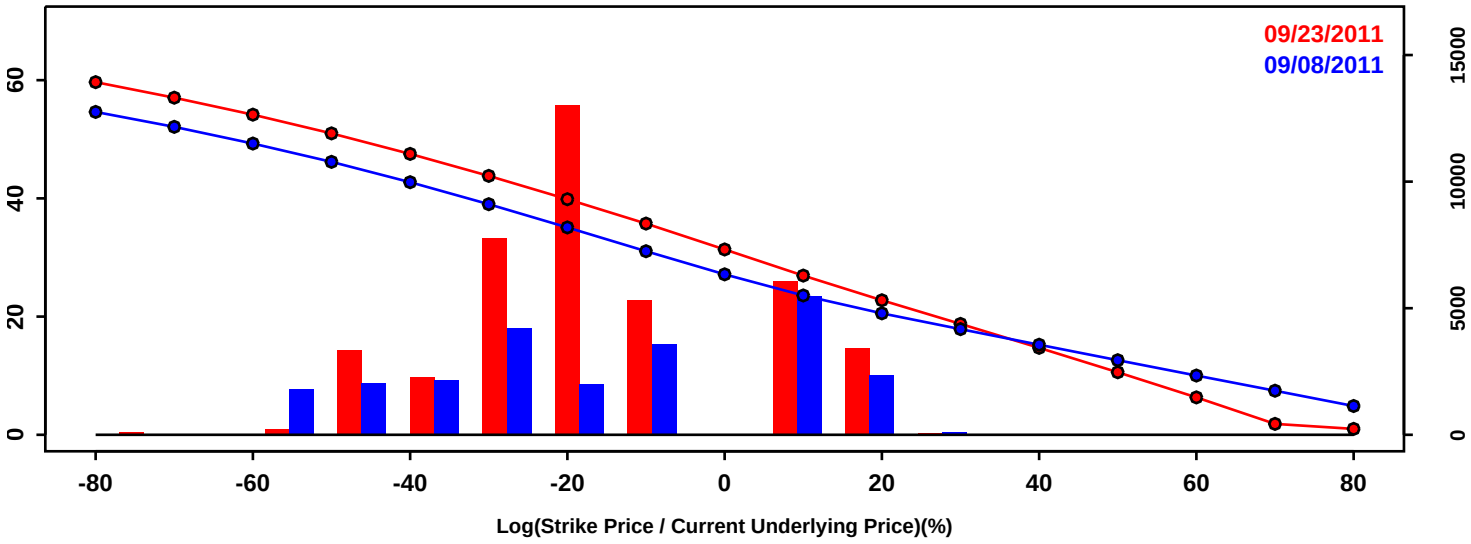
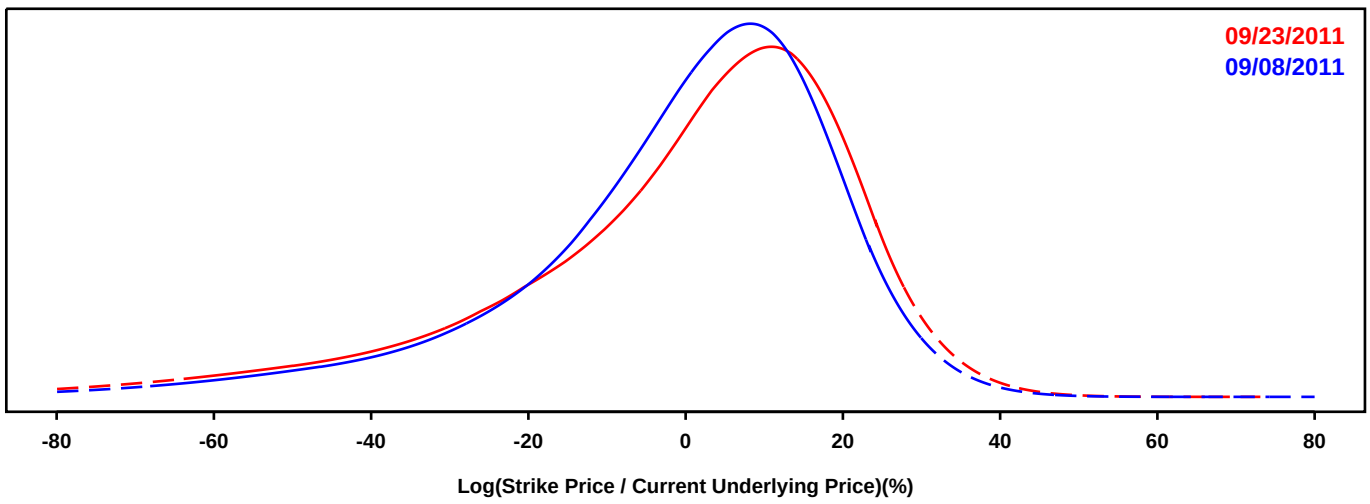
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- S&P 500

Log returns are based on the risk neutral density function of the front month futures contract derived from options that expire in approximately 6 months.

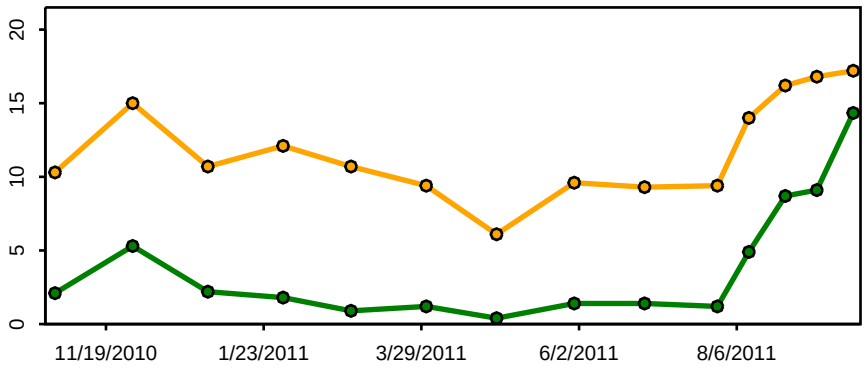
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



Decrease <=20% Increase >= 20%

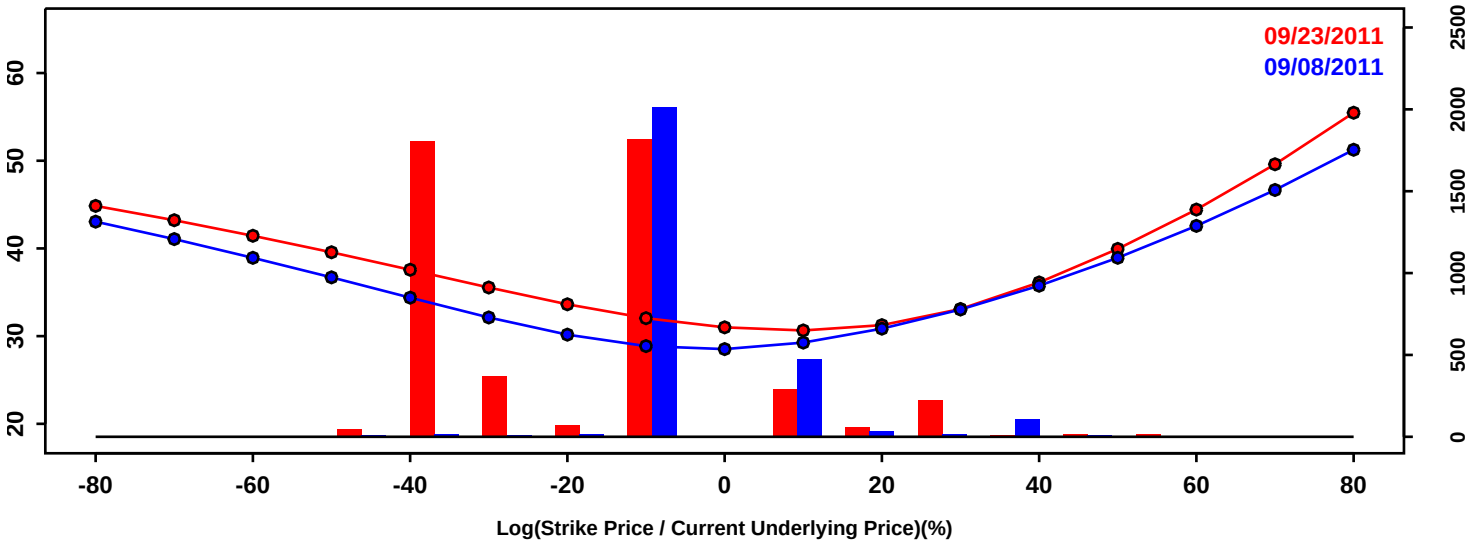
Statistics of the Log Return Distributions

