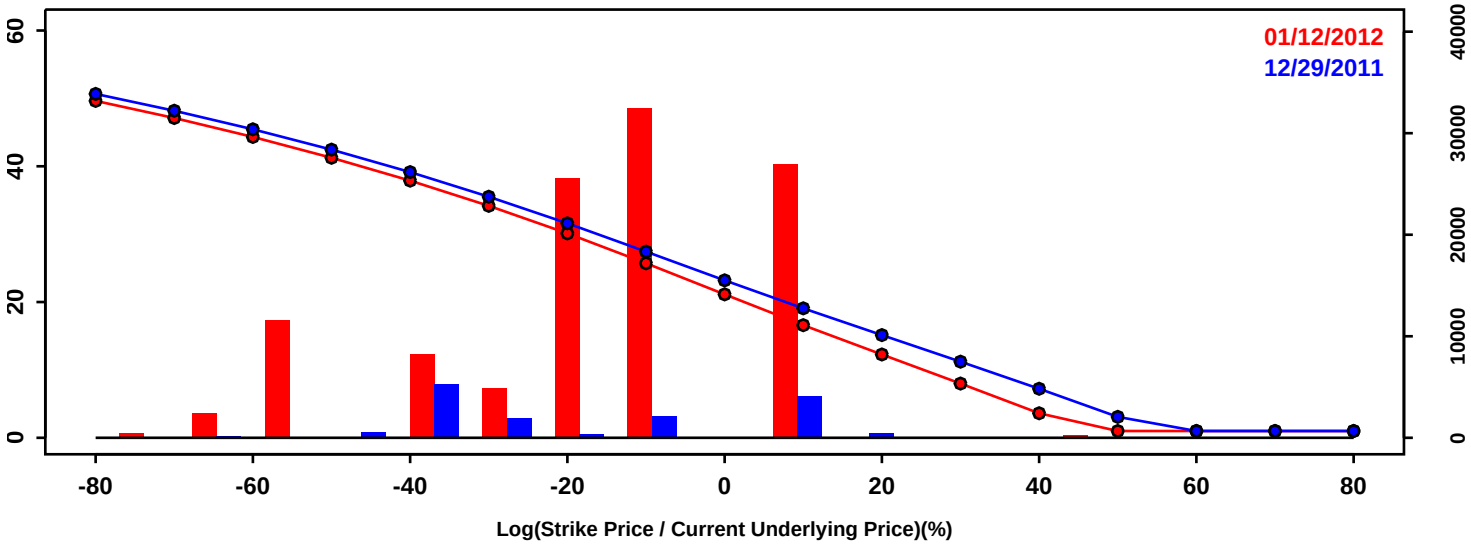
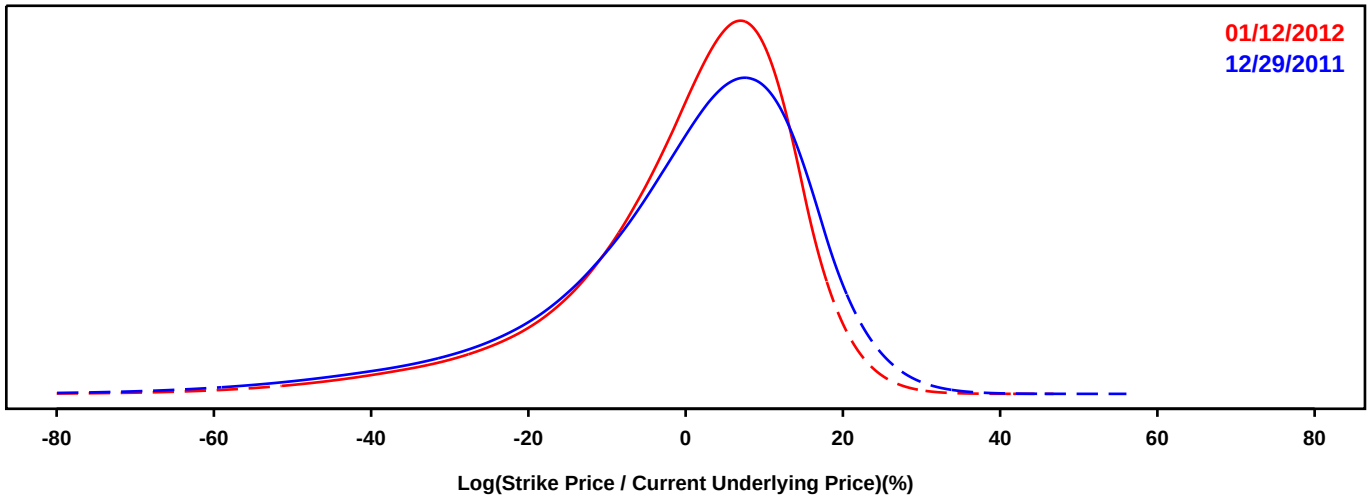
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- S&P 500

