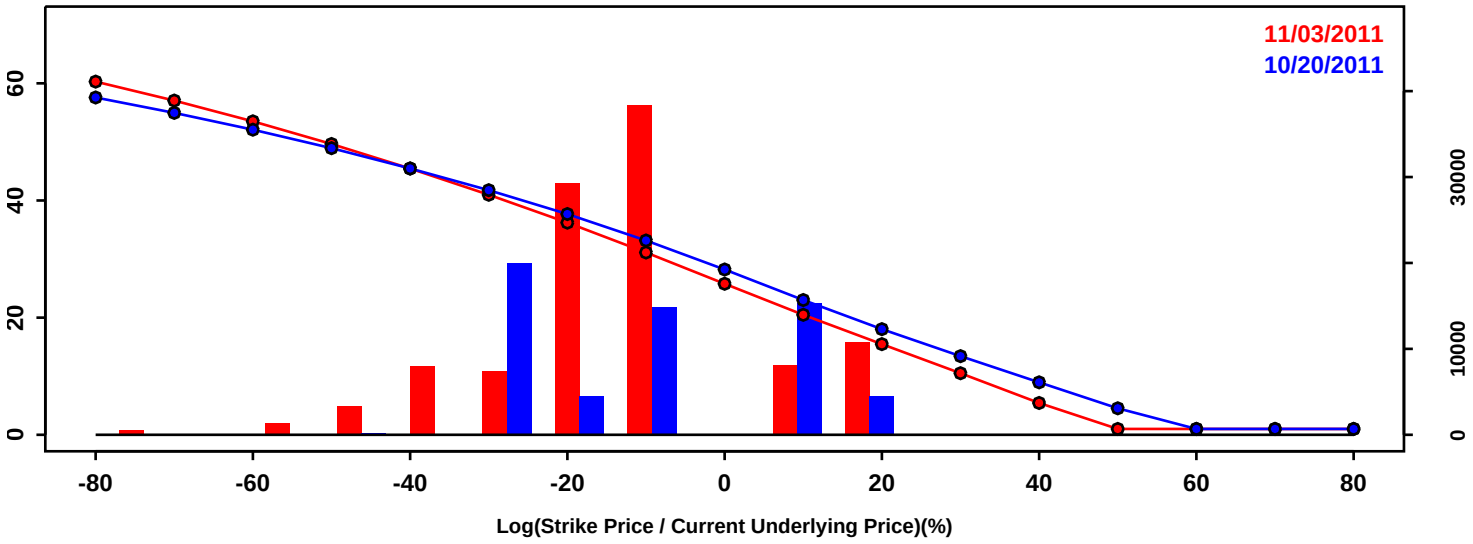
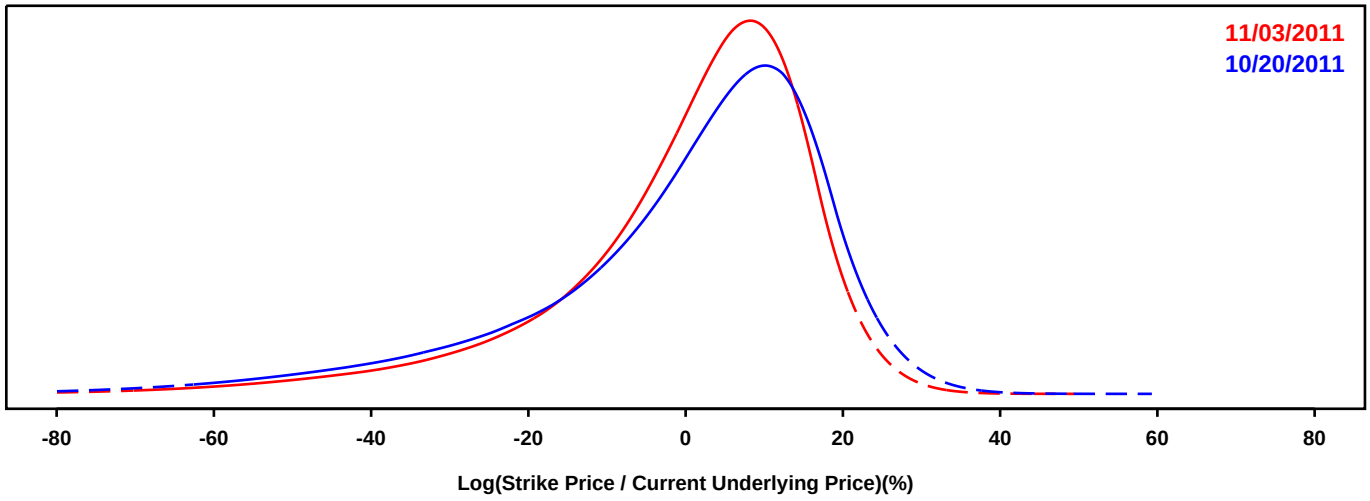
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- S&P 500

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

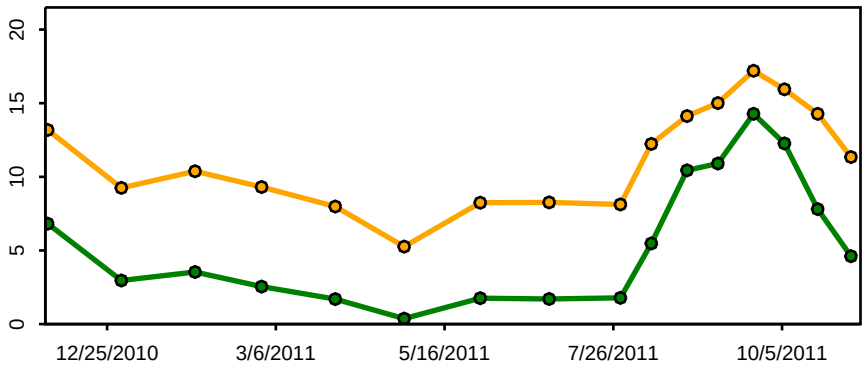
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



Decrease <=20% Increase >= 20%

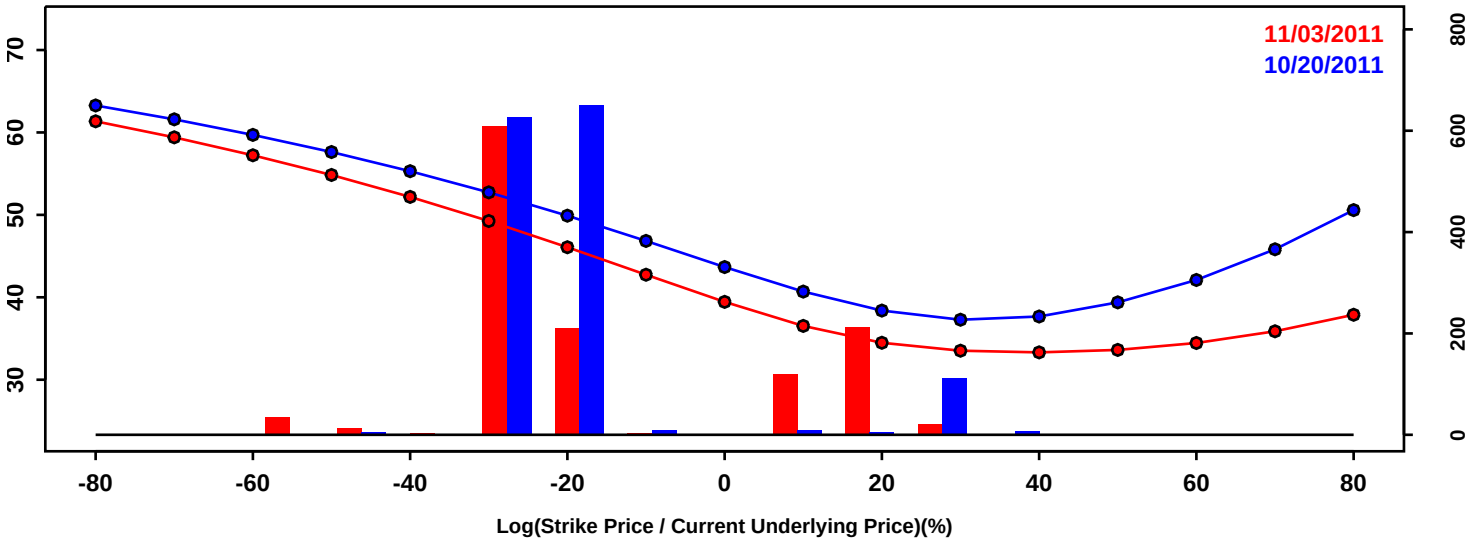
Statistics of the Log Return Distributions