	09/08/2011	09/23/2011	Change
10th Pct	-27.92%	-32.12%	-4.21%
50th Pct	2.95%	4.18%	1.23%
90th Pct	20.66%	22.68%	2.02%
Mean	-0.9%	-0.9%	-0.01%
Std Dev	20.7%	23.2%	2.5%
Skew	-1.22	-1.26	-0.04
Kurtosis	2.31	2.17	-0.14

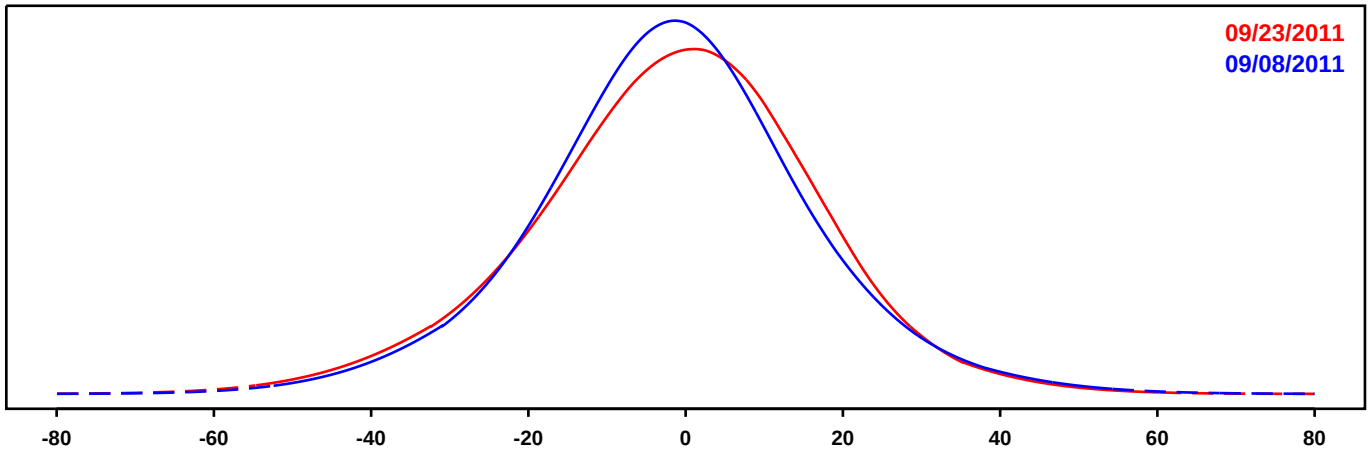
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- GOLD FUTURES

Log returns are based on the risk neutral density function of the front month futures contract derived from options that expire in approximately 6 months.

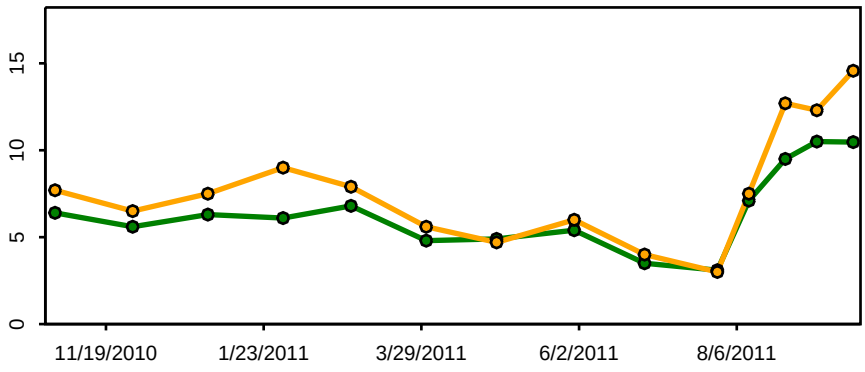
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



Decrease <=20% Increase >= 20%

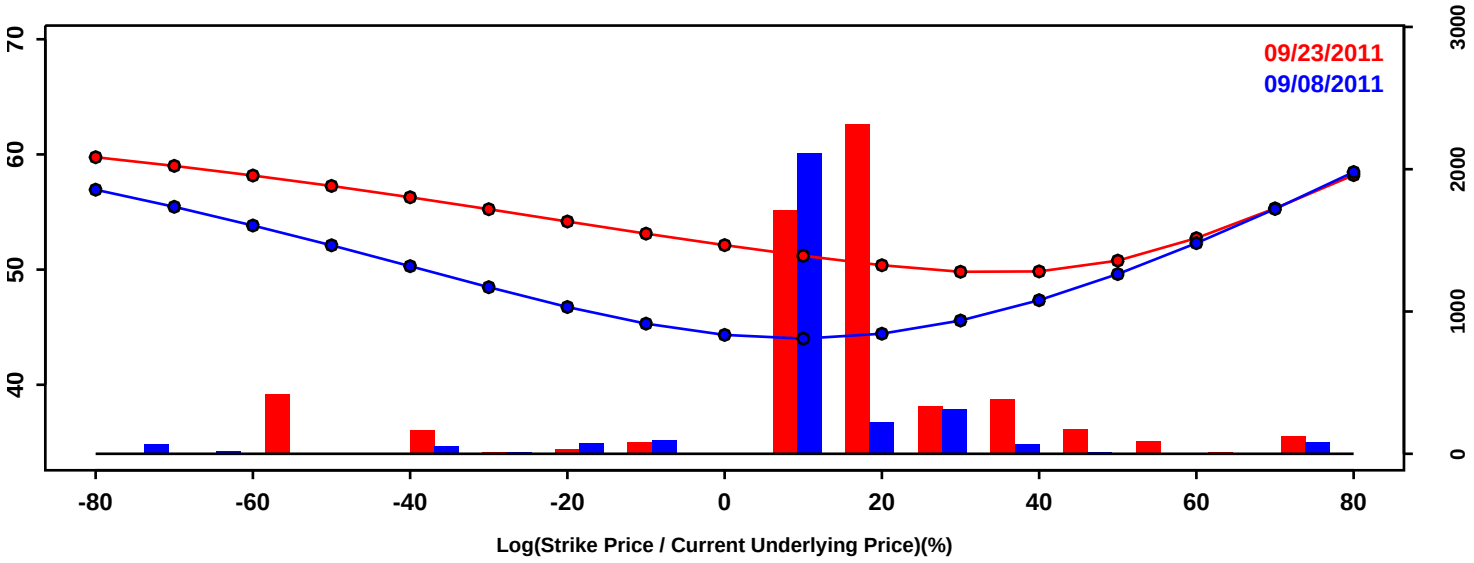
Statistics of the Log Return Distributions

	09/08/2011	09/23/2011	Change
10th Pct	-23.27%	-24.73%	-1.46%
50th Pct	-1.52%	-0.66%	0.86%
90th Pct	20.13%	20.46%	0.33%
Mean	-1.5%	-1.4%	0.09%
Std Dev	17.6%	18.2%	0.5%
Skew	0.02	-0.20	-0.23
Kurtosis	0.70	0.49	-0.21