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

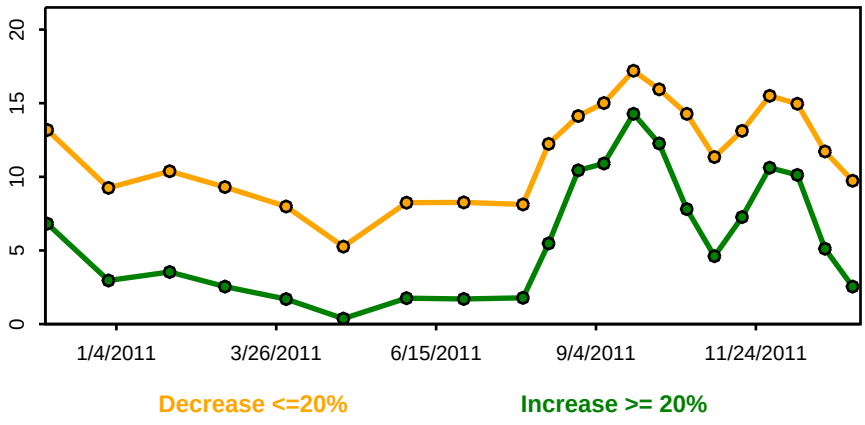
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



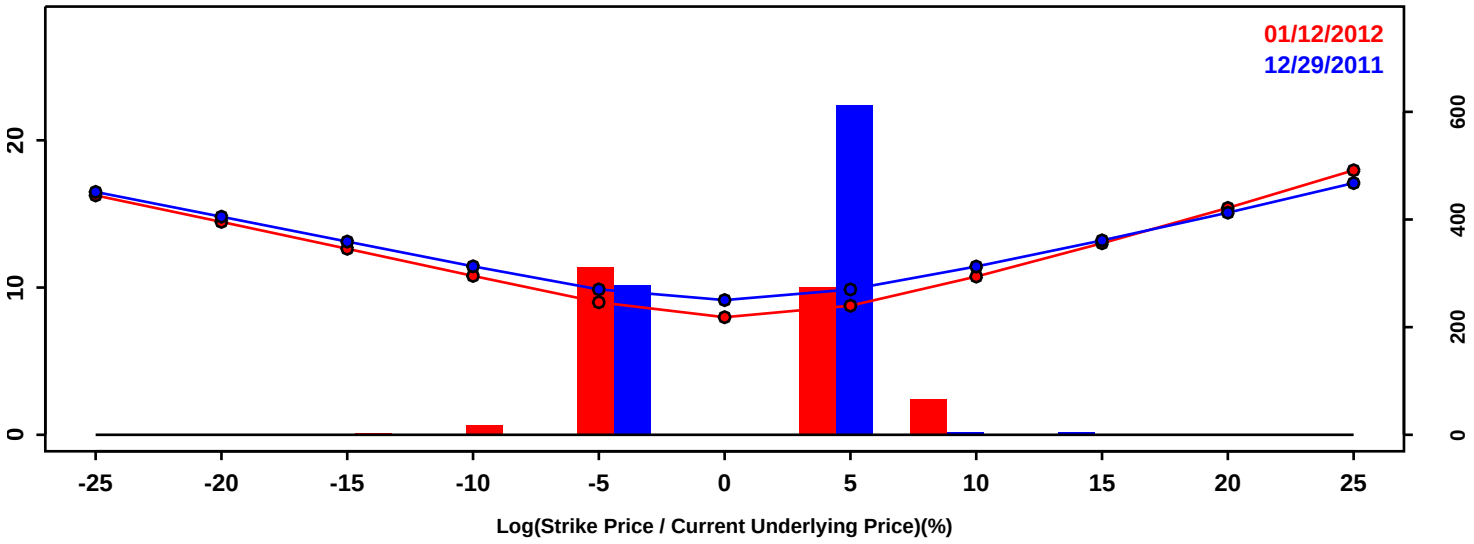
Statistics of the Log Return Distributions

	12/29/2011	01/12/2012	Change
10th Pct	-22.55%	-19.61%	2.94%
50th Pct	2.83%	2.76%	-0.07%
90th Pct	16.70%	14.55%	-2.15%
Mean	-0.51%	-0.31%	0.20%
Std Dev	16.71%	14.64%	-2.06%
Skew	-1.26	-1.32	-0.07
Kurtosis	2.30	2.53	0.23