	10/20/2011	11/03/2011	Change
10th Pct	-27.08%	-22.16%	4.92%
50th Pct	4.06%	3.57%	-0.50%
90th Pct	18.65%	16.43%	-2.22%
Mean	-0.51%	-0.15%	0.37%
Std Dev	19.33%	16.76%	-2.57%
Skew	-1.34	-1.44	-0.10
Kurtosis	2.30	2.97	0.67

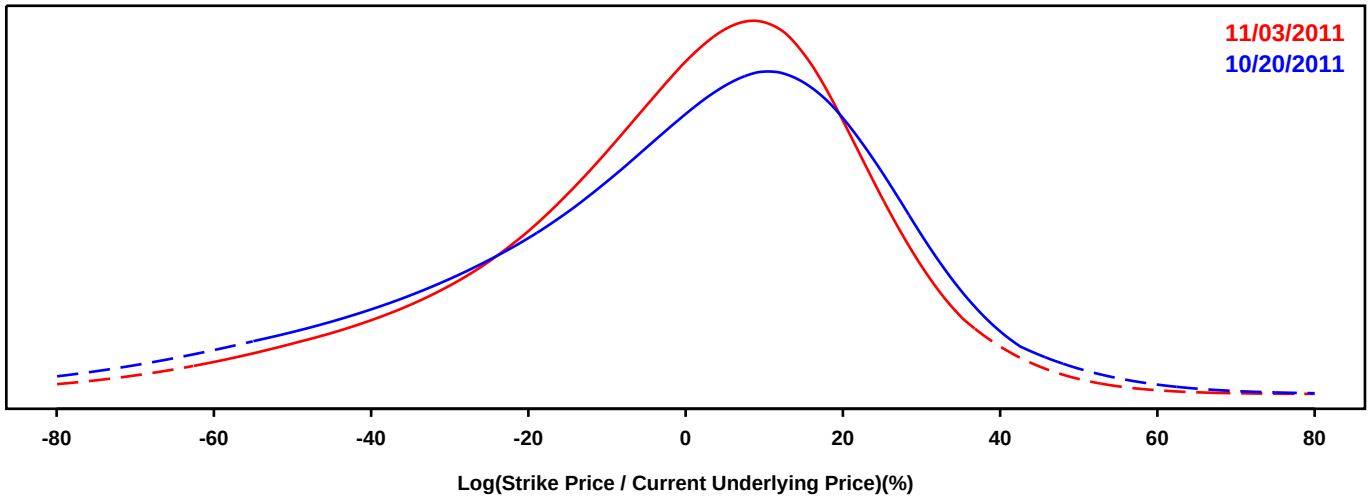
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- CRUDE OIL FUTURES

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

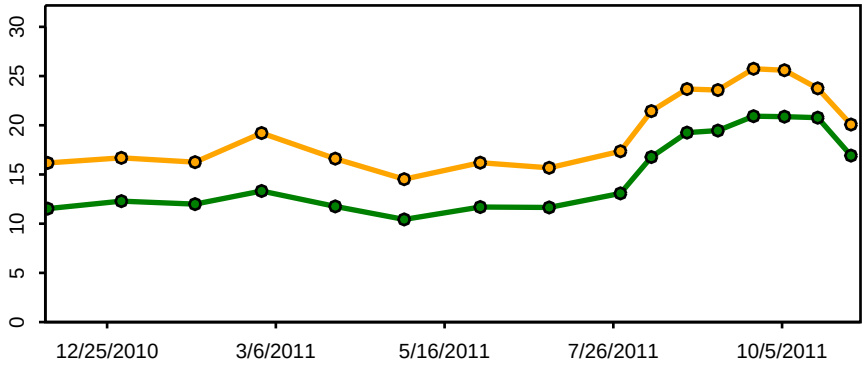
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



Decrease <=20% Increase >= 20%

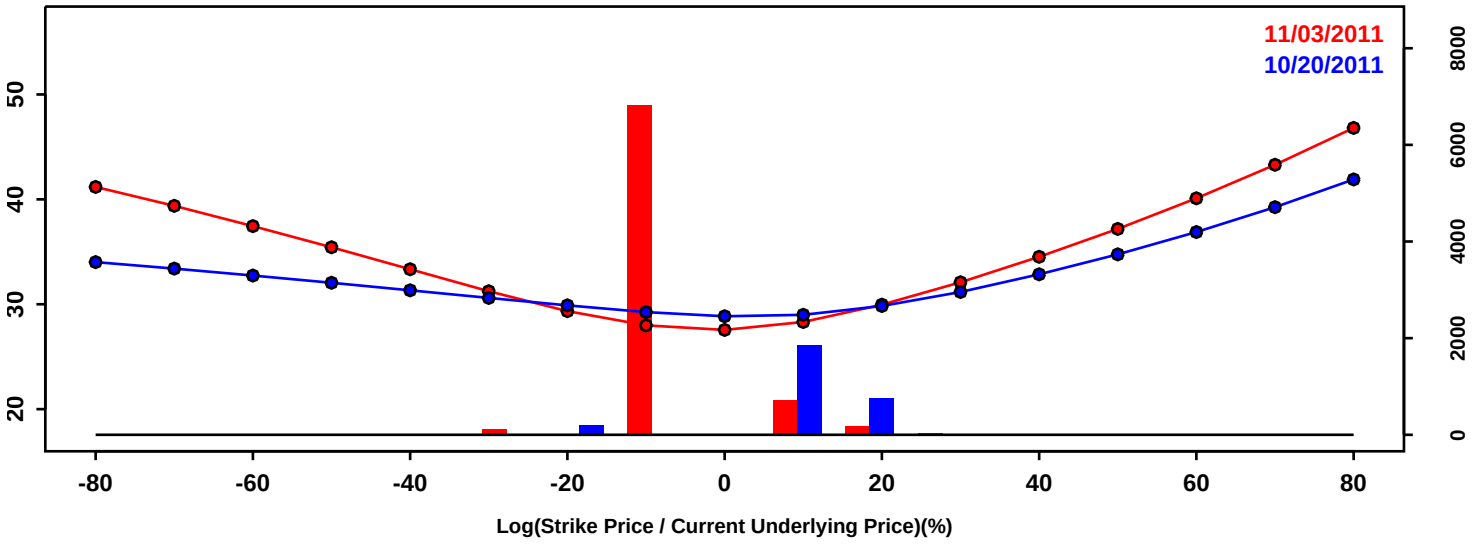
Statistics of the Log Return Distributions

	10/20/2011	11/03/2011	Change
10th Pct	-43.02%	-35.68%	7.34%
50th Pct	2.27%	2.17%	-0.10%
90th Pct	28.93%	25.66%	-3.27%
Mean	-2.68%	-1.70%	0.97%
Std Dev	28.95%	24.87%	-4.09%
Skew	-0.79	-0.80	-0.02
Kurtosis	0.83	1.01	0.18

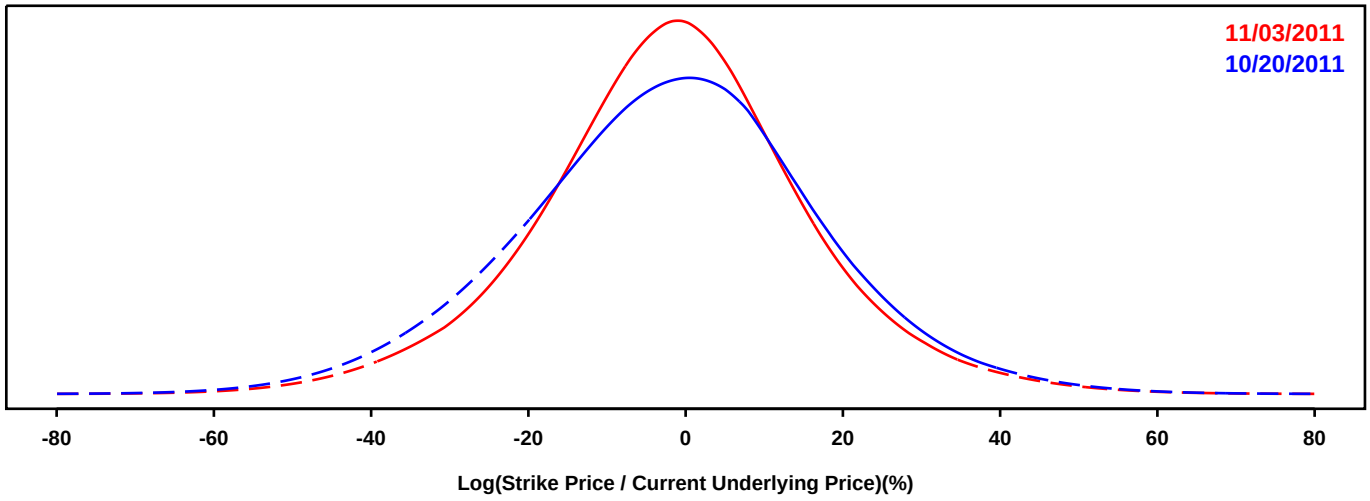
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- GOLD FUTURES