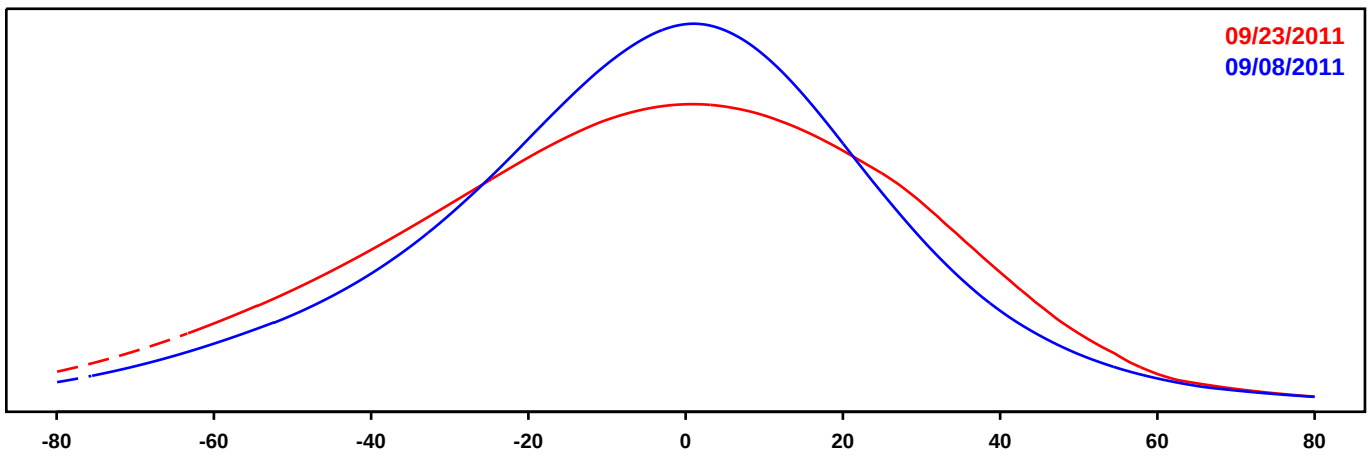
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- SILVER FUTURES

Log returns are based on the risk neutral density function of the front month futures contract derived from options that expire in approximately 6 months.

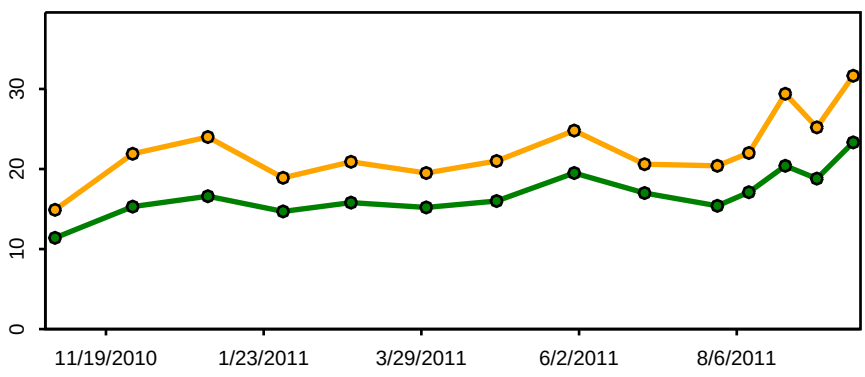
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



Decrease <=20% Increase >= 20%

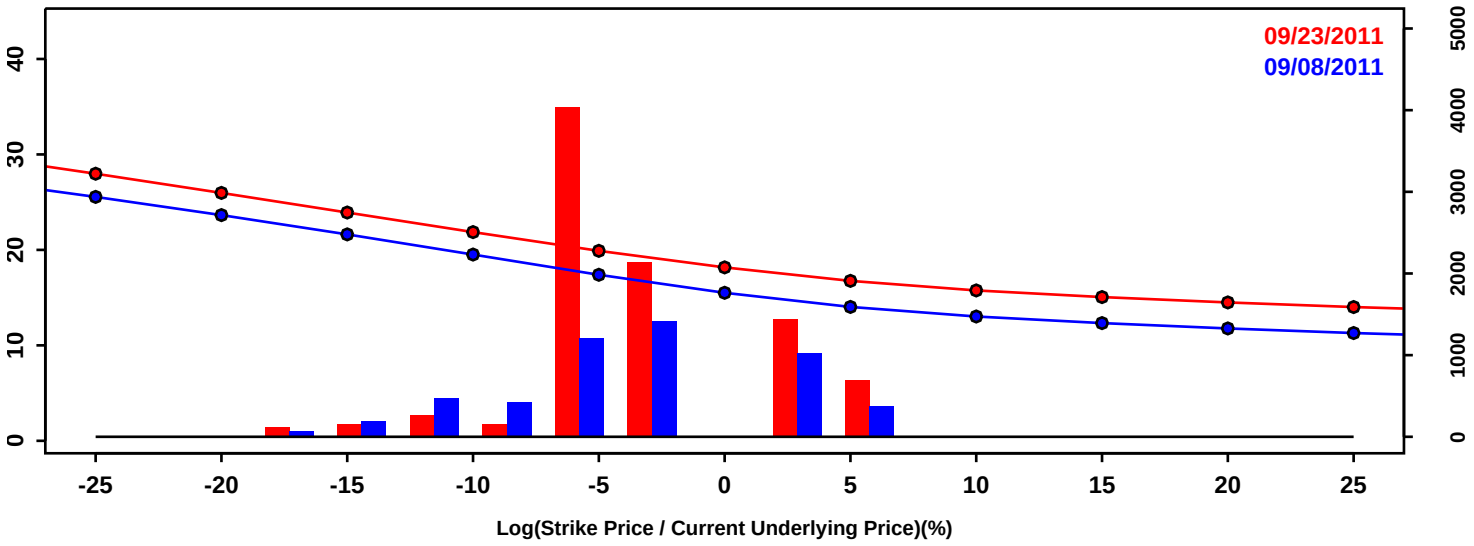
Statistics of the Log Return Distributions

	09/08/2011	09/23/2011	Change
10th Pct	-43.64%	-50.69%	-7.05%
50th Pct	-2.49%	-3.36%	-0.88%
90th Pct	31.23%	35.77%	4.54%
Mean	-4.4%	-5.5%	-1.13%
Std Dev	30.0%	33.8%	3.7%
Skew	-0.31	-0.32	-0.01
Kurtosis	0.55	0.07	-0.49

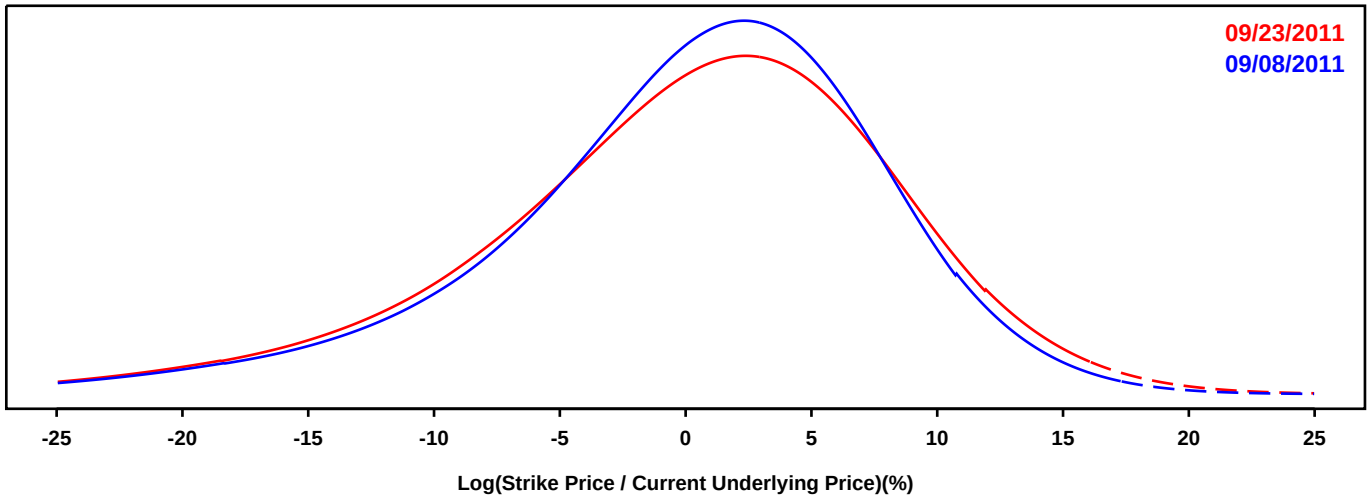
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- DOLLAR-EURO EXCHANGE RATE FUTURES

Log returns are based on the risk neutral density function of the front month futures contract derived from options that expire in approximately 6 months.