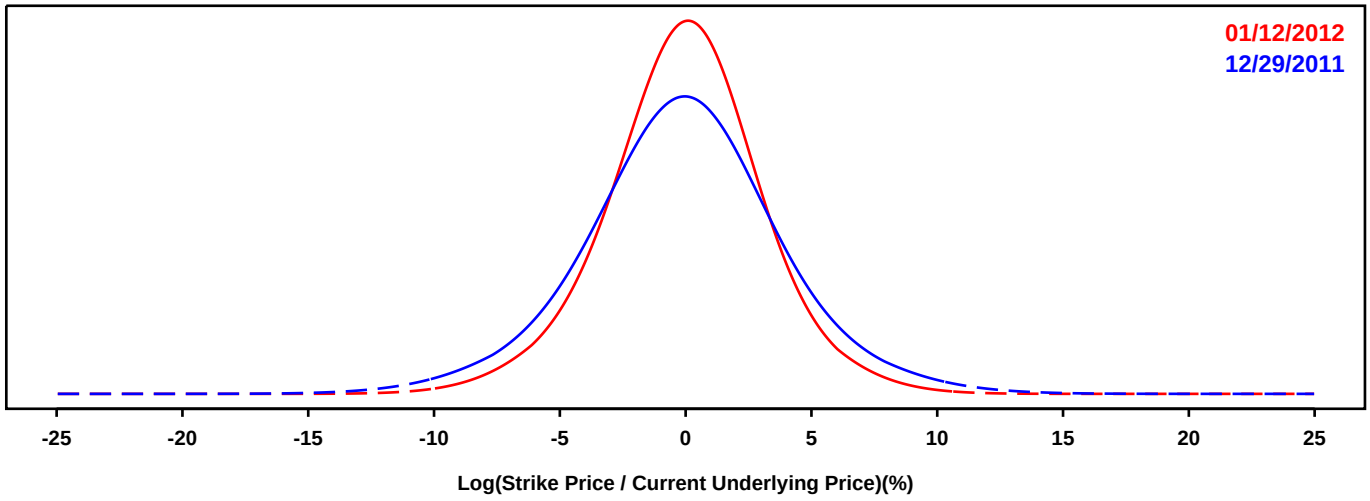
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- YEN-DOLLAR EXCHANGE RATE FUTURES

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

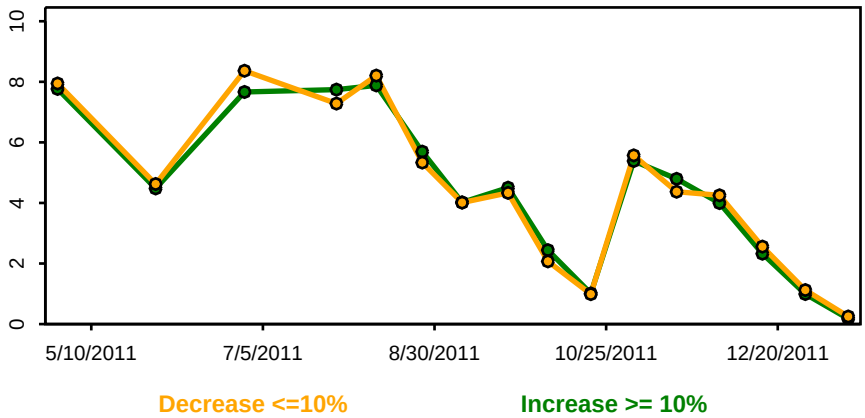
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



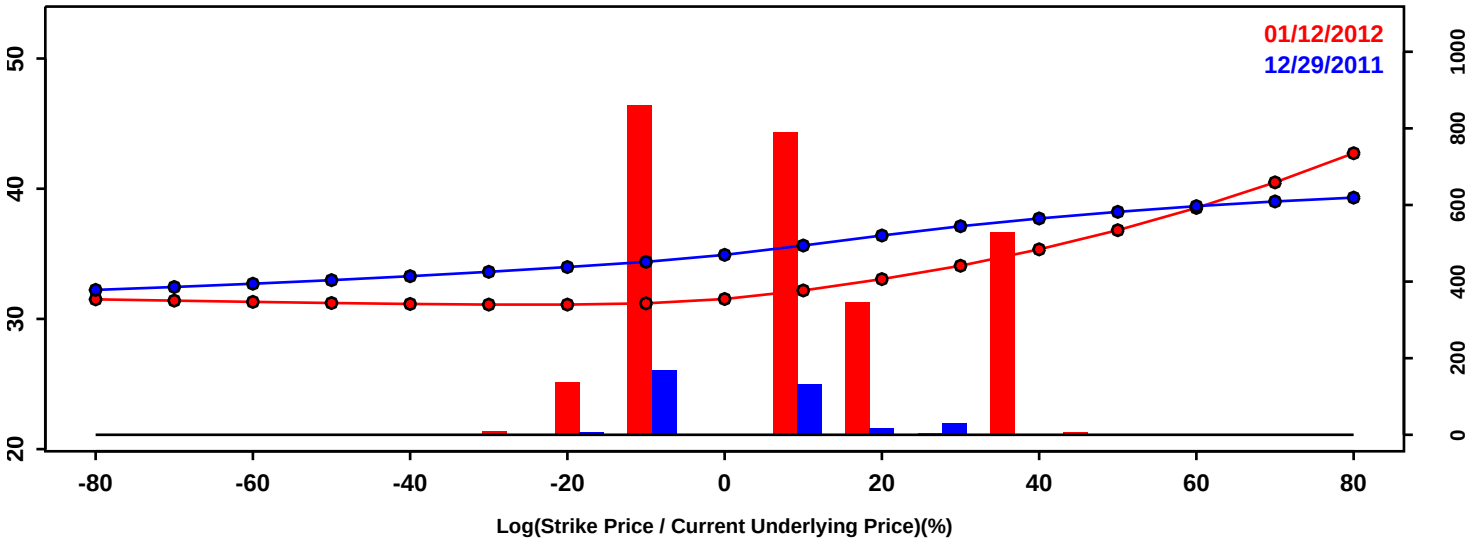
Statistics of the Log Return Distributions