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

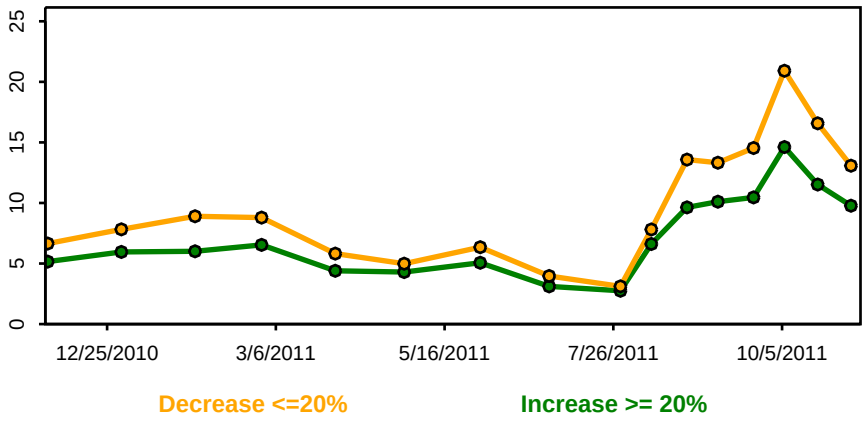
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



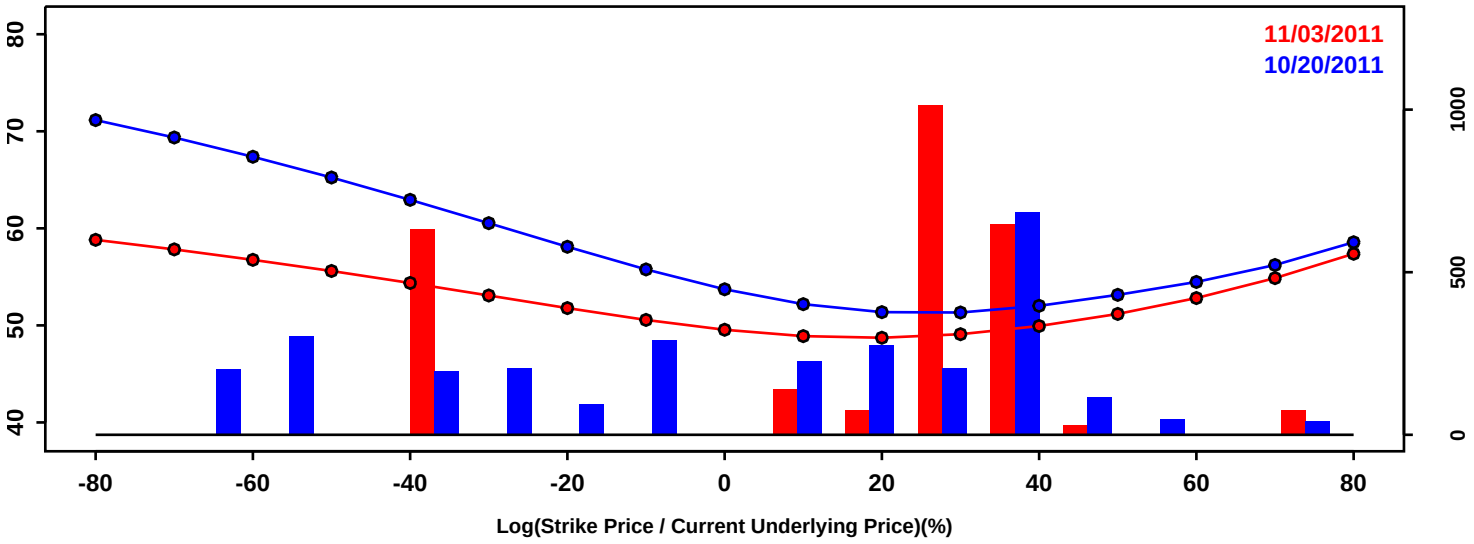
Statistics of the Log Return Distributions

	10/20/2011	11/03/2011	Change
10th Pct	-26.34%	-23.02%	3.33%
50th Pct	-1.47%	-1.42%	0.05%
90th Pct	21.63%	19.76%	-1.87%
Mean	-1.87%	-1.47%	0.39%
Std Dev	19.05%	17.40%	-1.65%
Skew	-0.04	0.01	0.05
Kurtosis	0.33	0.73	0.40

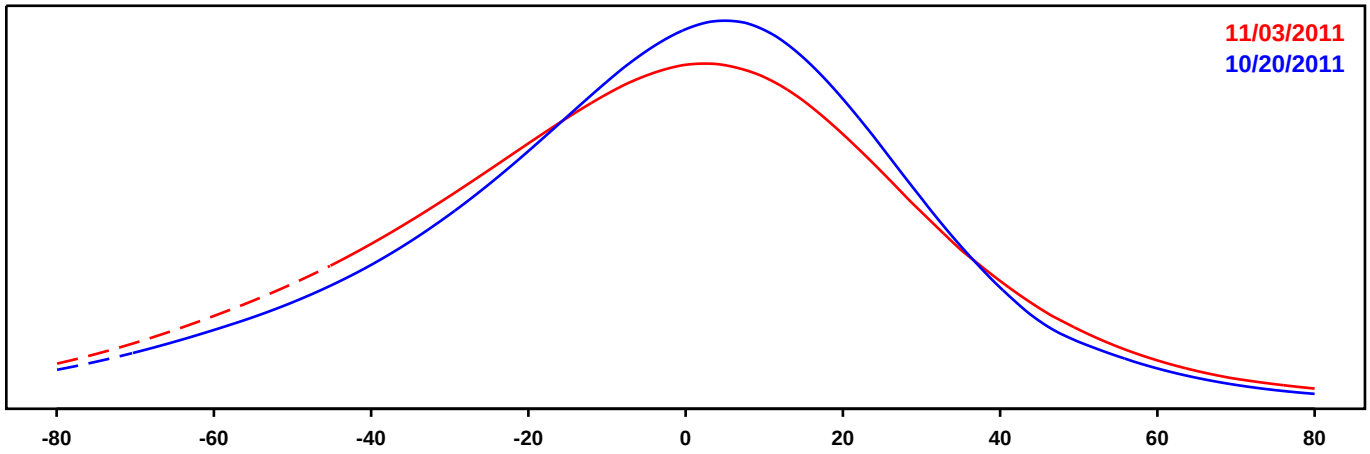
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- SILVER FUTURES

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

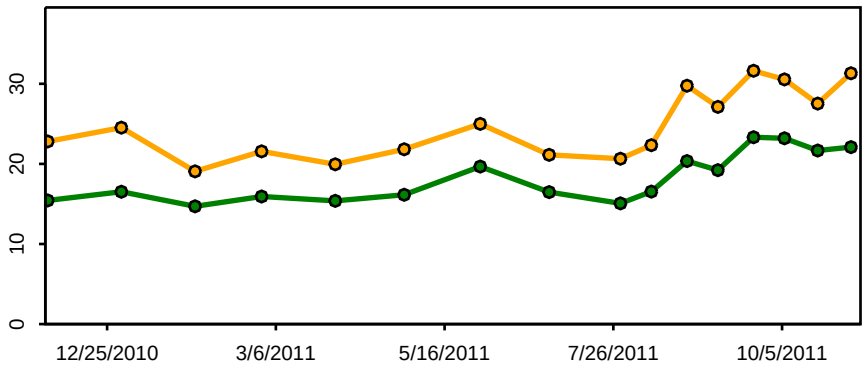
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



