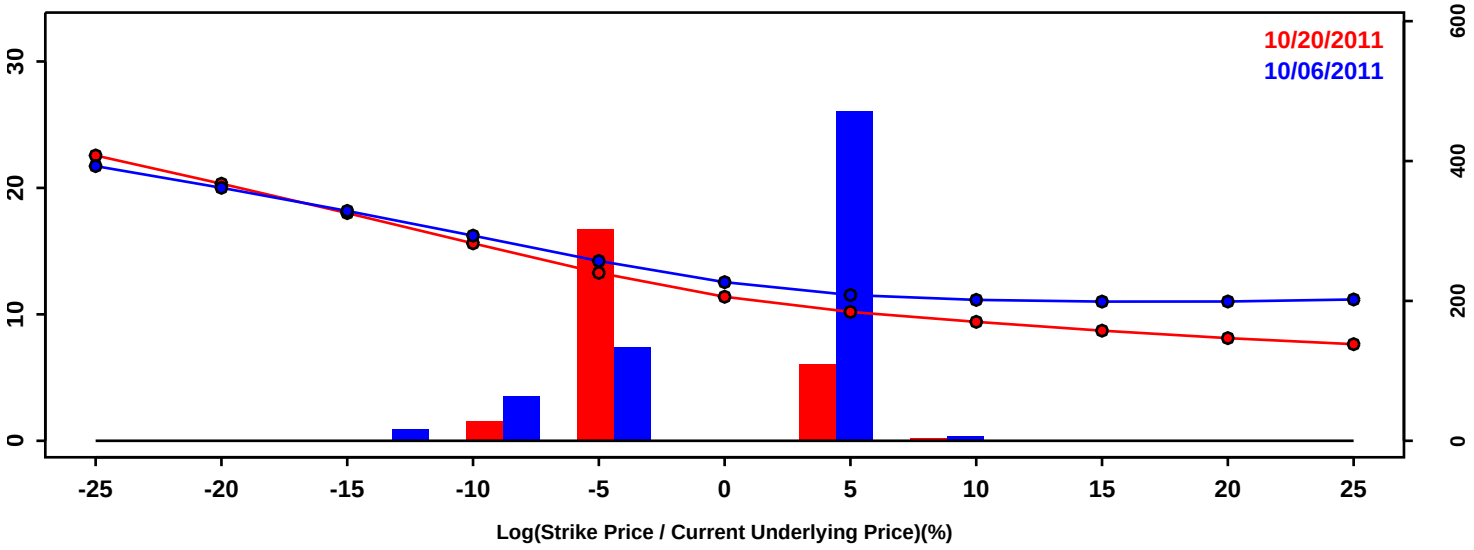
Statistics of the Log Return Distributions

	10/06/2011	10/20/2011	Change
10th Pct	-9.00%	-7.91%	1.09%
50th Pct	0.59%	0.69%	0.10%
90th Pct	8.06%	7.18%	-0.88%
Mean	0.01%	0.08%	0.08%
Std Dev	6.92%	6.08%	-0.84%
Skew	-0.54	-0.60	-0.05
Kurtosis	0.83	0.76	-0.07

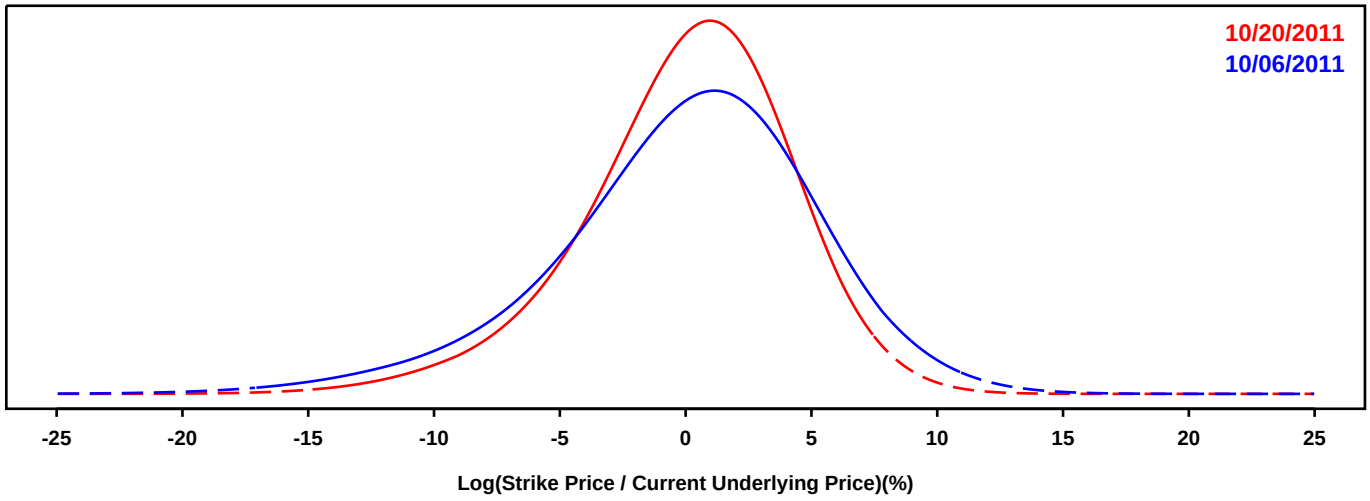
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- DOLLAR-POUND EXCHANGE RATE FUTURES