	12/29/2011	01/12/2012	Change
10th Pct	-5.03%	-3.98%	1.05%
50th Pct	-0.06%	-0.01%	0.05%
90th Pct	4.83%	3.82%	-1.01%
Mean	-0.07%	-0.02%	0.05%
Std Dev	4.02%	3.17%	-0.85%
Skew	-0.01	-0.08	-0.06
Kurtosis	0.67	0.62	-0.05

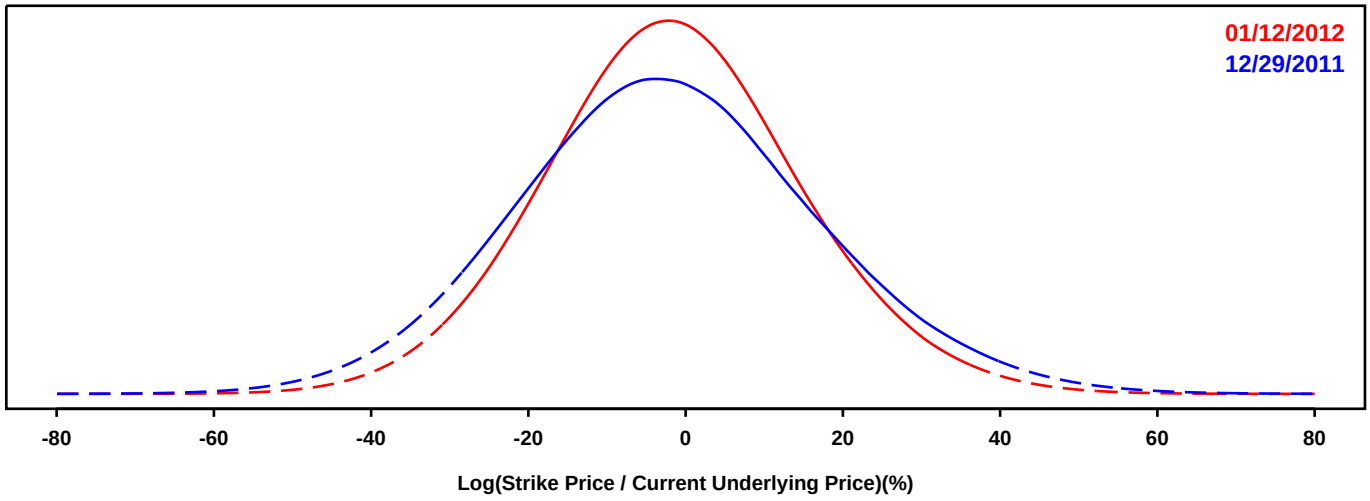
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- WHEAT FUTURES

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

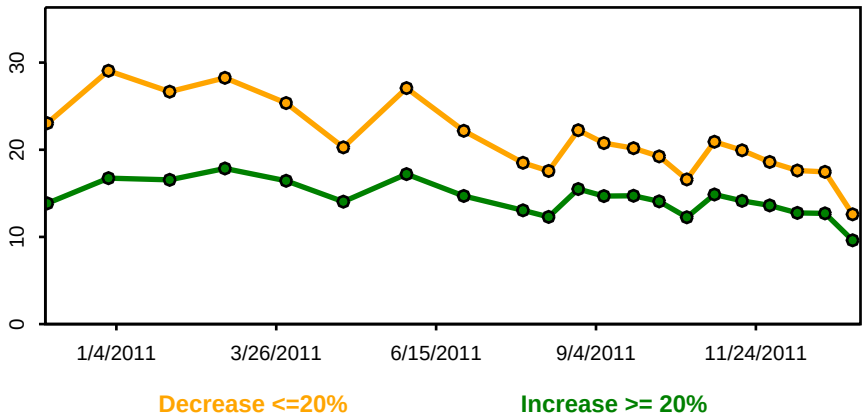
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