Decrease <=20% Increase >= 20%

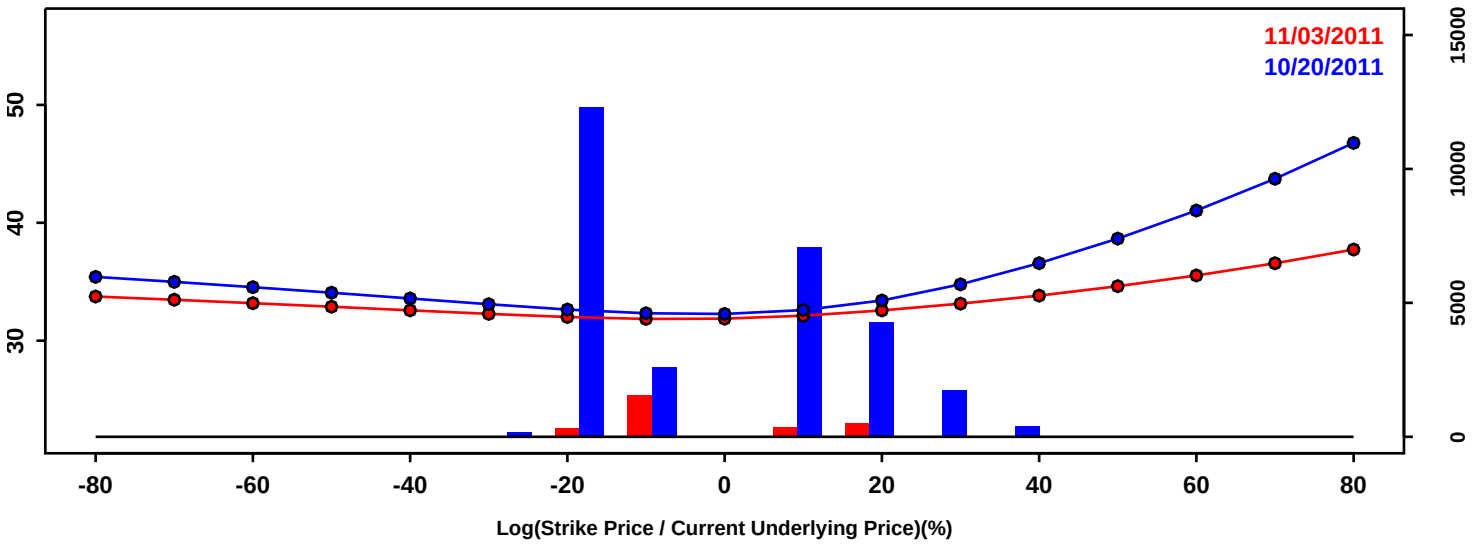
Statistics of the Log Return Distributions

	10/20/2011	11/03/2011	Change
10th Pct	-47.26%	-51.61%	-4.34%
50th Pct	-0.96%	-3.31%	-2.35%
90th Pct	33.08%	35.56%	2.48%
Mean	-4.17%	-5.77%	-1.61%
Std Dev	32.13%	34.36%	2.24%
Skew	-0.49	-0.32	0.16
Kurtosis	0.55	0.25	-0.30

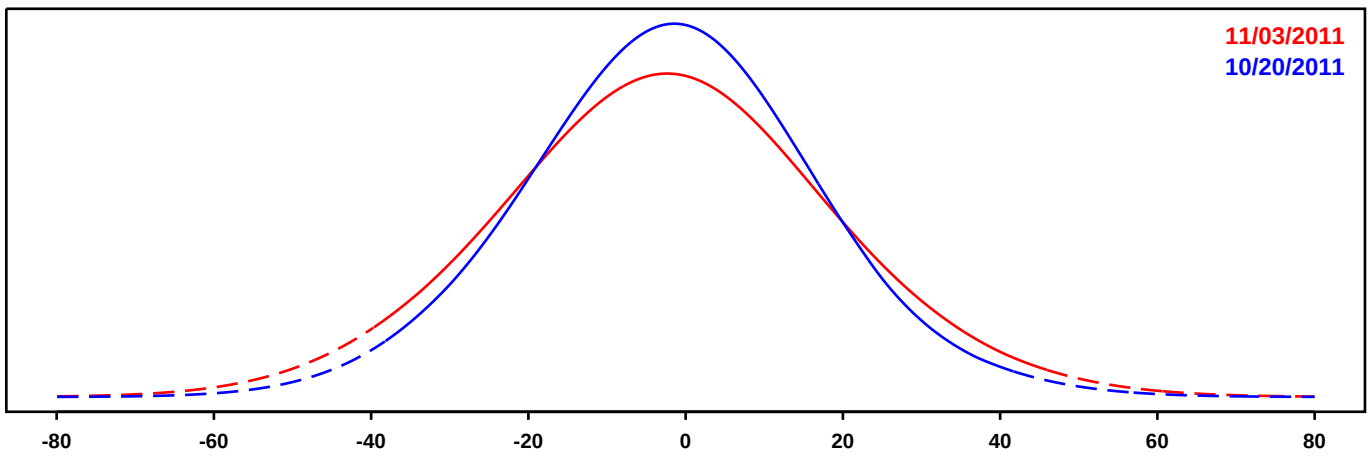
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- CORN FUTURES

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

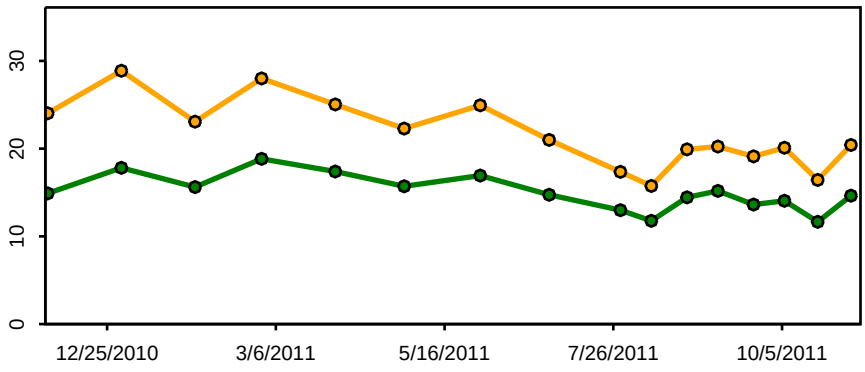
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



Decrease <=20% Increase >= 20%

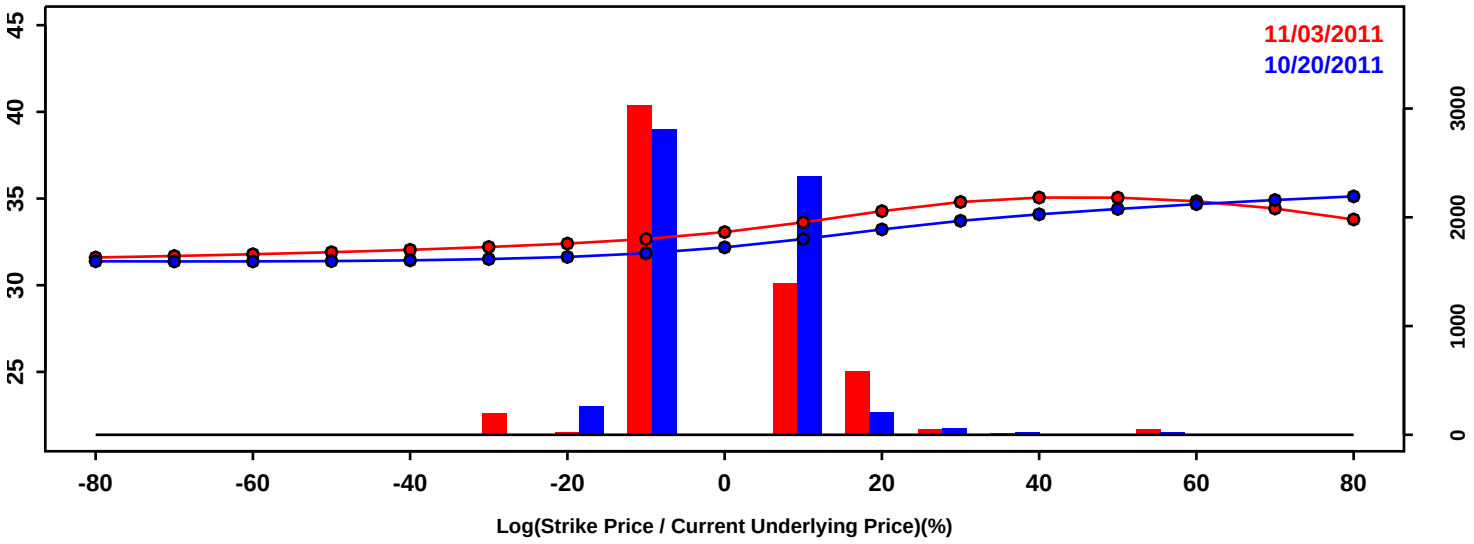
Statistics of the Log Return Distributions

	10/20/2011	11/03/2011	Change
10th Pct	-25.89%	-29.99%	-4.10%
50th Pct	-1.82%	-2.43%	-0.61%
90th Pct	21.71%	25.15%	3.44%
Mean	-1.88%	-2.38%	-0.50%
Std Dev	18.85%	21.67%	2.82%
Skew	0.03	0.03	0.00
Kurtosis	0.24	0.15	-0.09