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

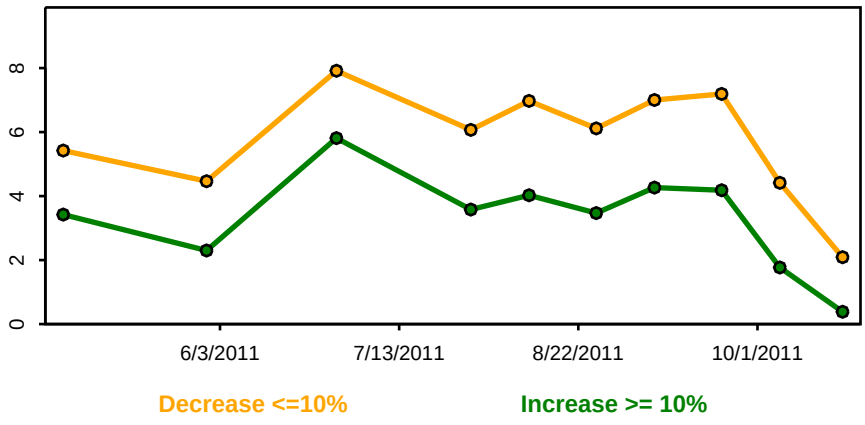
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



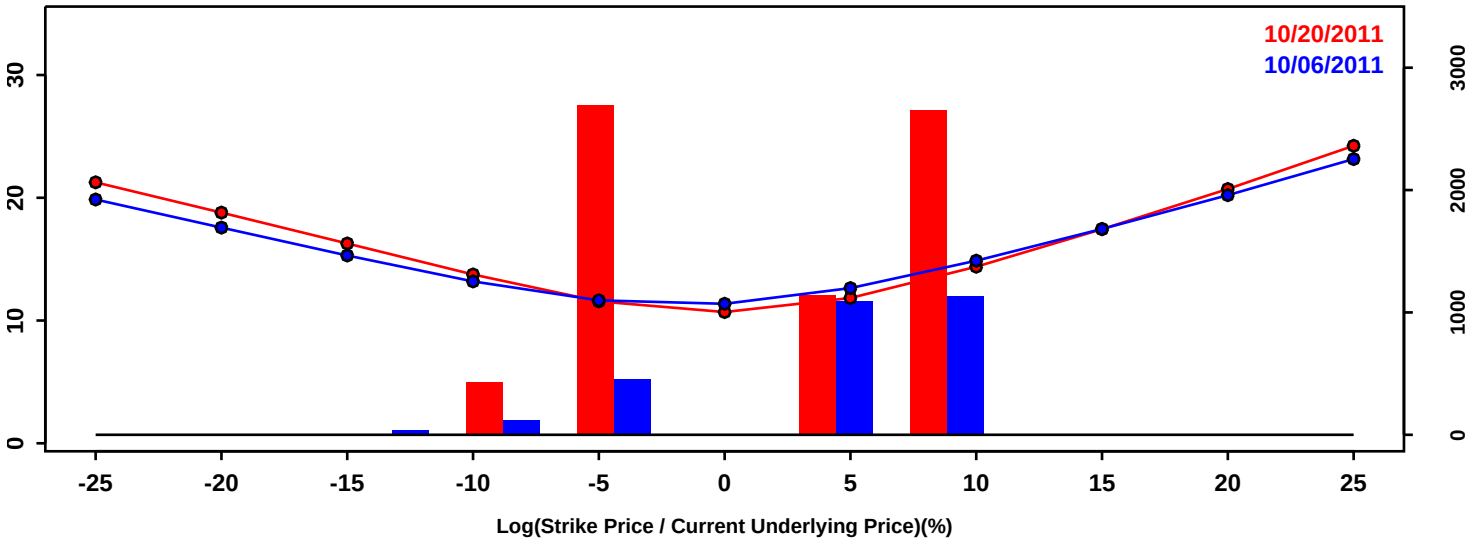
Statistics of the Log Return Distributions

	10/06/2011	10/20/2011	Change
10th Pct	-6.83%	-5.45%	1.38%
50th Pct	0.44%	0.39%	-0.05%
90th Pct	6.25%	5.07%	-1.18%
Mean	0.03%	0.06%	0.03%
Std Dev	5.28%	4.23%	-1.06%
Skew	-0.53	-0.53	0.01
Kurtosis	0.77	0.70	-0.06

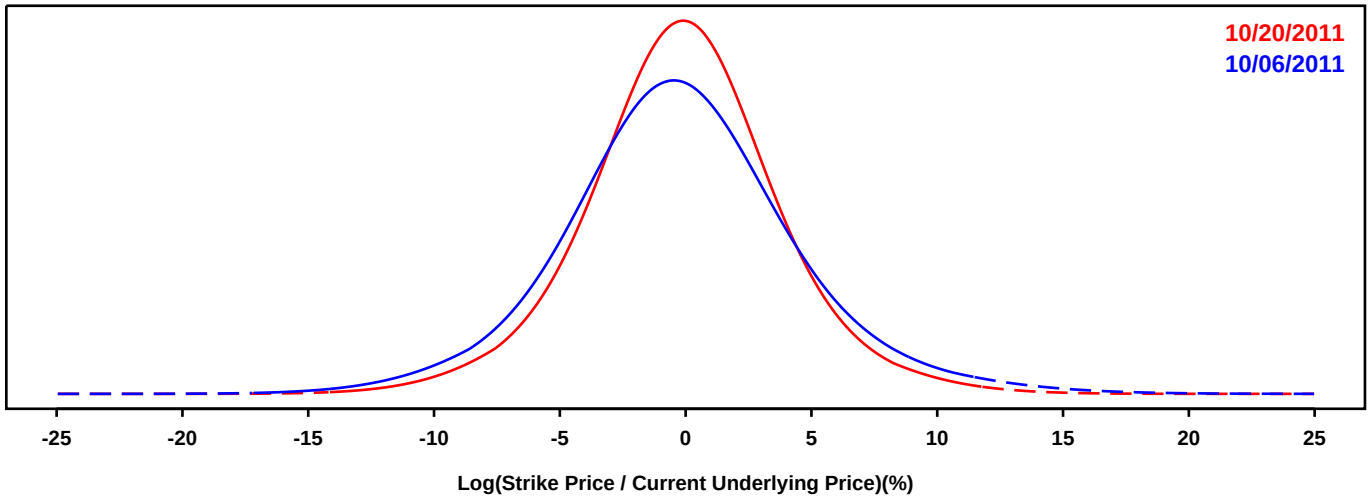
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- YEN-DOLLAR EXCHANGE RATE FUTURES