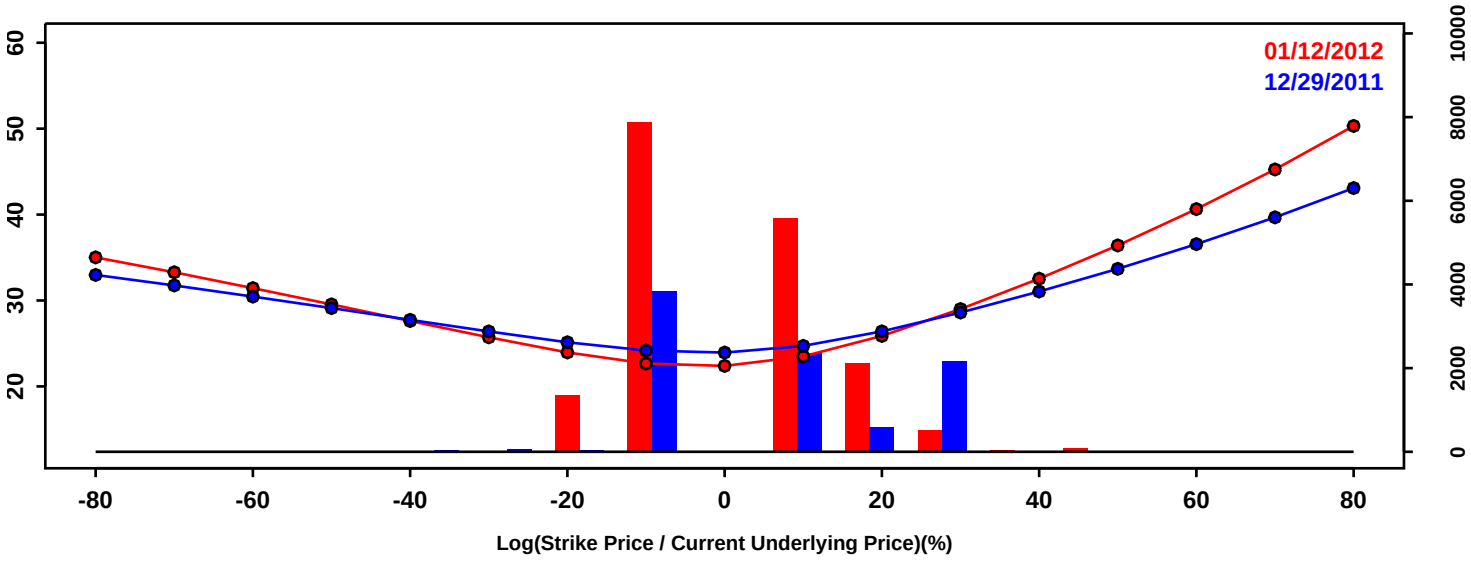
Statistics of the Log Return Distributions

	12/29/2011	01/12/2012	Change
10th Pct	-26.34%	-22.14%	4.21%
50th Pct	-2.59%	-1.77%	0.82%
90th Pct	22.95%	19.60%	-3.36%
Mean	-2.06%	-1.45%	0.60%
Std Dev	19.32%	16.40%	-2.91%
Skew	0.14	0.10	-0.04
Kurtosis	0.11	0.15	0.04

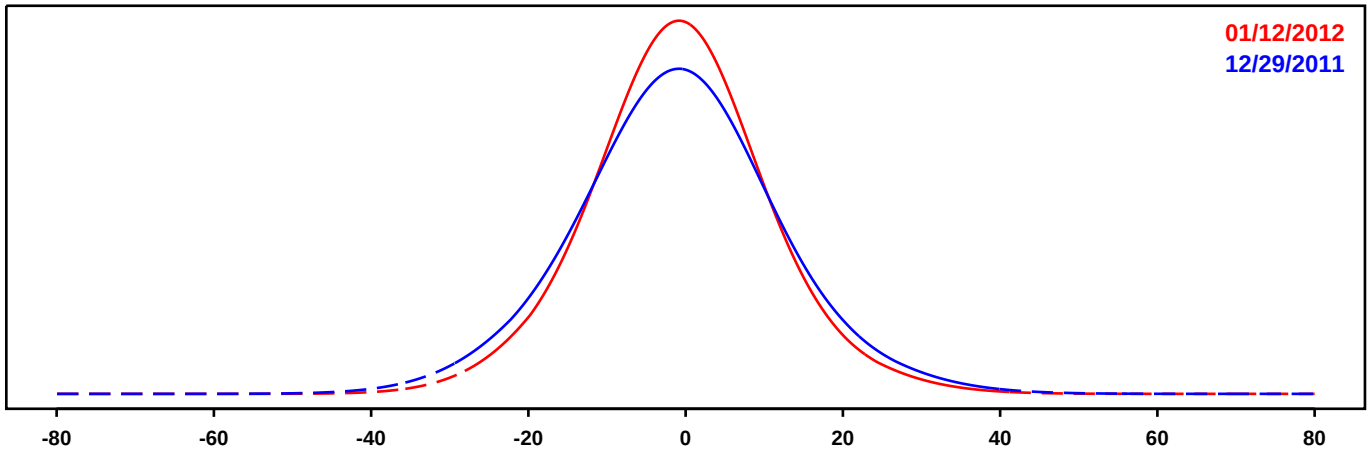
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- SOYBEAN FUTURES