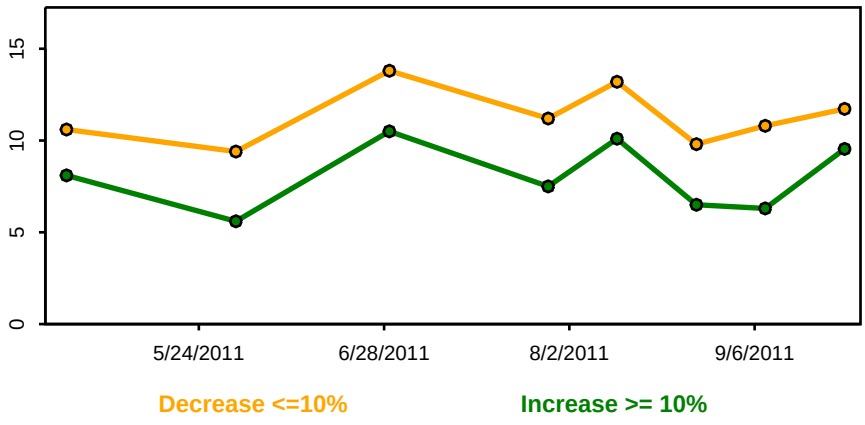
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



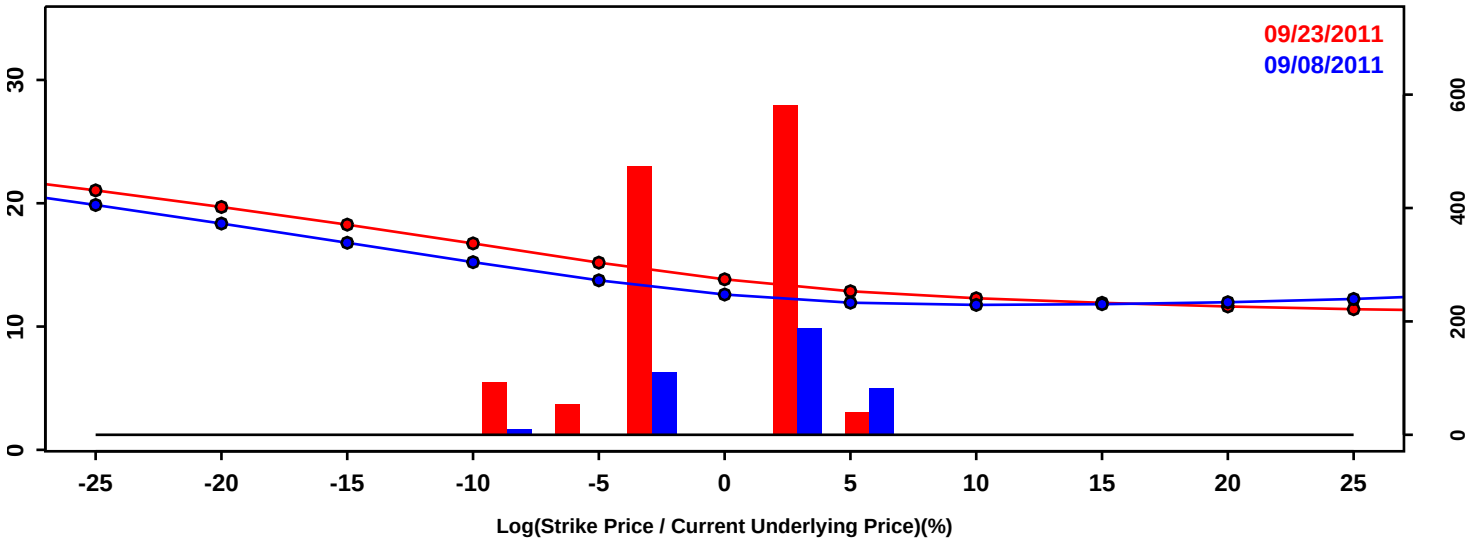
Statistics of the Log Return Distributions

	09/08/2011	09/23/2011	Change
10th Pct	-10.32%	-11.05%	-0.72%
50th Pct	0.94%	0.94%	0.00%
90th Pct	8.98%	9.80%	0.82%
Mean	0.0%	0.0%	0.02%
Std Dev	8.0%	8.5%	0.5%
Skew	-0.80	-0.67	0.14
Kurtosis	1.32	0.95	-0.36

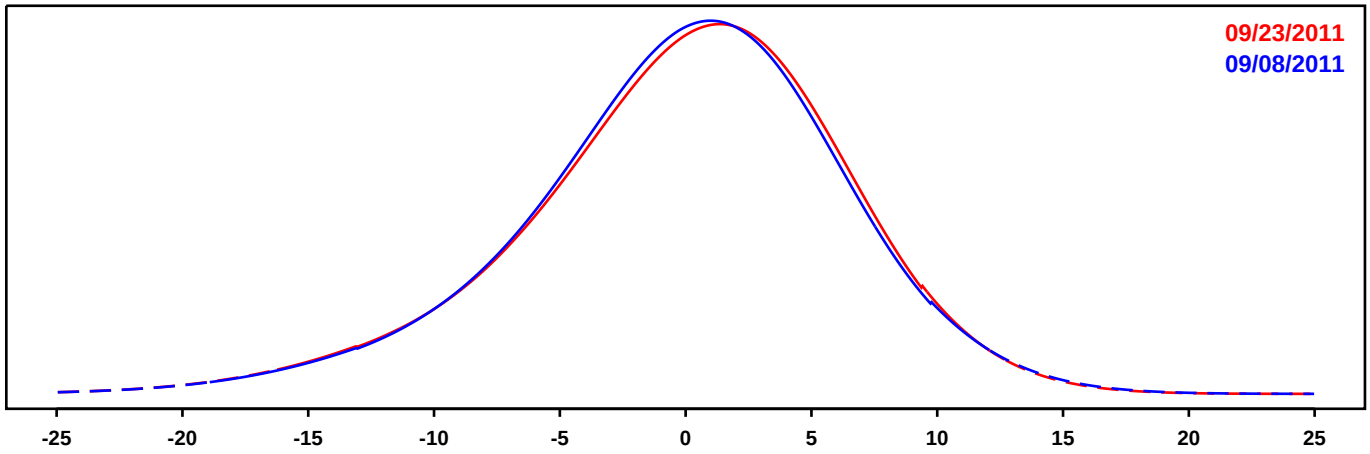
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- DOLLAR-POUND EXCHANGE RATE FUTURES

Log returns are based on the risk neutral density function of the front month futures contract derived from options that expire in approximately 6 months.

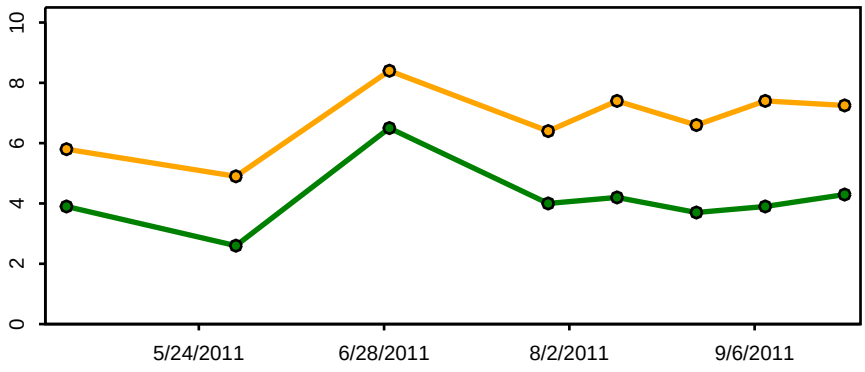
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