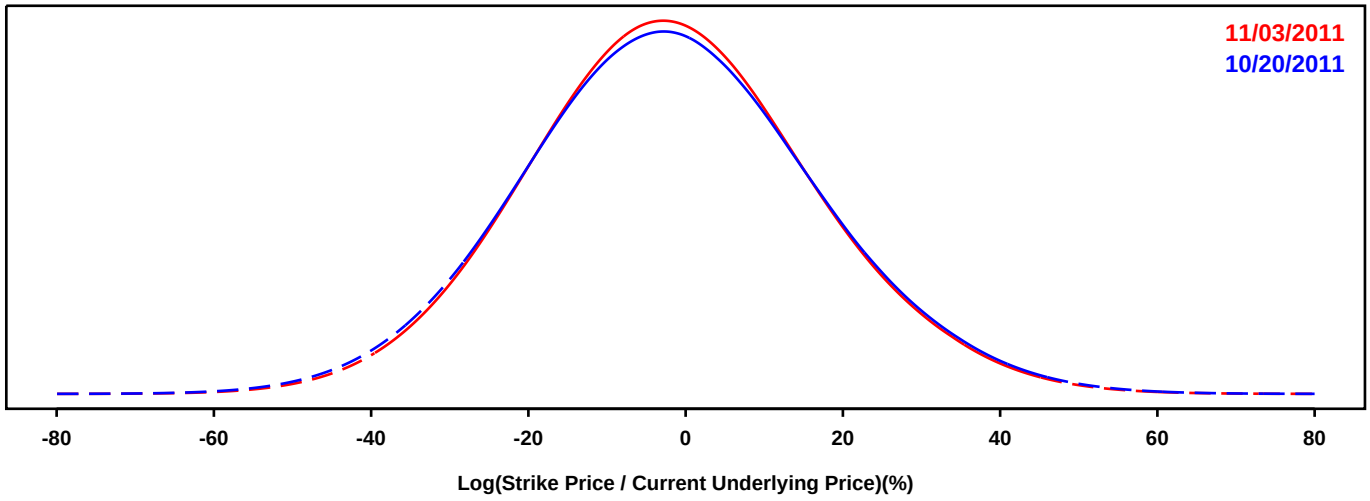
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- WHEAT FUTURES

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

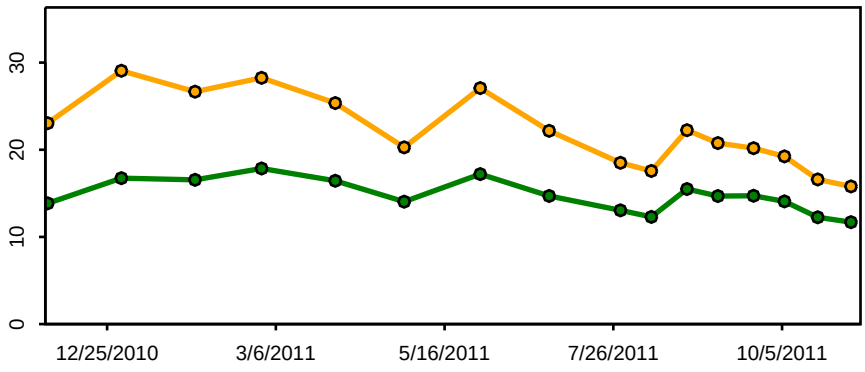
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



Decrease <=20% Increase >= 20%

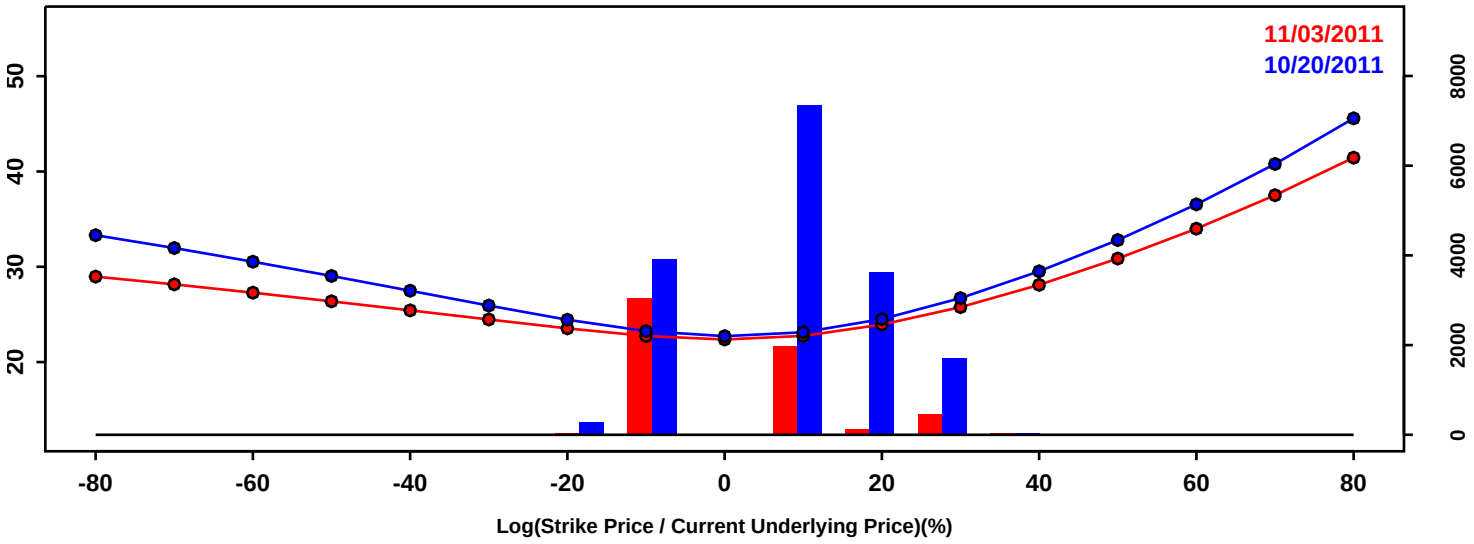
Statistics of the Log Return Distributions

	10/20/2011	11/03/2011	Change
10th Pct	-25.70%	-24.92%	0.77%
50th Pct	-2.23%	-2.18%	0.05%
90th Pct	22.39%	21.79%	-0.60%
Mean	-1.88%	-1.81%	0.07%
Std Dev	18.83%	18.30%	-0.53%
Skew	0.10	0.11	0.01
Kurtosis	0.09	0.09	0.01

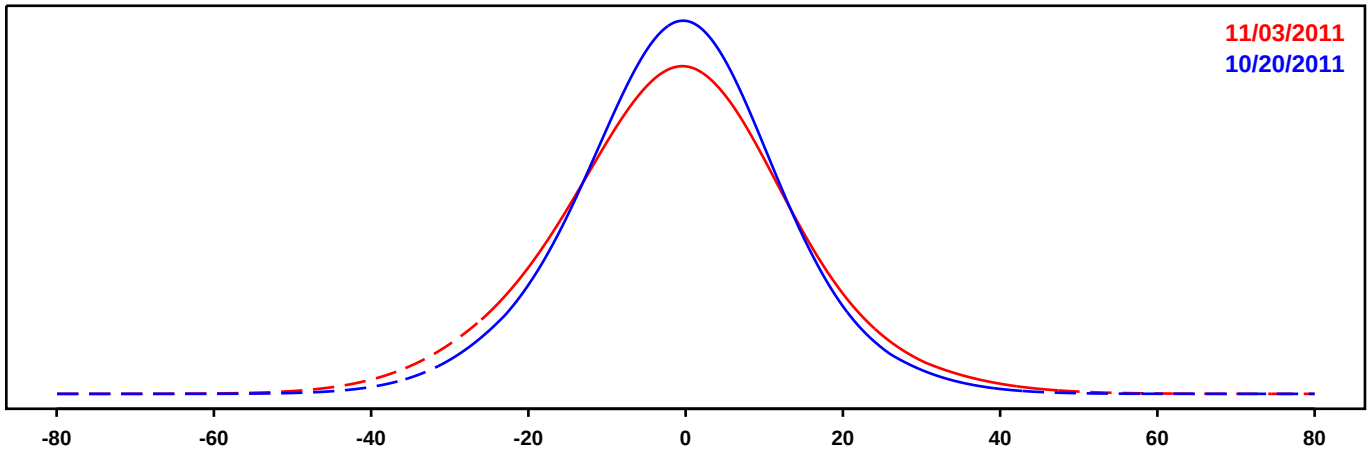
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- SOYBEAN FUTURES

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

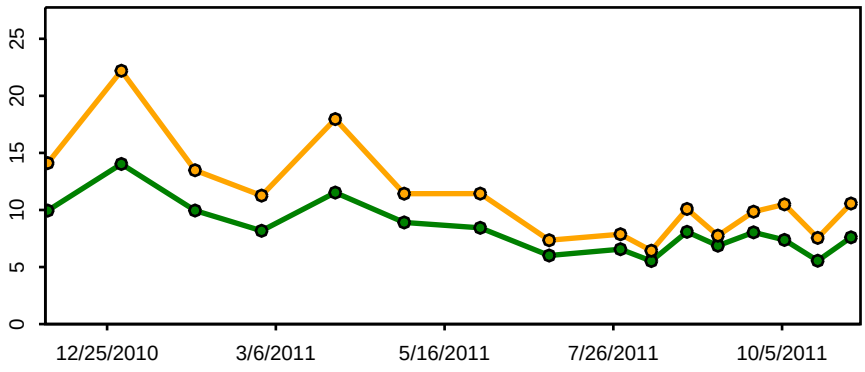
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