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

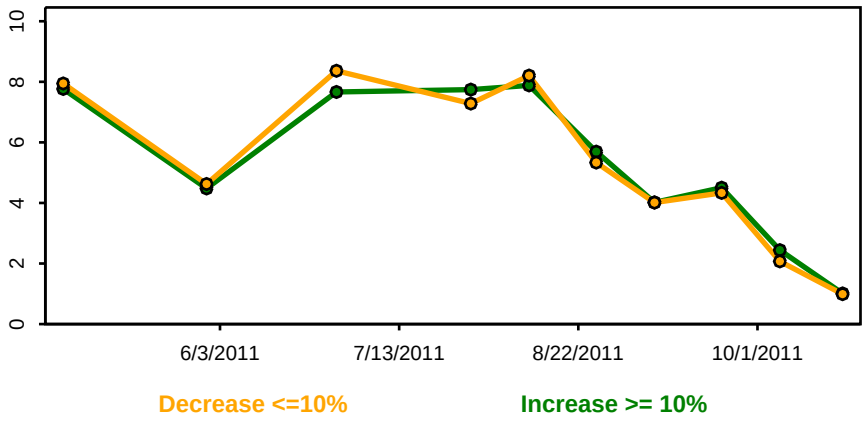
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



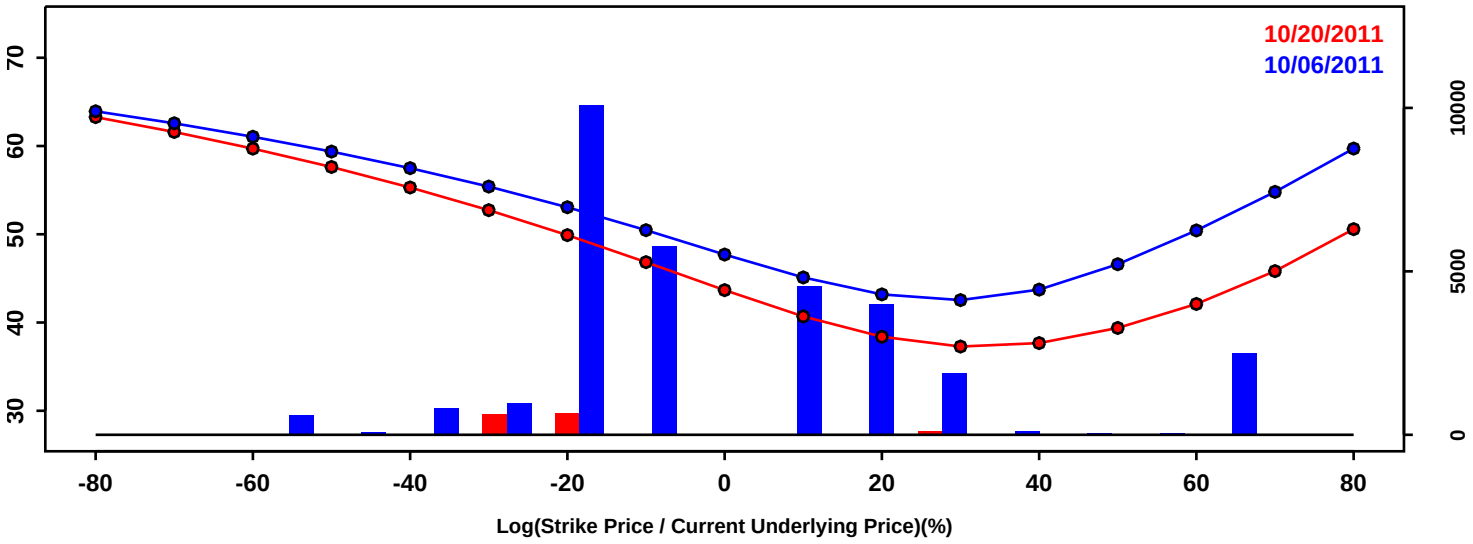
Statistics of the Log Return Distributions

	10/06/2011	10/20/2011	Change
10th Pct	-5.88%	-4.87%	1.00%
50th Pct	-0.31%	-0.11%	0.20%
90th Pct	5.63%	4.68%	-0.95%
Mean	-0.16%	-0.07%	0.09%
Std Dev	4.73%	3.92%	-0.80%
Skew	0.20	0.04	-0.17
Kurtosis	0.93	0.83	-0.11