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

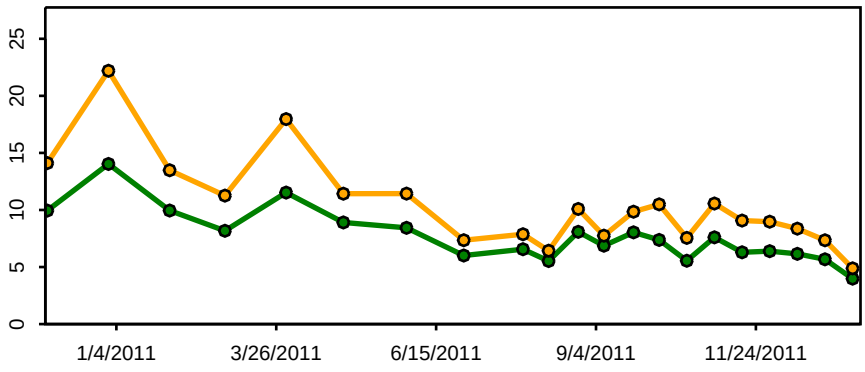
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



Decrease <=20% Increase >= 20%

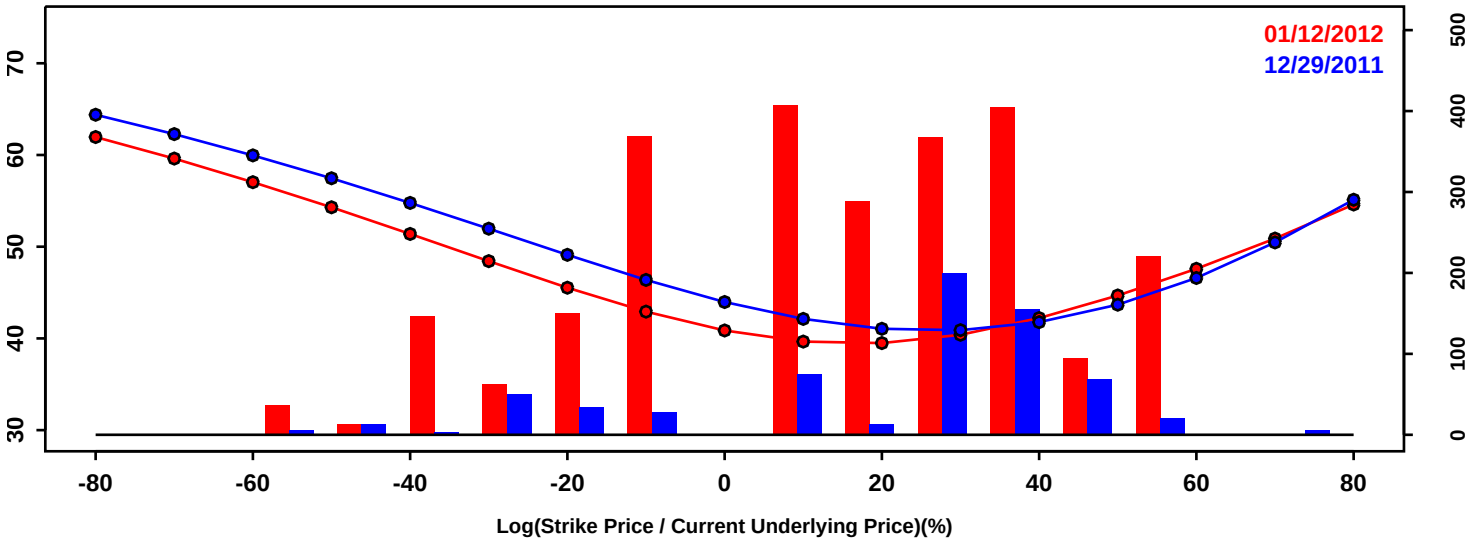
Statistics of the Log Return Distributions

	12/29/2011	01/12/2012	Change
10th Pct	-17.56%	-15.21%	2.36%
50th Pct	-0.96%	-0.86%	0.10%
90th Pct	15.53%	13.63%	-1.90%
Mean	-0.93%	-0.74%	0.18%
Std Dev	13.24%	11.61%	-1.63%
Skew	0.05	0.08	0.03
Kurtosis	0.44	0.54	0.10