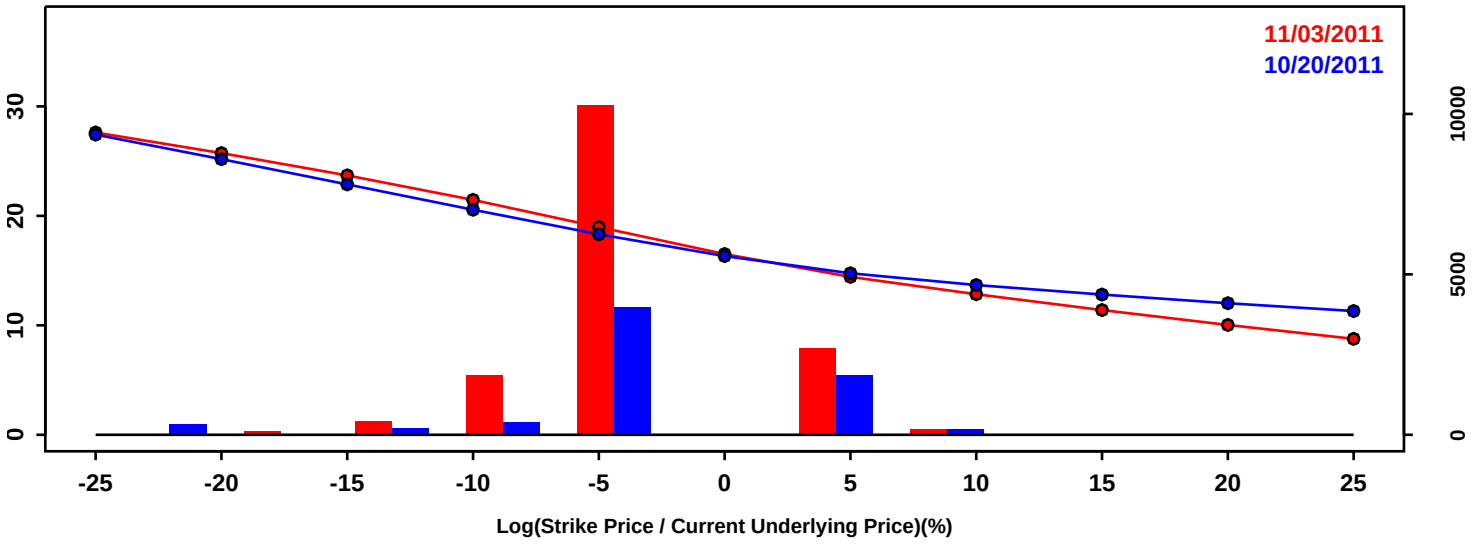
Statistics of the Log Return Distributions

	10/20/2011	11/03/2011	Change
10th Pct	-17.68%	-20.53%	-2.85%
50th Pct	-0.71%	-1.01%	-0.30%
90th Pct	15.57%	17.56%	1.99%
Mean	-0.85%	-1.17%	-0.32%
Std Dev	13.30%	15.21%	1.91%
Skew	-0.03	-0.01	0.02
Kurtosis	0.42	0.42	0.00

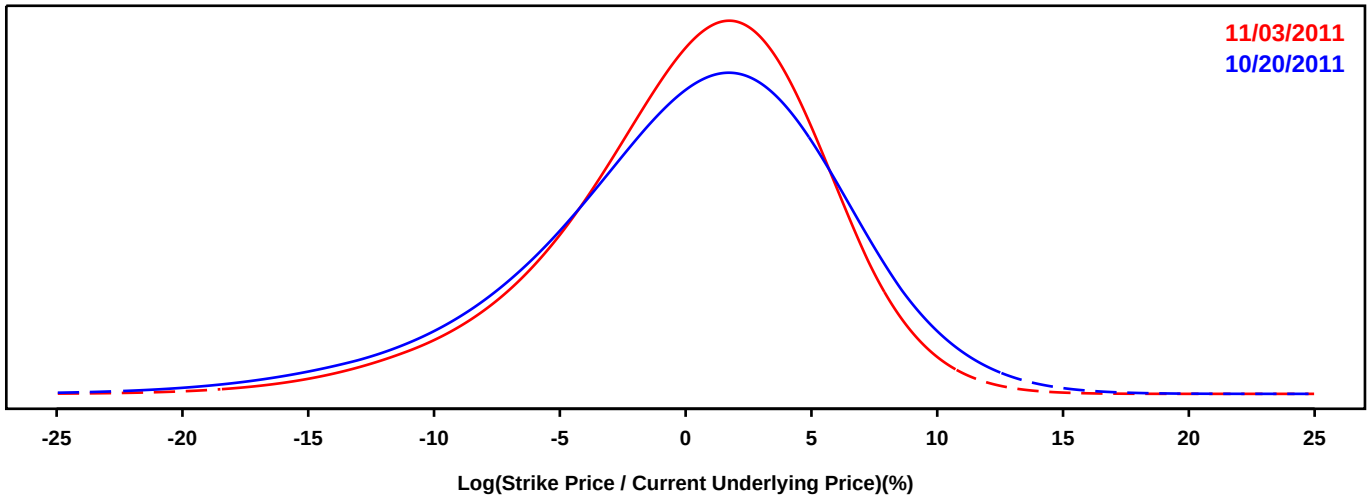
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- DOLLAR-EURO EXCHANGE RATE FUTURES

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

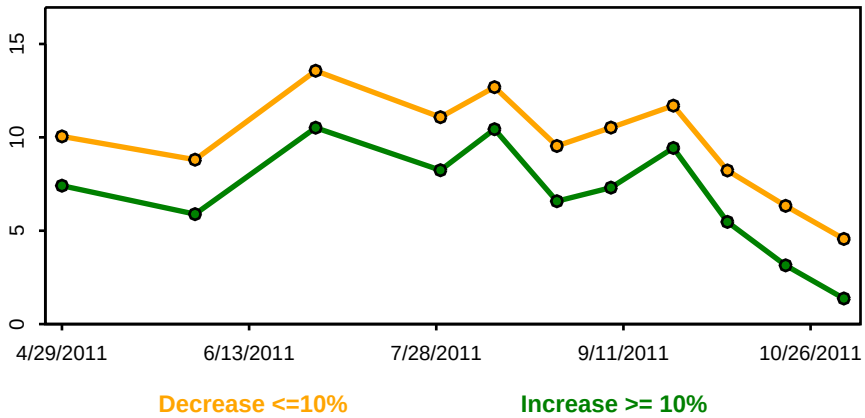
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



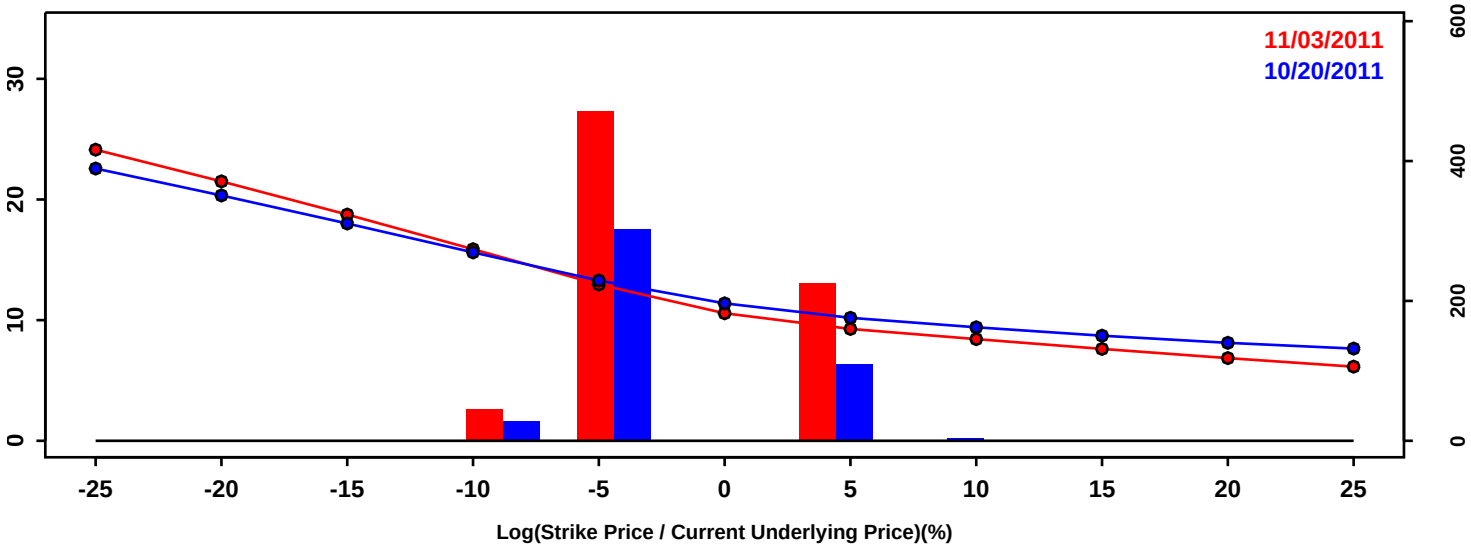
Statistics of the Log Return Distributions