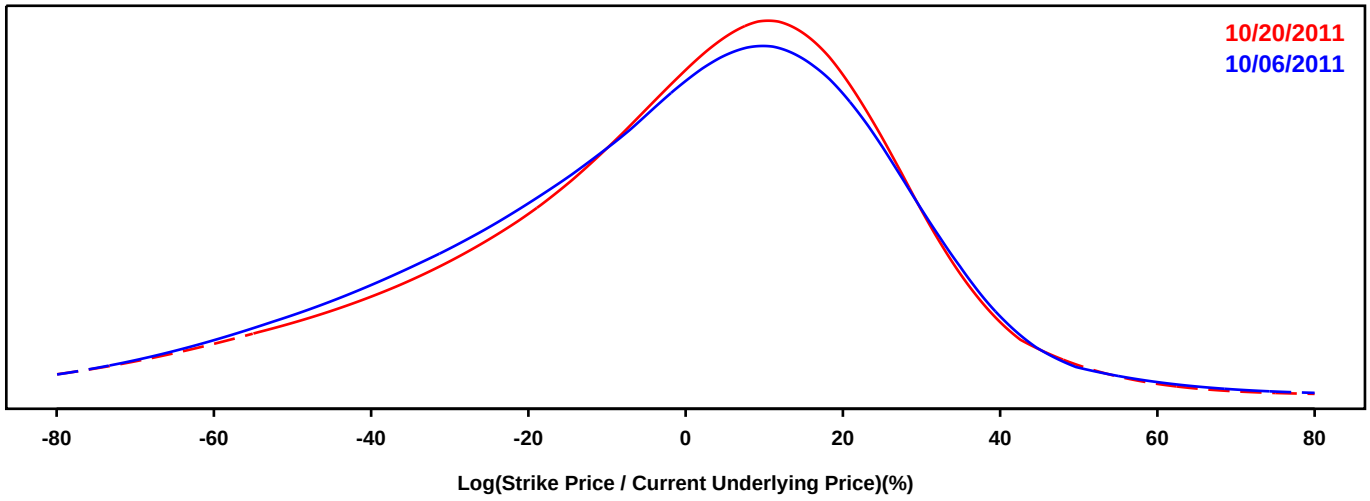
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- CRUDE OIL FUTURES

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

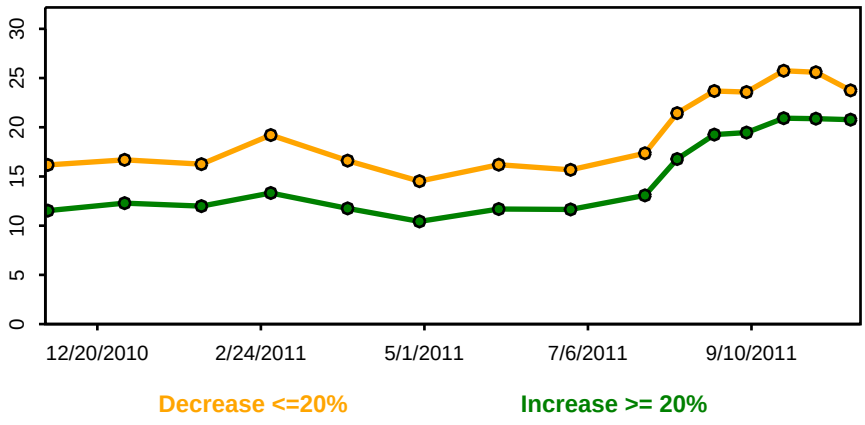
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



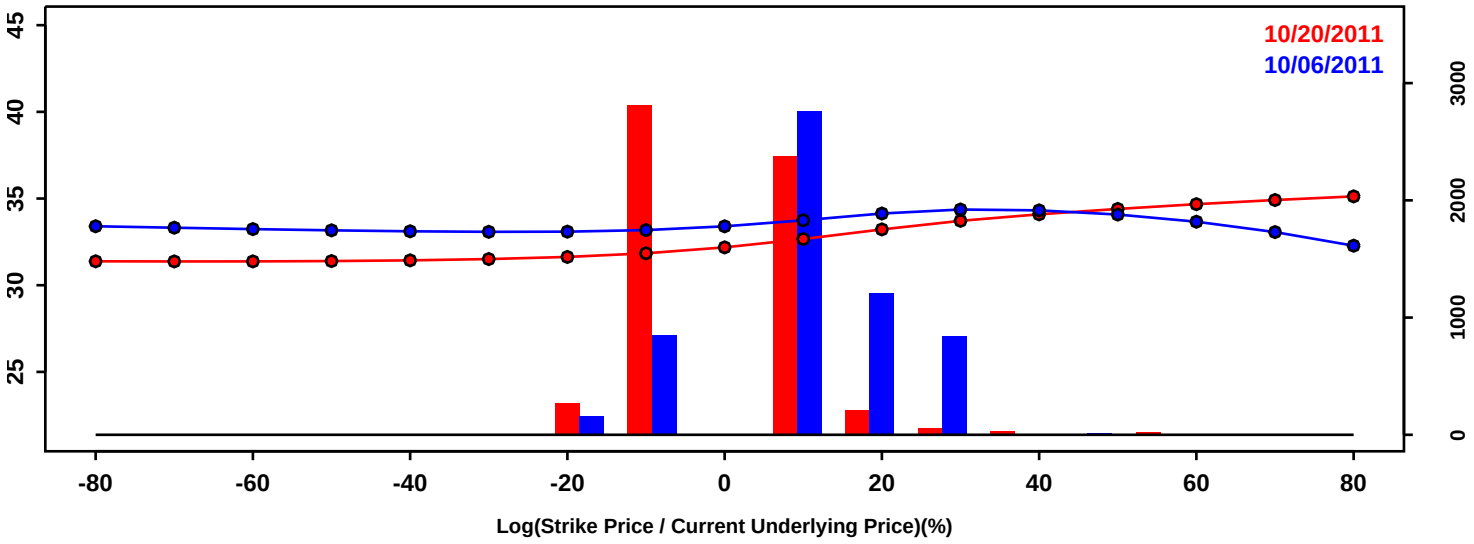
Statistics of the Log Return Distributions

	10/06/2011	10/20/2011	Change
10th Pct	-44.26%	-43.02%	1.24%
50th Pct	1.09%	2.27%	1.18%
90th Pct	29.49%	28.93%	-0.56%
Mean	-3.41%	-2.68%	0.73%
Std Dev	29.39%	28.95%	-0.43%
Skew	-0.64	-0.79	-0.14
Kurtosis	0.53	0.83	0.31