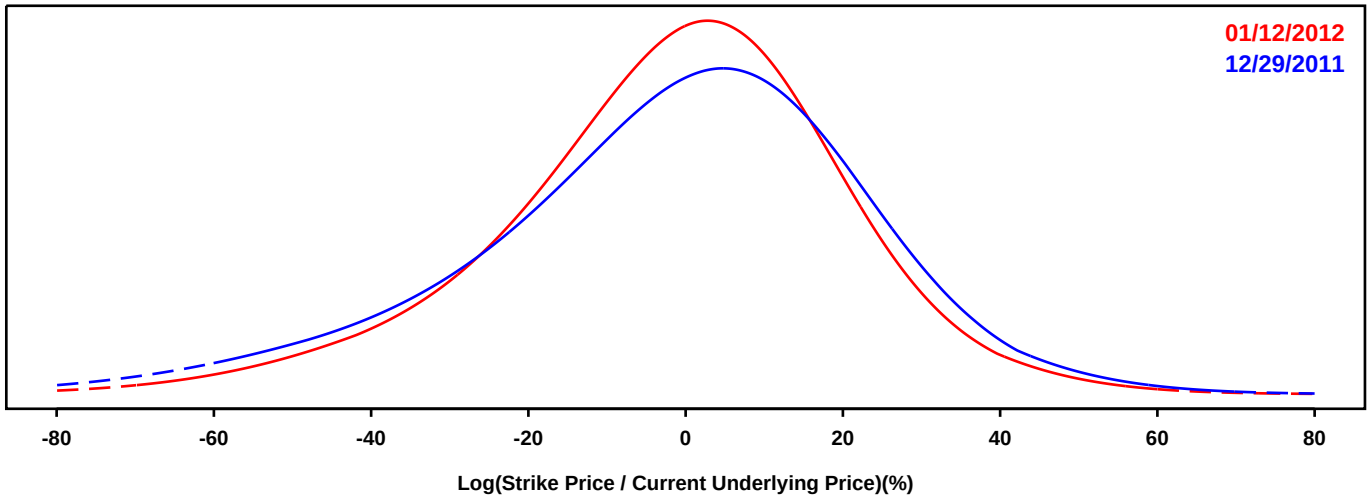
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- SILVER FUTURES

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

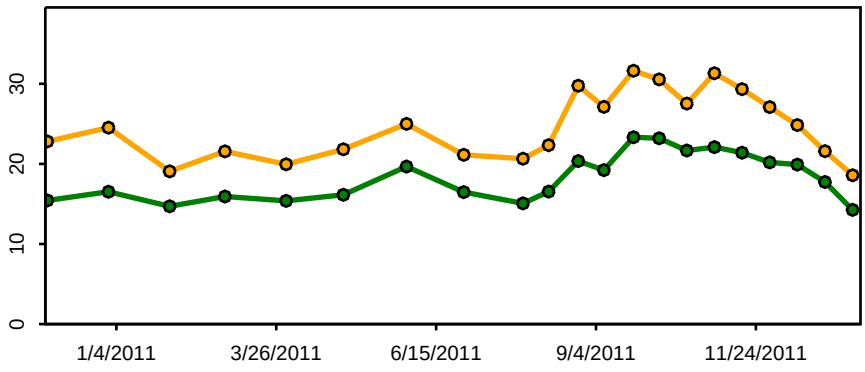
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



Decrease <=20% Increase >= 20%

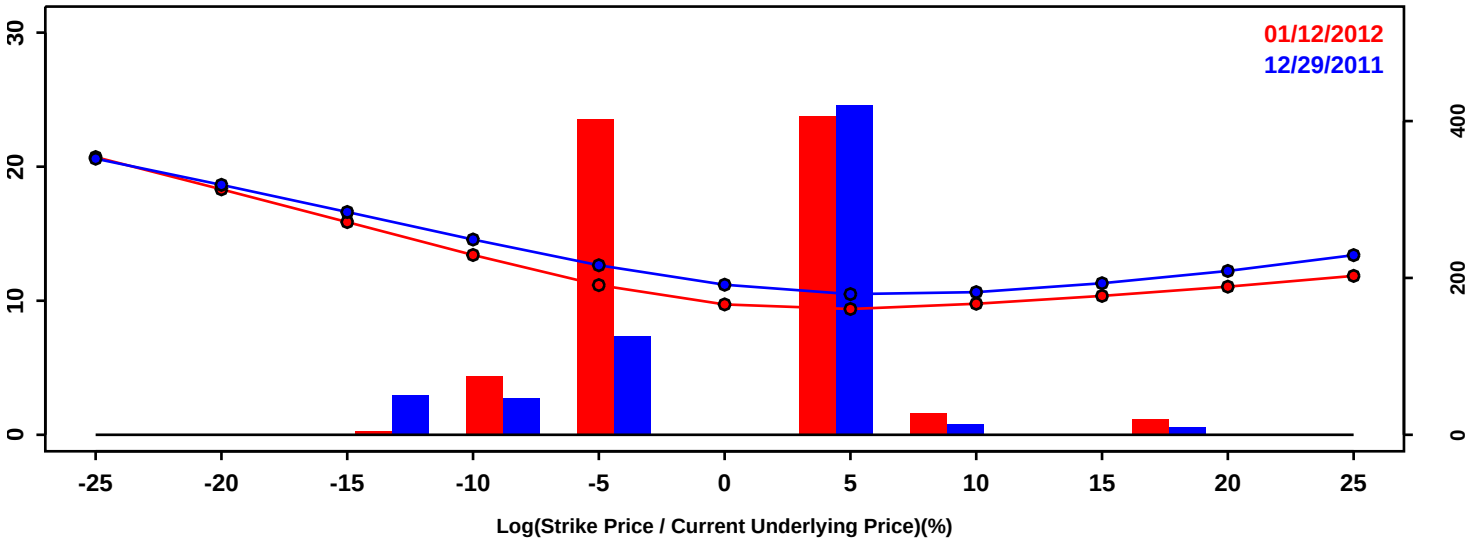
Statistics of the Log Return Distributions