	10/20/2011	11/03/2011	Change
10th Pct	-7.91%	-6.89%	1.02%
50th Pct	0.69%	0.69%	0.00%
90th Pct	7.18%	6.20%	-0.98%
Mean	0.08%	0.13%	0.05%
Std Dev	6.08%	5.28%	-0.81%
Skew	-0.60	-0.64	-0.05
Kurtosis	0.76	0.76	-0.01

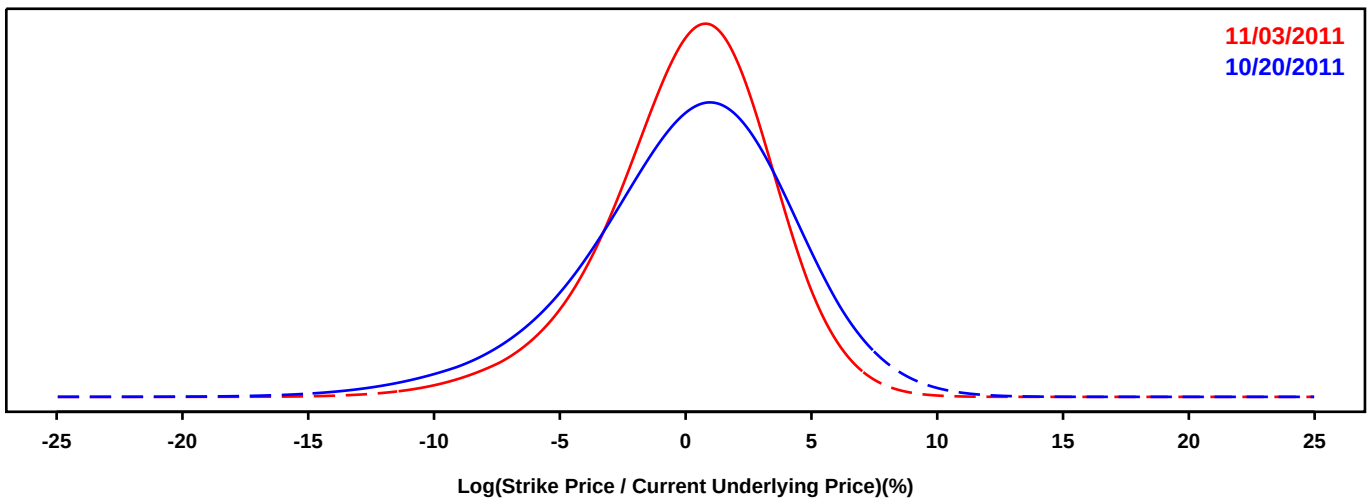
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- DOLLAR-POUND EXCHANGE RATE FUTURES

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

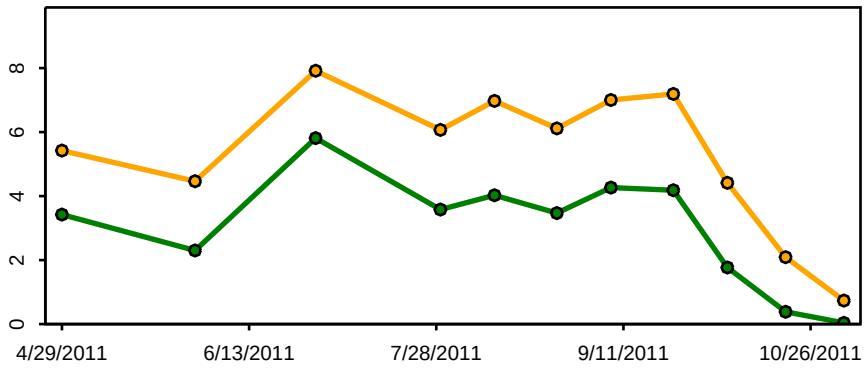
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



Decrease <=10% Increase >= 10%

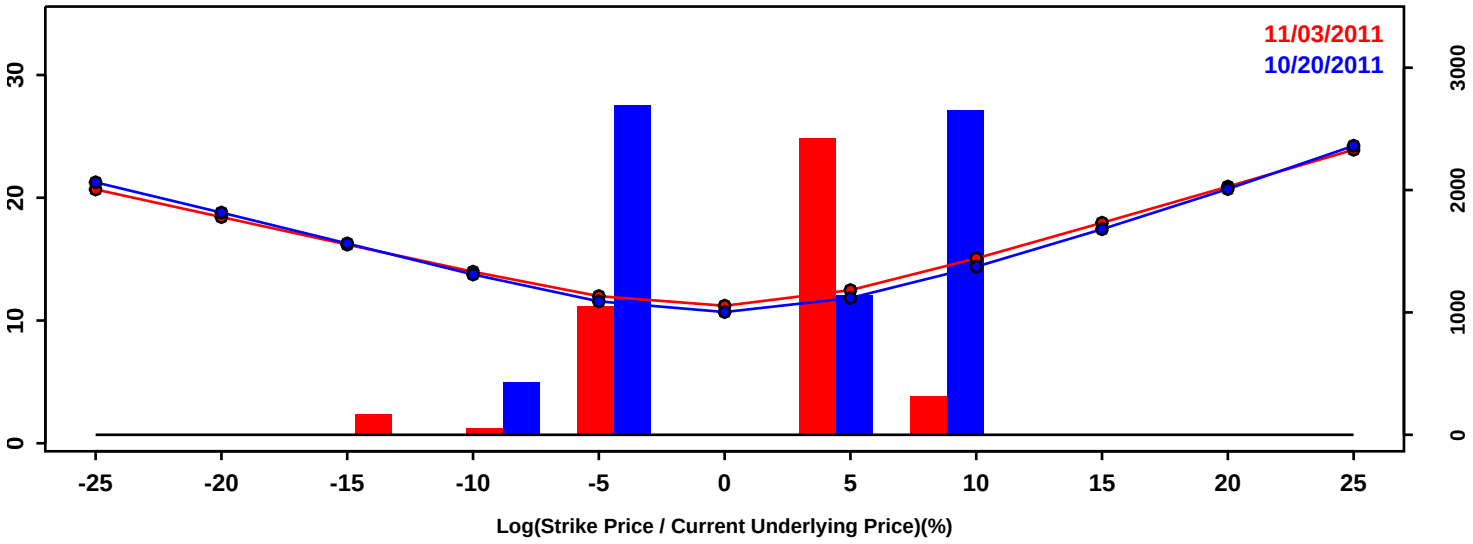
Statistics of the Log Return Distributions

	10/20/2011	11/03/2011	Change
10th Pct	-5.45%	-4.30%	1.16%
50th Pct	0.39%	0.34%	-0.05%
90th Pct	5.07%	4.01%	-1.05%
Mean	0.06%	0.08%	0.02%
Std Dev	4.23%	3.36%	-0.87%
Skew	-0.53	-0.54	-0.02
Kurtosis	0.70	0.78	0.08

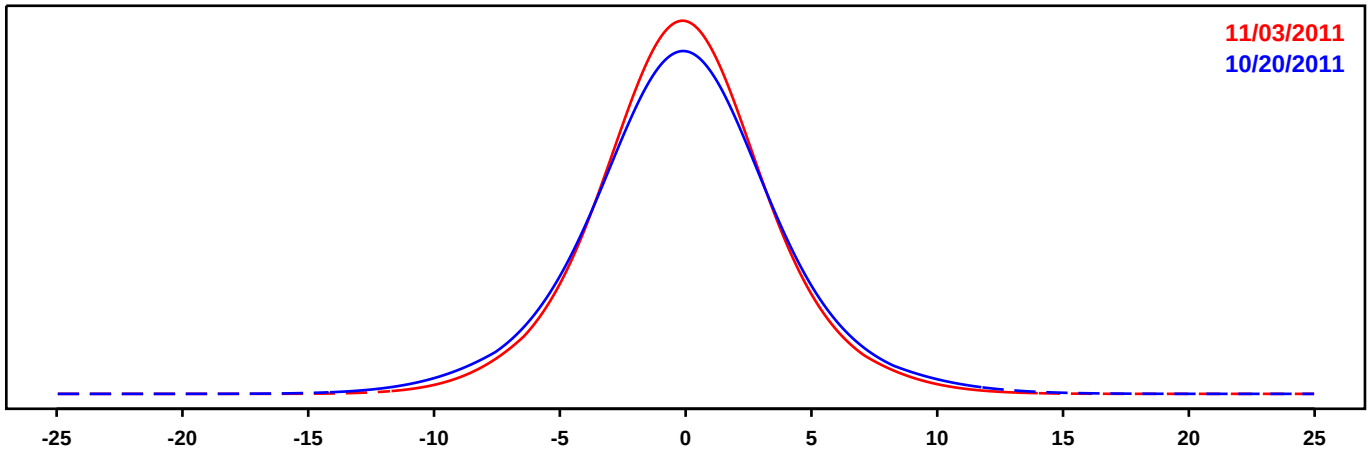
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- YEN-DOLLAR EXCHANGE RATE FUTURES