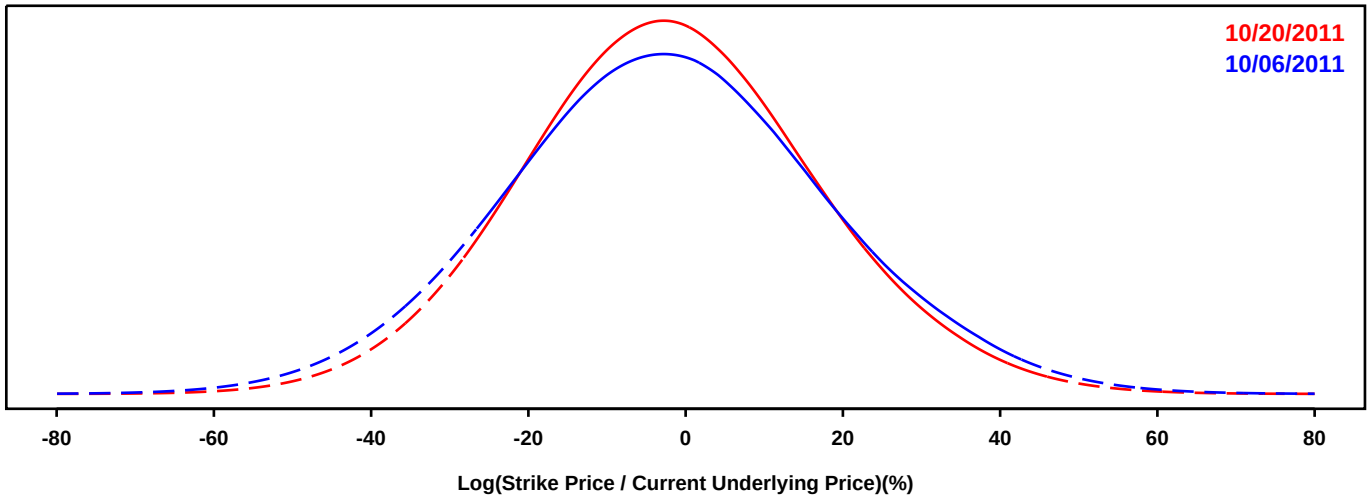
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- WHEAT FUTURES

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

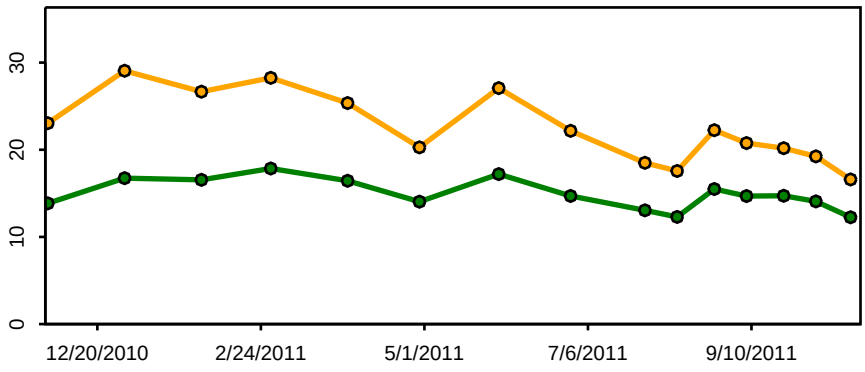
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



Decrease <=20% Increase >= 20%

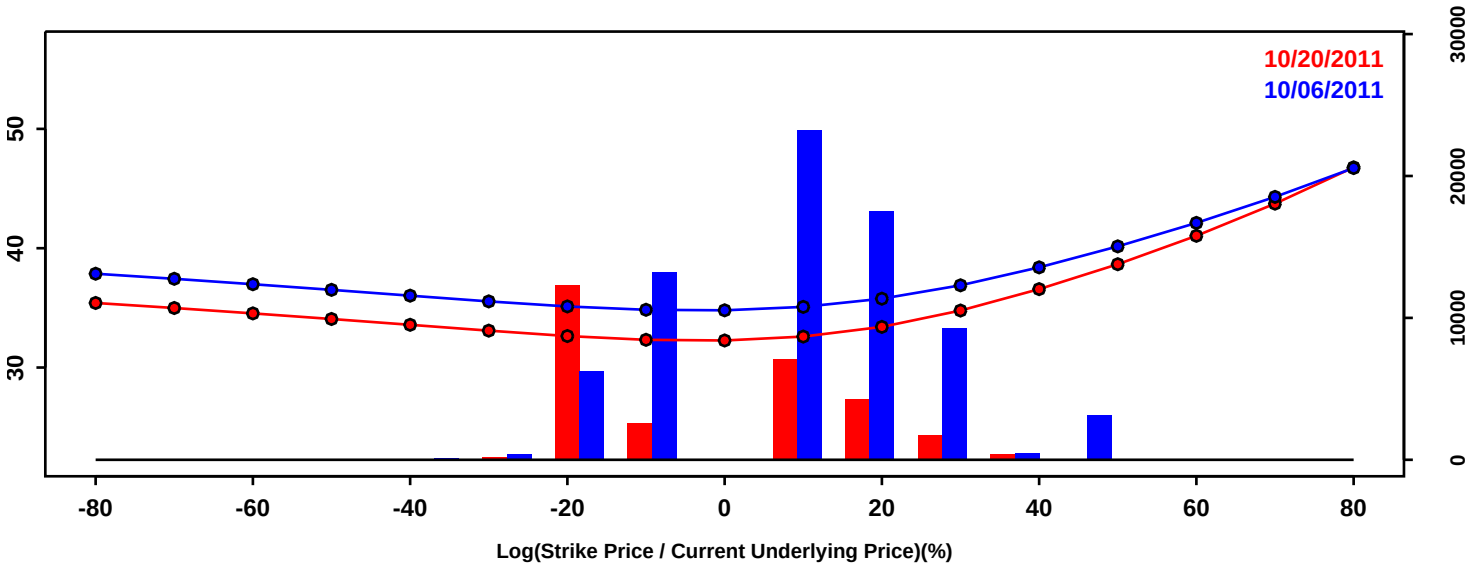
Statistics of the Log Return Distributions