Decrease <=10% Increase >= 10%

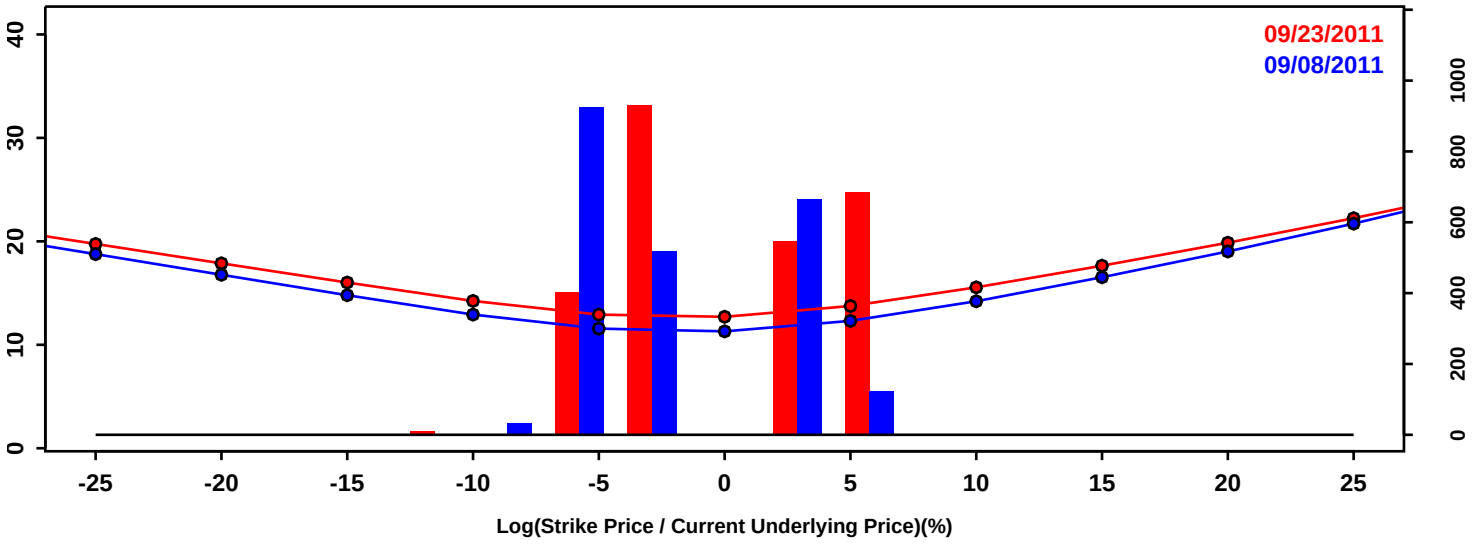
Statistics of the Log Return Distributions

	09/08/2011	09/23/2011	Change
10th Pct	-8.40%	-8.45%	-0.05%
50th Pct	0.29%	0.44%	0.15%
90th Pct	7.51%	7.60%	0.09%
Mean	-0.1%	-0.0%	0.07%
Std Dev	6.4%	6.4%	0.0%
Skew	-0.43	-0.49	-0.05
Kurtosis	0.63	0.59	-0.04

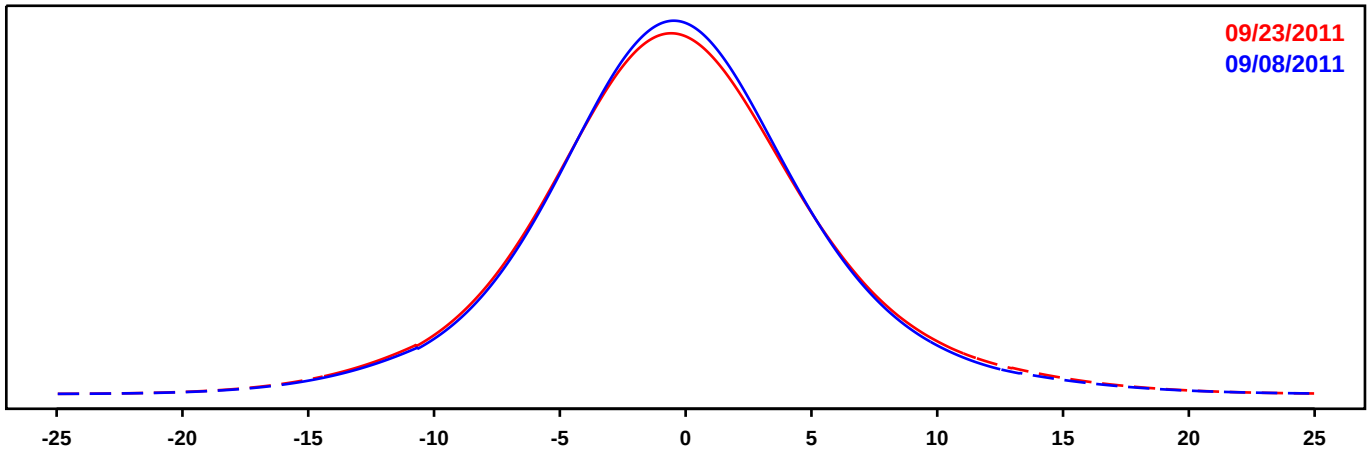
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- YEN-DOLLAR EXCHANGE RATE FUTURES

Log returns are based on the risk neutral density function of the front month futures contract derived from options that expire in approximately 6 months.

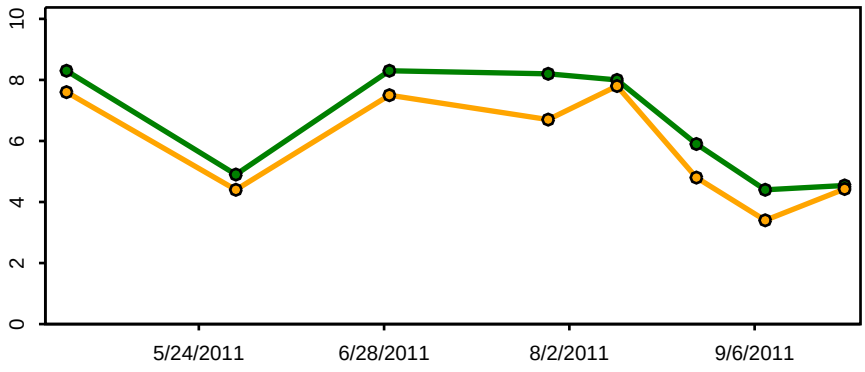
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



Decrease <=10% Increase >= 10%

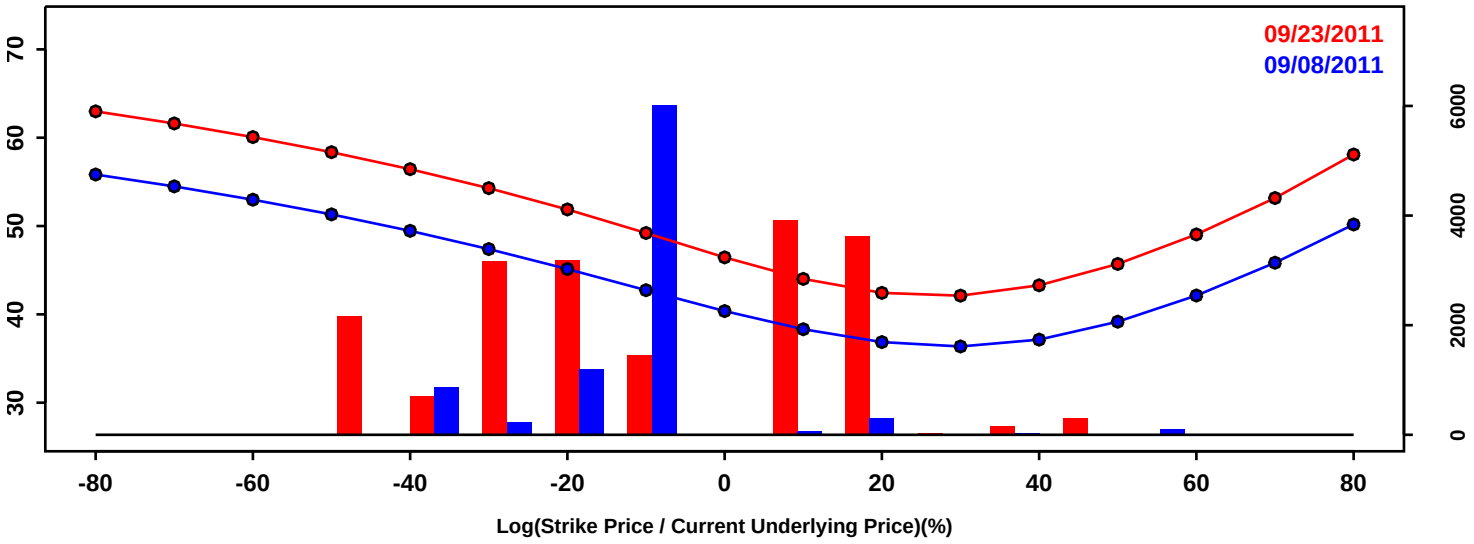
Statistics of the Log Return Distributions