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

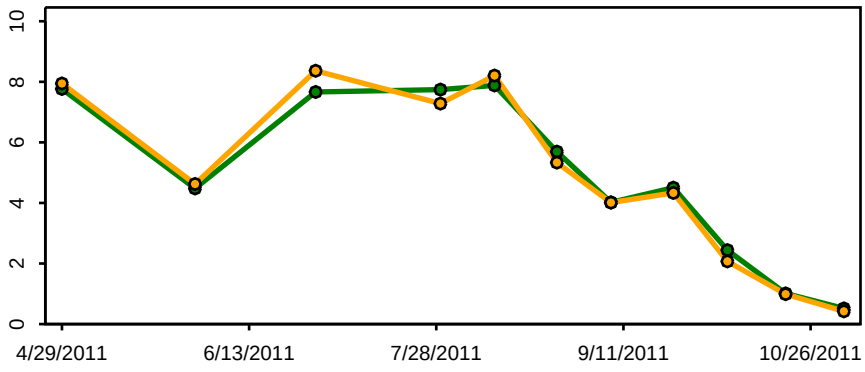
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



Decrease <=10% Increase >= 10%

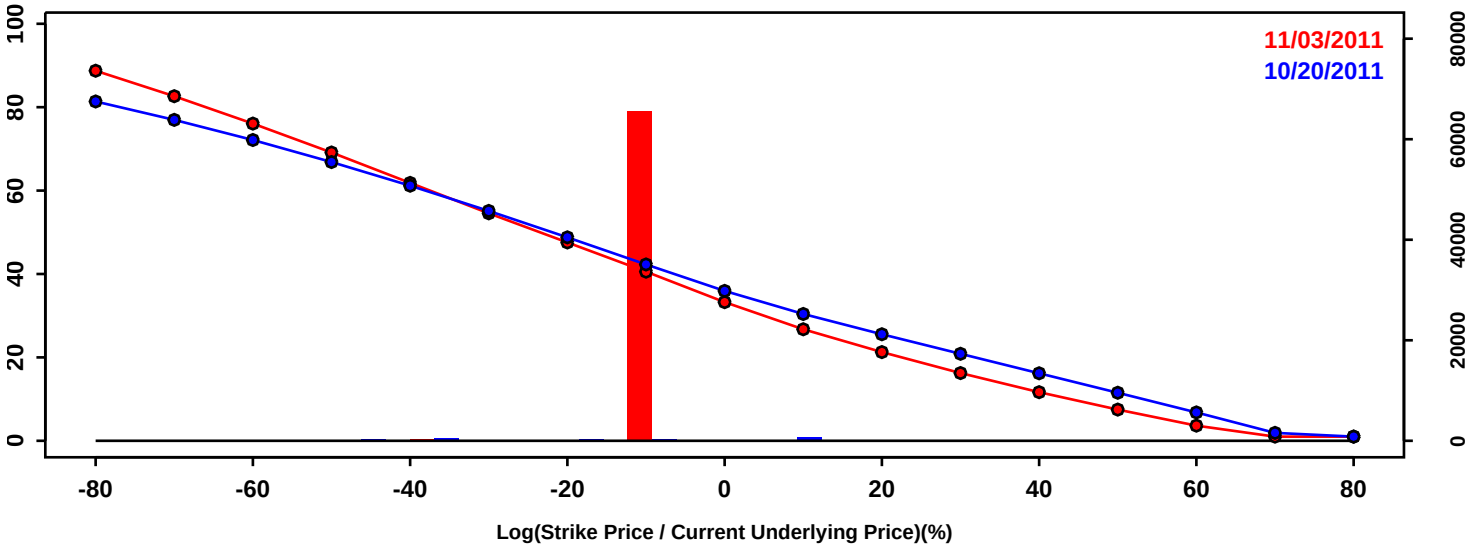
Statistics of the Log Return Distributions

	10/20/2011	11/03/2011	Change
10th Pct	-4.87%	-4.45%	0.42%
50th Pct	-0.11%	-0.11%	-0.00%
90th Pct	4.68%	4.25%	-0.43%
Mean	-0.07%	-0.06%	0.01%
Std Dev	3.92%	3.53%	-0.40%
Skew	0.04	0.06	0.03
Kurtosis	0.83	0.62	-0.21

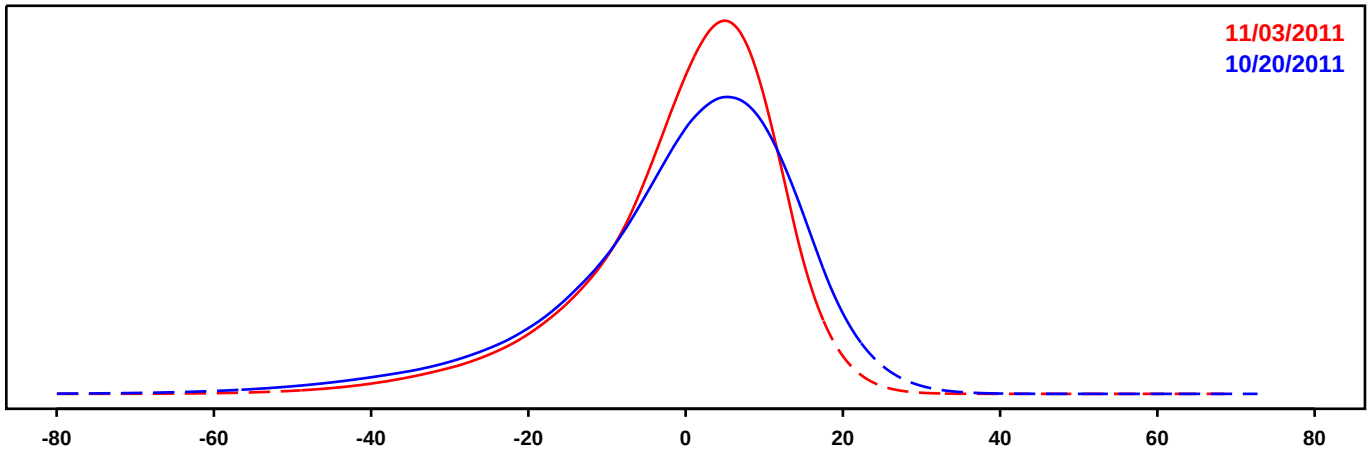
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- iSHARES DOW JONES US REAL ESTATE INDEX

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

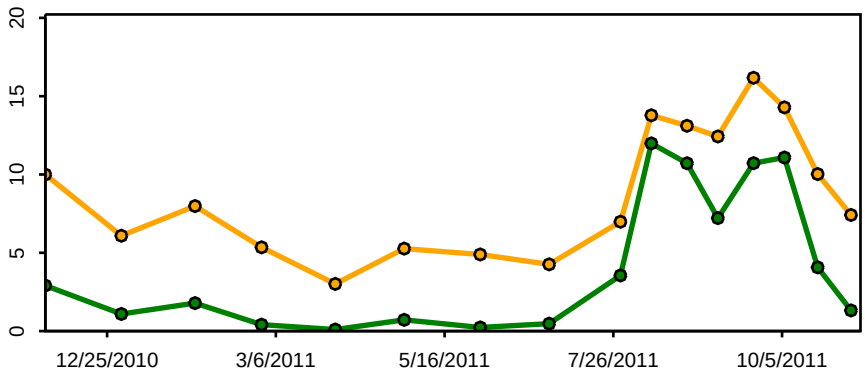
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



Statistics of the Log Return Distributions

	10/20/2011	11/03/2011	Change
10th Pct	-20.06%	-16.66%	3.40%
50th Pct	2.05%	1.91%	-0.14%
90th Pct	15.64%	12.71%	-2.93%
Mean	-0.43%	-0.29%	0.14%
Std Dev	14.95%	12.26%	-2.69%
Skew	-1.08	-1.10	-0.02
Kurtosis	1.91	1.86	-0.04