	10/06/2011	10/20/2011	Change
10th Pct	-28.38%	-25.70%	2.69%
50th Pct	-2.49%	-2.23%	0.26%
90th Pct	24.53%	22.39%	-2.14%
Mean	-2.16%	-1.88%	0.28%
Std Dev	20.67%	18.83%	-1.84%
Skew	0.07	0.10	0.03
Kurtosis	0.07	0.09	0.02

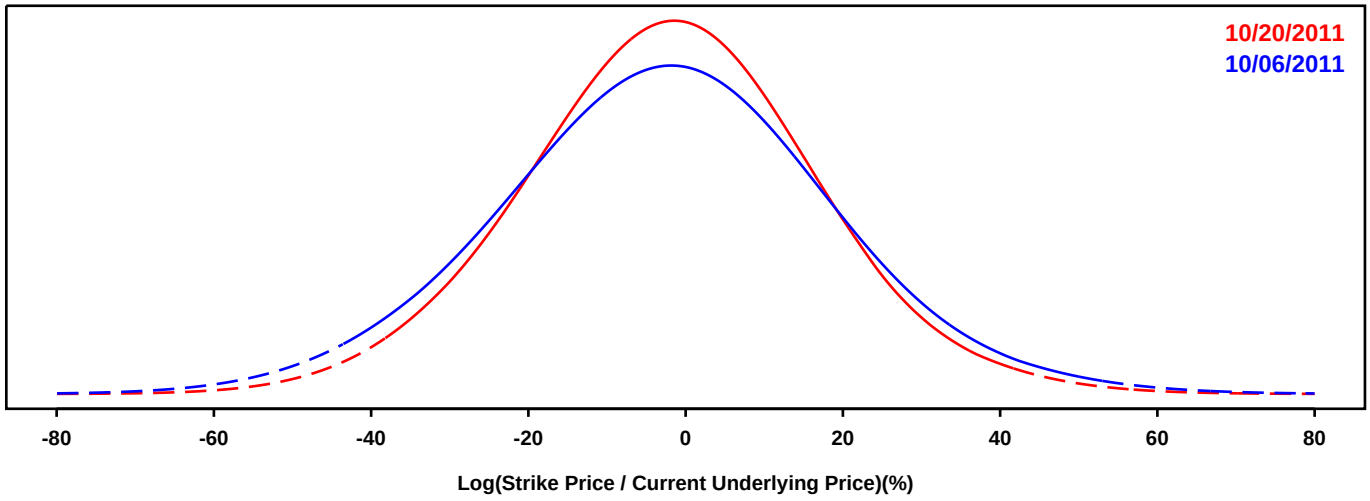
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- CORN FUTURES

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

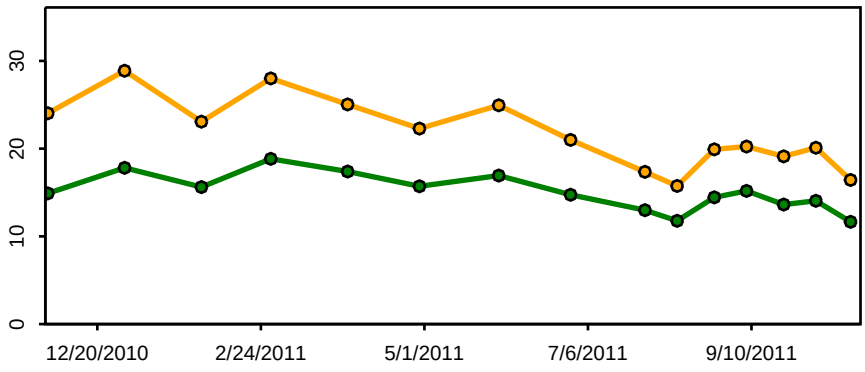
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



Decrease <=20% Increase >= 20%

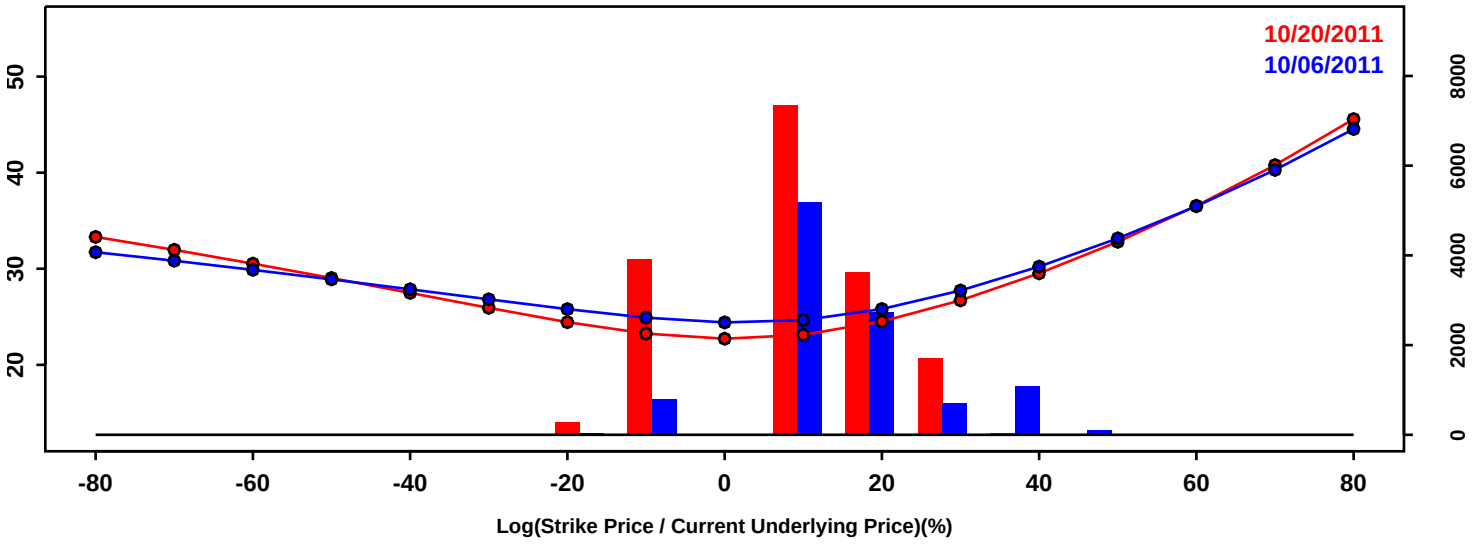
Statistics of the Log Return Distributions