	09/08/2011	09/23/2011	Change
10th Pct	-7.00%	-7.21%	-0.21%
50th Pct	-0.36%	-0.36%	-0.00%
90th Pct	6.62%	6.90%	0.28%
Mean	-0.2%	-0.2%	0.01%
Std Dev	5.7%	5.8%	0.2%
Skew	0.18	0.19	0.00
Kurtosis	1.12	0.97	-0.15

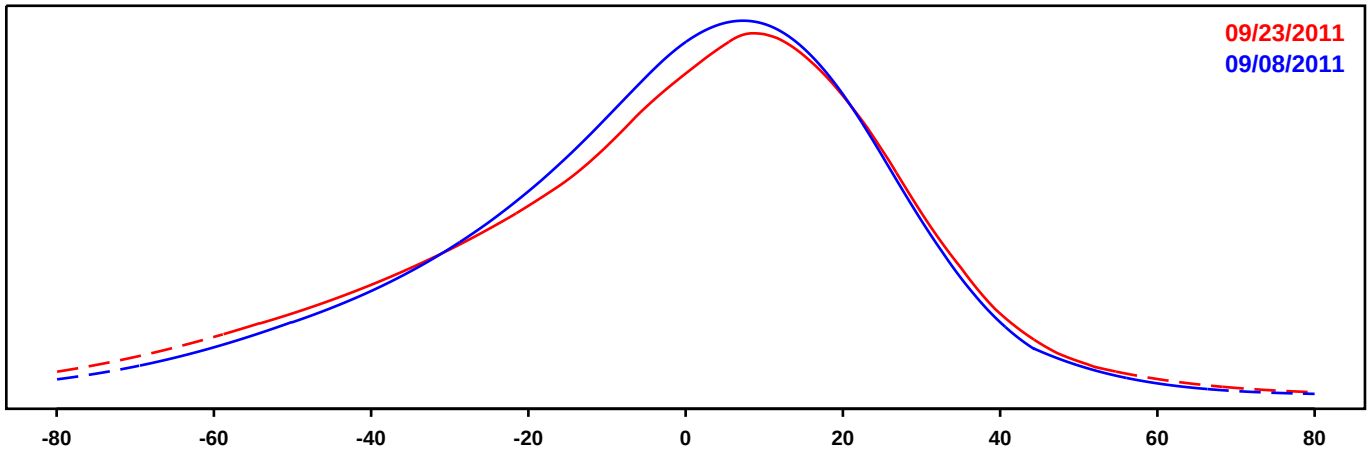
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- CRUDE OIL FUTURES

Log returns are based on the risk neutral density function of the front month futures contract derived from options that expire in approximately 6 months.

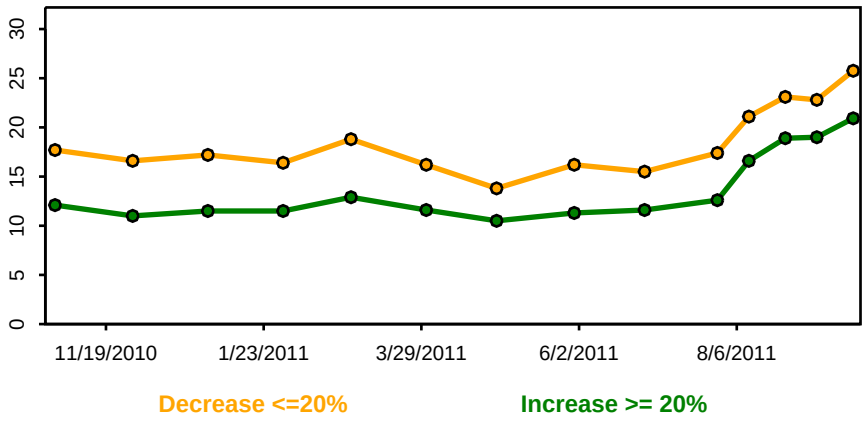
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



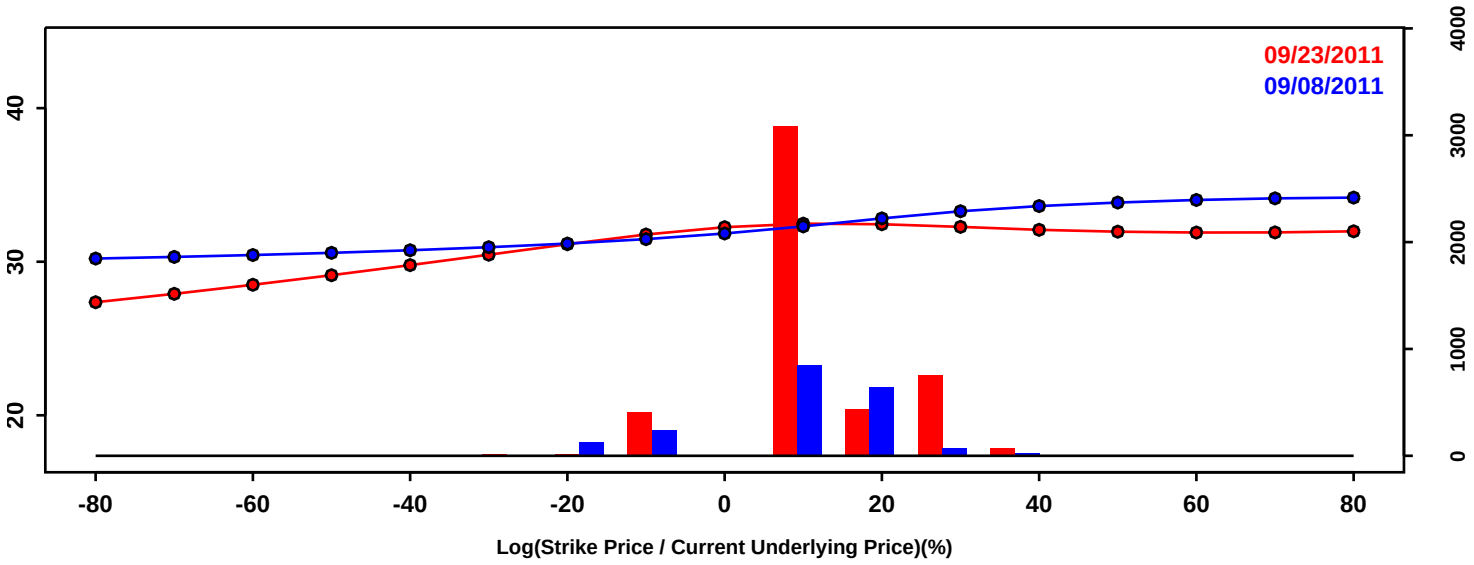
Statistics of the Log Return Distributions

	09/08/2011	09/23/2011	Change
10th Pct	-40.44%	-45.59%	-5.15%
50th Pct	0.89%	1.14%	0.25%
90th Pct	28.52%	30.01%	1.49%
Mean	-2.7%	-3.5%	-0.84%
Std Dev	27.5%	30.2%	2.7%
Skew	-0.61	-0.65	-0.04
Kurtosis	0.60	0.61	0.01