	10/06/2011	10/20/2011	Change
10th Pct	-29.72%	-25.89%	3.83%
50th Pct	-2.33%	-1.82%	0.51%
90th Pct	24.41%	21.71%	-2.70%
Mean	-2.42%	-1.88%	0.54%
Std Dev	21.43%	18.85%	-2.59%
Skew	0.02	0.03	0.01
Kurtosis	0.23	0.24	0.01

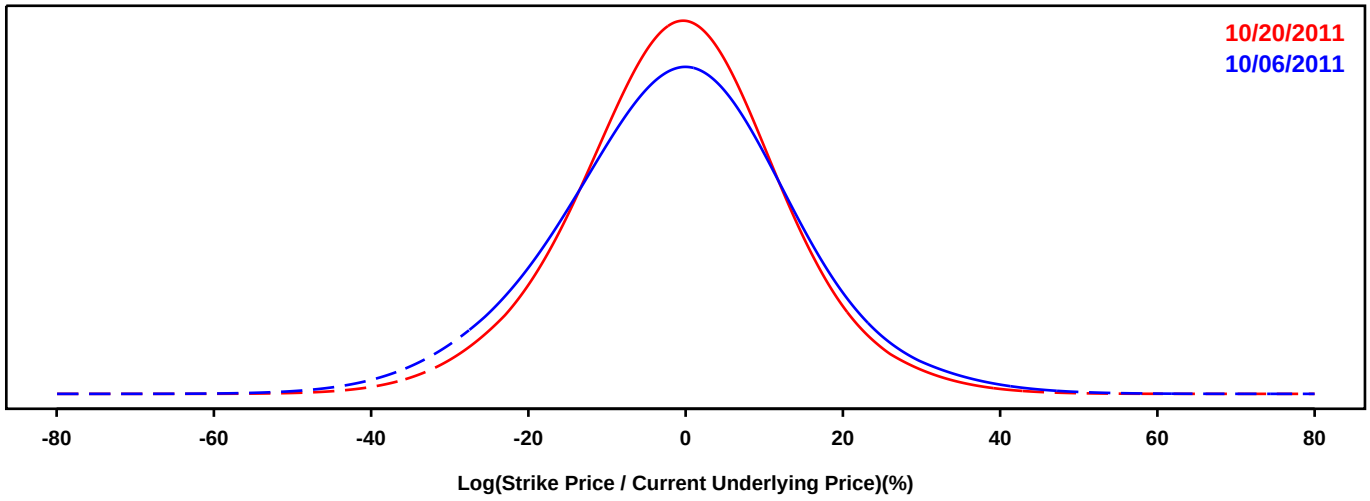
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- SOYBEAN FUTURES

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

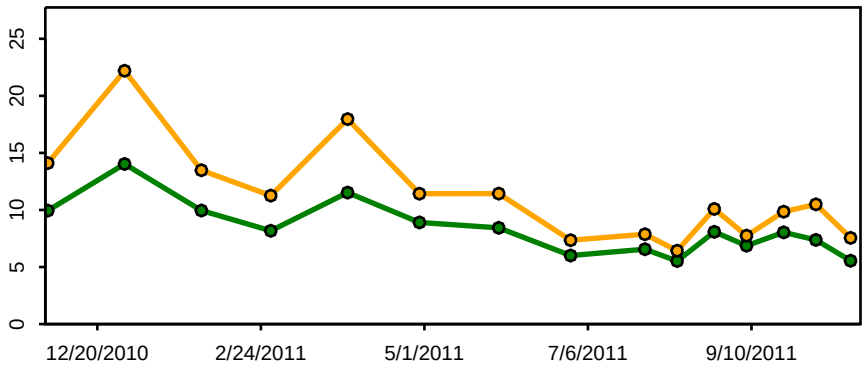
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