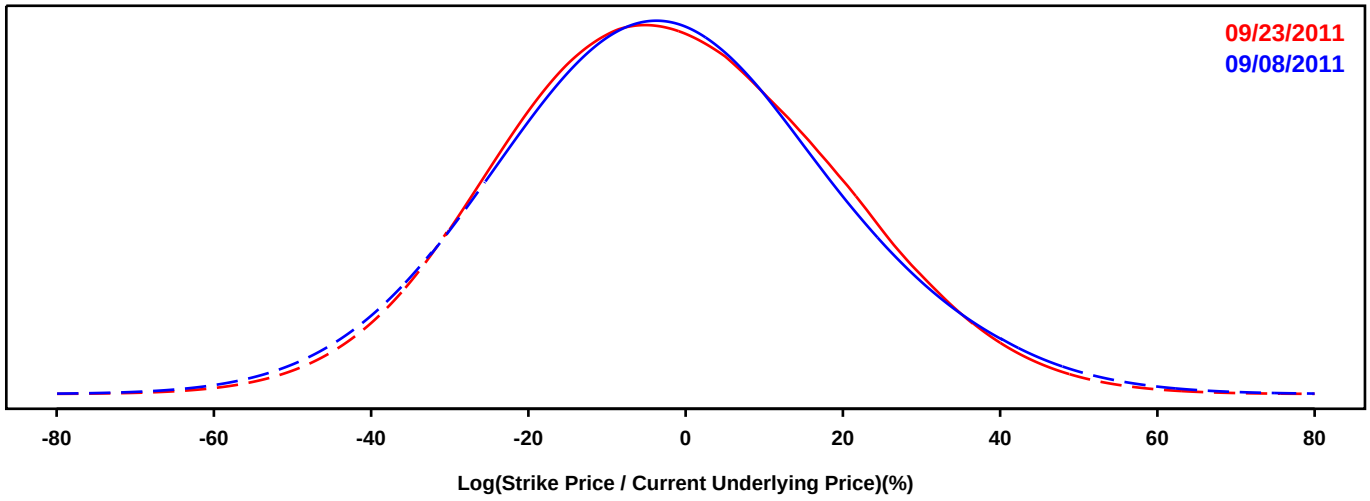
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- WHEAT FUTURES

Log returns are based on the risk neutral density function of the front month futures contract derived from options that expire in approximately 6 months.

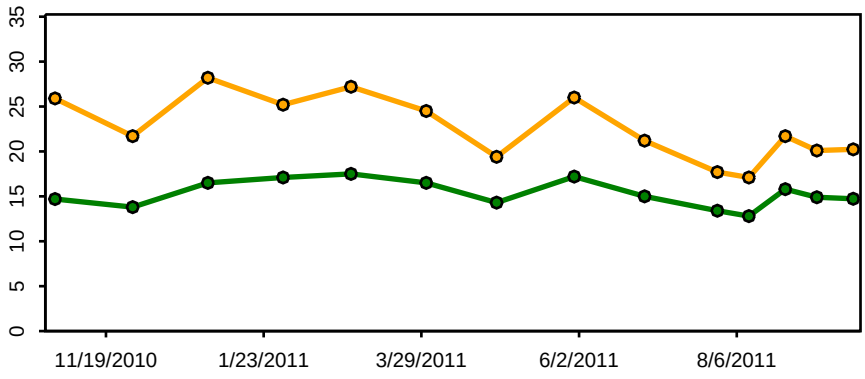
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



Decrease <=20% Increase >= 20%

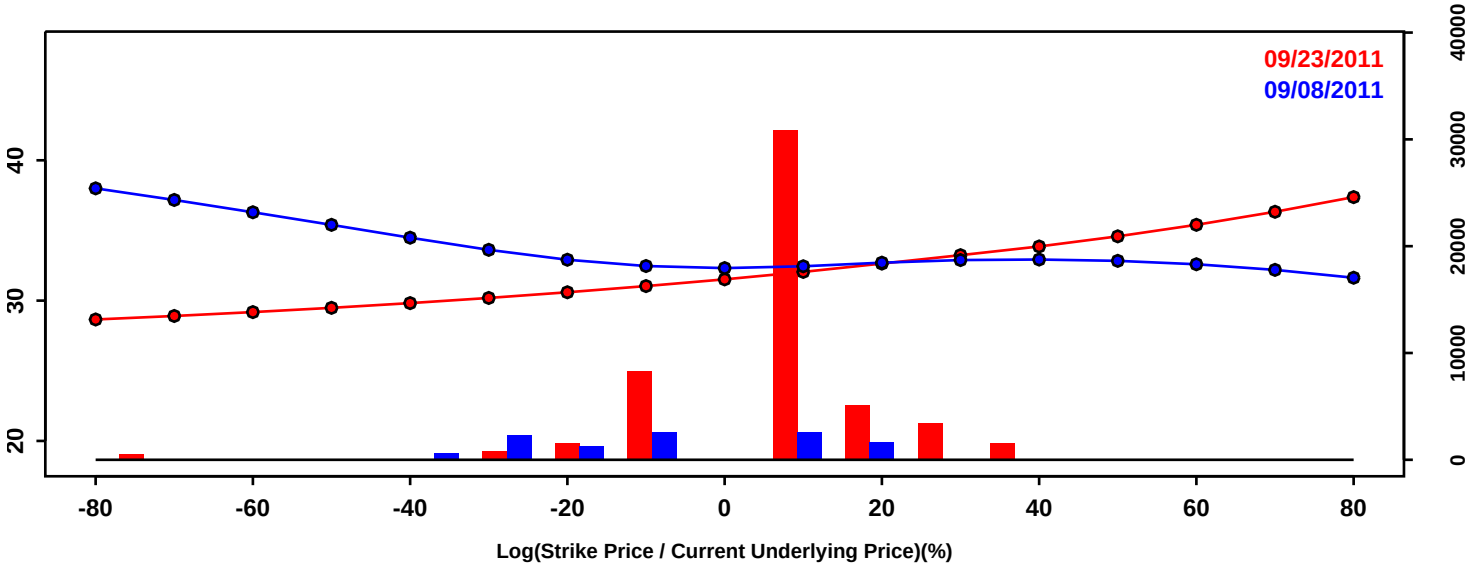
Statistics of the Log Return Distributions

	09/08/2011	09/23/2011	Change
10th Pct	-29.72%	-28.65%	1.07%
50th Pct	-3.00%	-2.85%	0.15%
90th Pct	25.39%	24.96%	-0.43%
Mean	-2.5%	-2.3%	0.21%
Std Dev	21.6%	20.8%	-0.7%
Skew	0.11	0.10	-0.02
Kurtosis	0.08	-0.11	-0.19

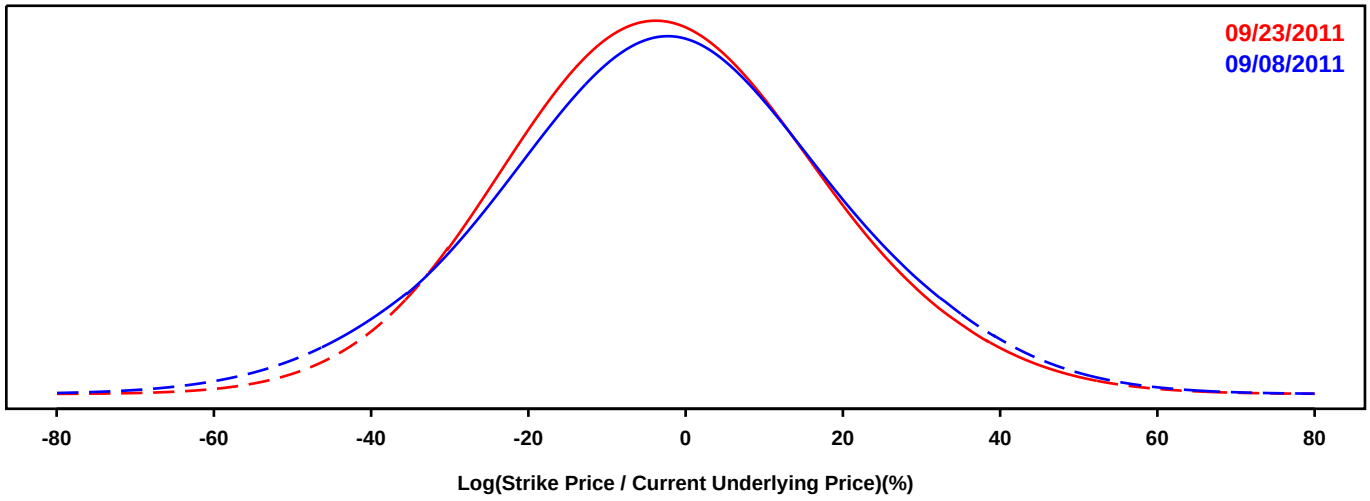
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- CORN FUTURES

Log returns are based on the risk neutral density function of the front month futures contract derived from options that expire in approximately 6 months.