Decrease <=20% Increase >= 20%

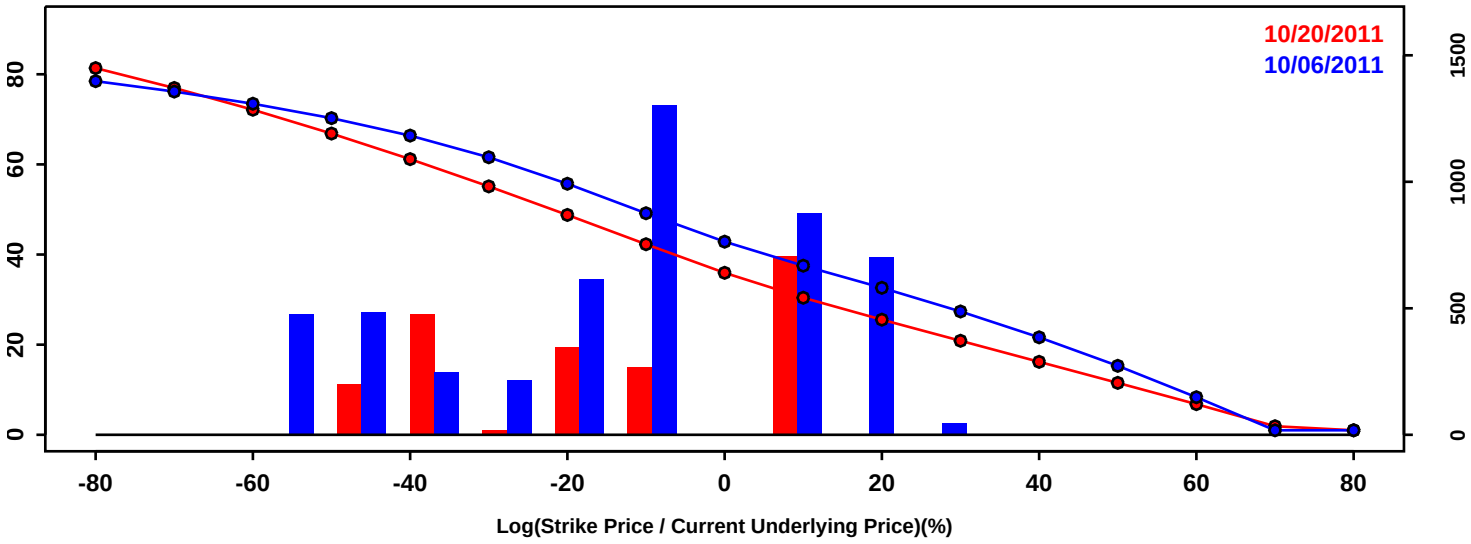
Statistics of the Log Return Distributions

	10/06/2011	10/20/2011	Change
10th Pct	-20.41%	-17.68%	2.72%
50th Pct	-0.86%	-0.71%	0.15%
90th Pct	17.39%	15.57%	-1.82%
Mean	-1.14%	-0.85%	0.29%
Std Dev	15.09%	13.30%	-1.79%
Skew	-0.04	-0.03	0.01
Kurtosis	0.38	0.42	0.04

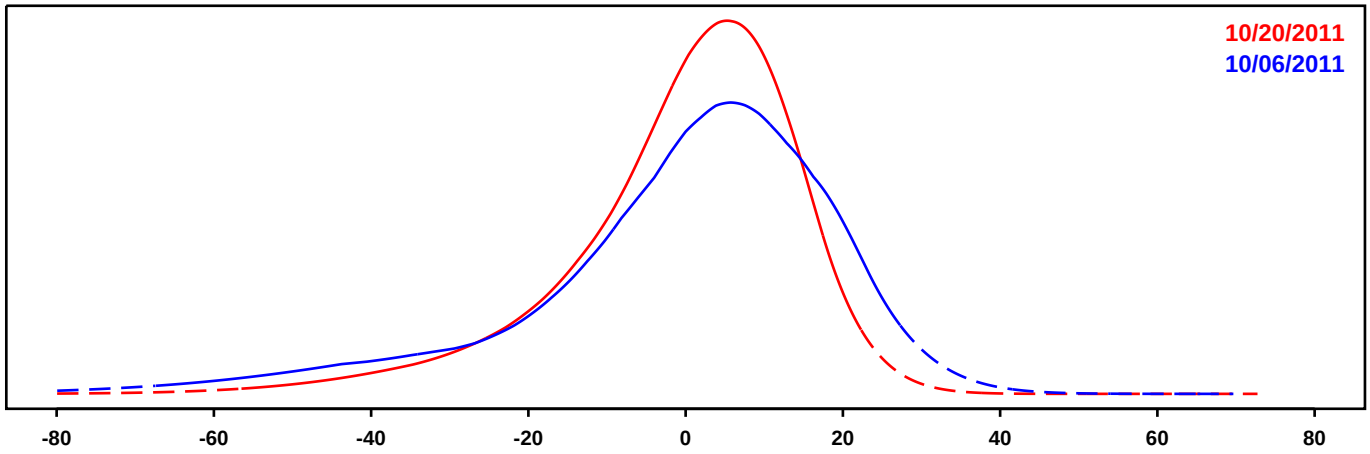
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- iSHARES DOW JONES US REAL ESTATE INDEX

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

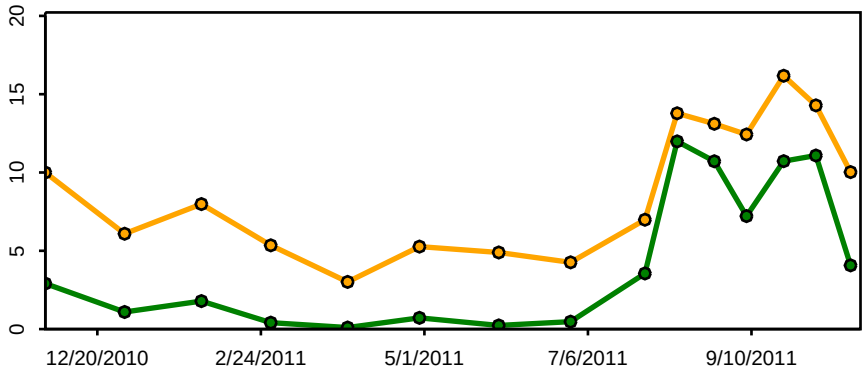
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



Decrease <=20% Increase >= 20%

Statistics of the Log Return Distributions

	10/06/2011	10/20/2011	Change
10th Pct	-27.84%	-20.06%	7.78%
50th Pct	2.84%	2.05%	-0.79%
90th Pct	20.73%	15.64%	-5.09%
Mean	-0.72%	-0.43%	0.29%
Std Dev	20.32%	14.95%	-5.37%
Skew	-1.18	-1.08	0.10
Kurtosis	2.04	1.91	-0.14