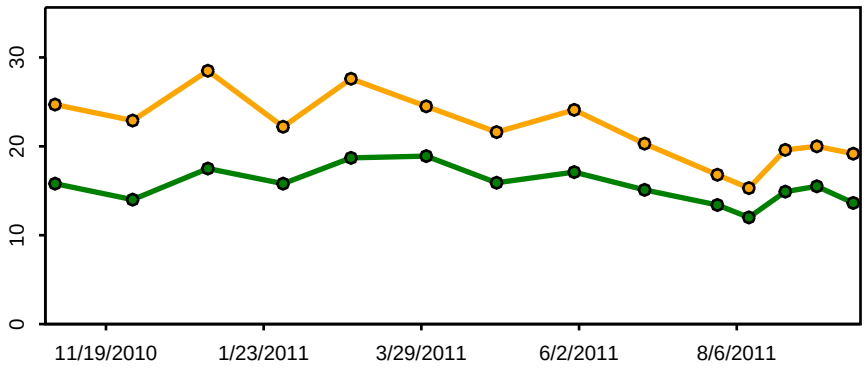
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



Decrease <=20% Increase >= 20%

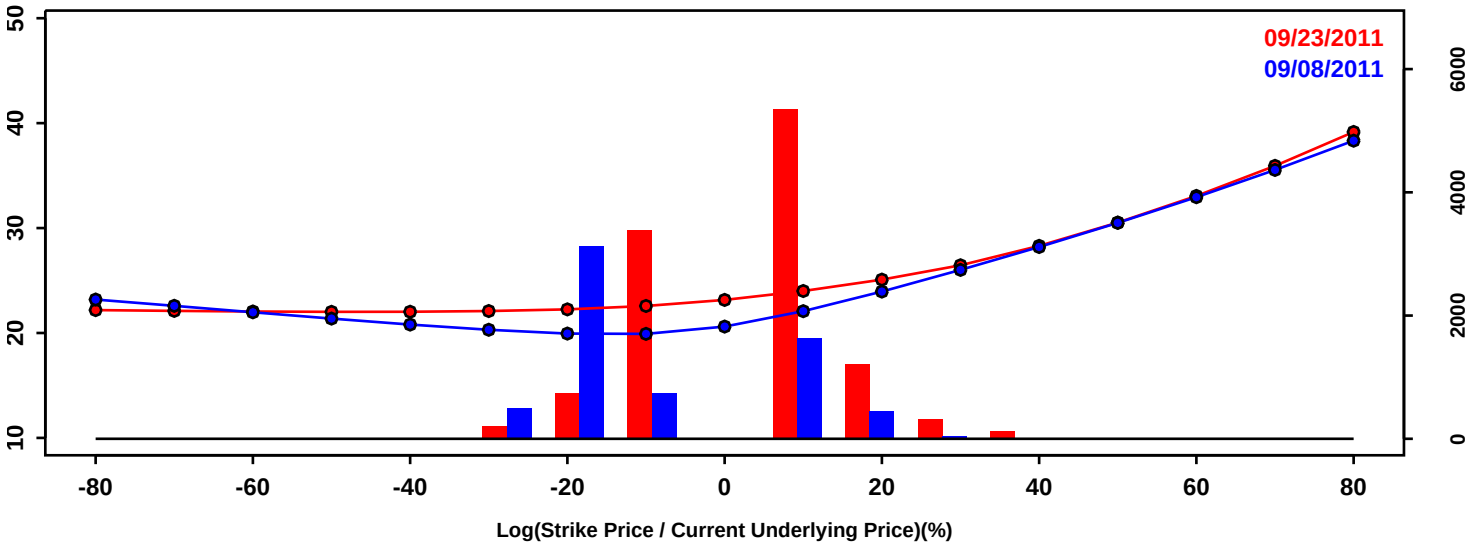
Statistics of the Log Return Distributions

	09/08/2011	09/23/2011	Change
10th Pct	-30.19%	-27.92%	2.27%
50th Pct	-2.23%	-2.79%	-0.56%
90th Pct	25.81%	24.06%	-1.75%
Mean	-2.2%	-2.3%	-0.04%
Std Dev	22.0%	20.3%	-1.7%
Skew	-0.03	0.14	0.16
Kurtosis	0.17	0.08	-0.09

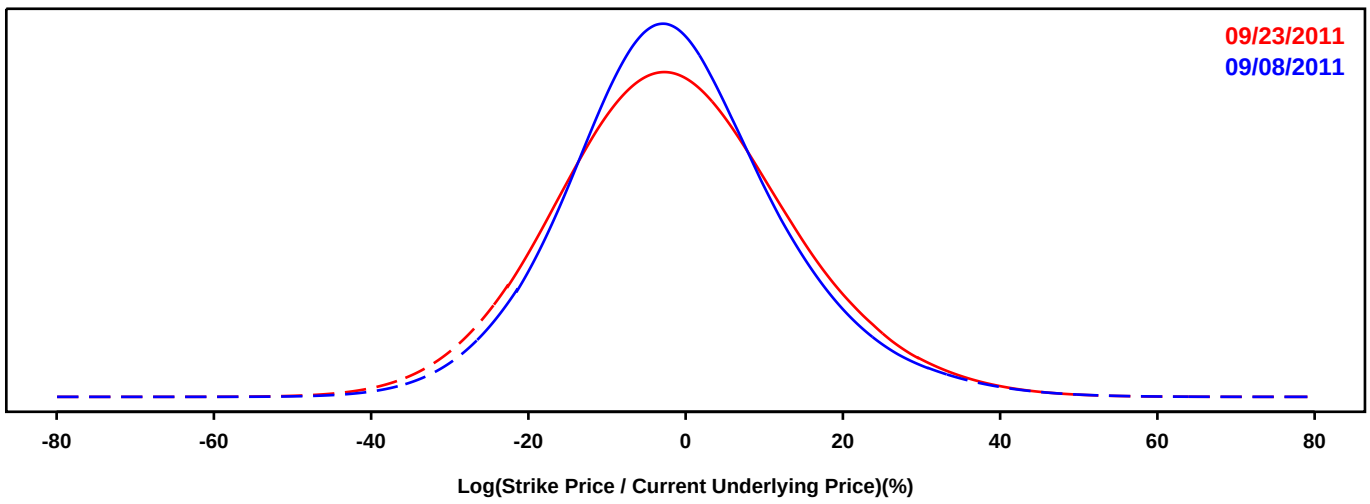
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- SOYBEAN FUTURES

Log returns are based on the risk neutral density function of the front month futures contract derived from options that expire in approximately 6 months.

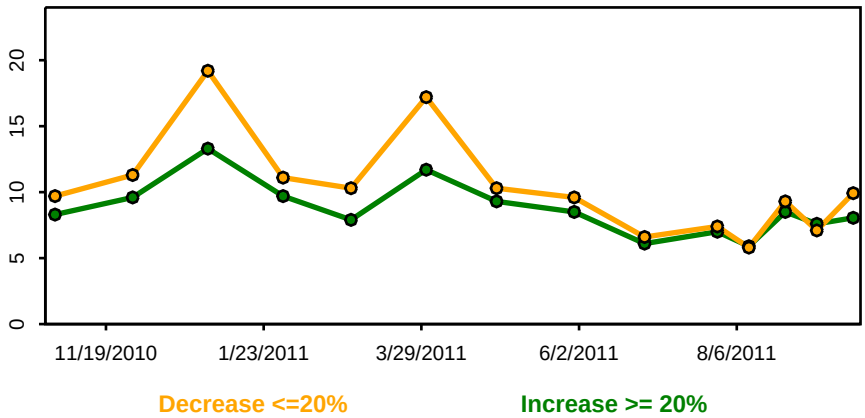
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



Statistics of the Log Return Distributions

	09/08/2011	09/23/2011	Change
10th Pct	-18.16%	-19.92%	-1.75%
50th Pct	-1.92%	-1.82%	0.10%
90th Pct	16.51%	17.98%	1.47%
Mean	-1.2%	-1.3%	-0.06%
Std Dev	13.9%	14.9%	1.0%
Skew	0.32	0.20	-0.12
Kurtosis	0.60	0.22	-0.37