	12/29/2011	01/12/2012	Change
10th Pct	-36.18%	-30.60%	5.59%
50th Pct	0.39%	-0.11%	-0.50%
90th Pct	27.31%	24.10%	-3.21%
Mean	-2.21%	-1.81%	0.40%
Std Dev	25.56%	22.14%	-3.42%
Skew	-0.55	-0.43	0.13
Kurtosis	0.72	0.72	0.00

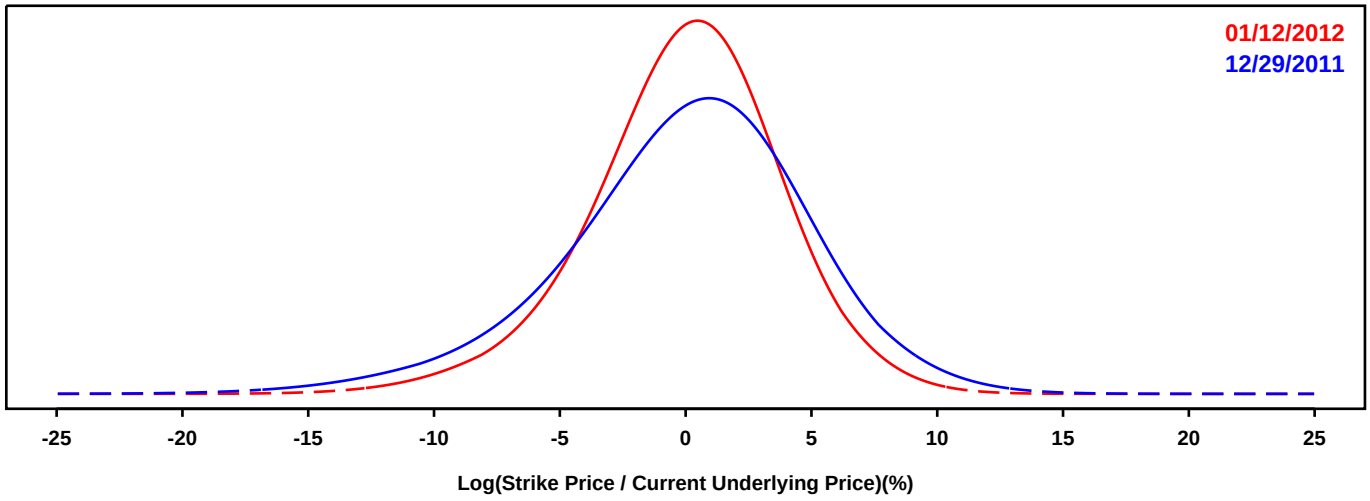
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- DOLLAR-POUND EXCHANGE RATE FUTURES

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

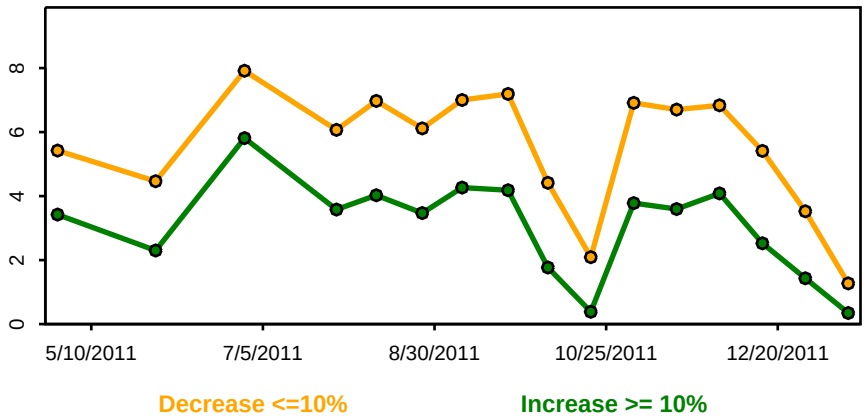
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



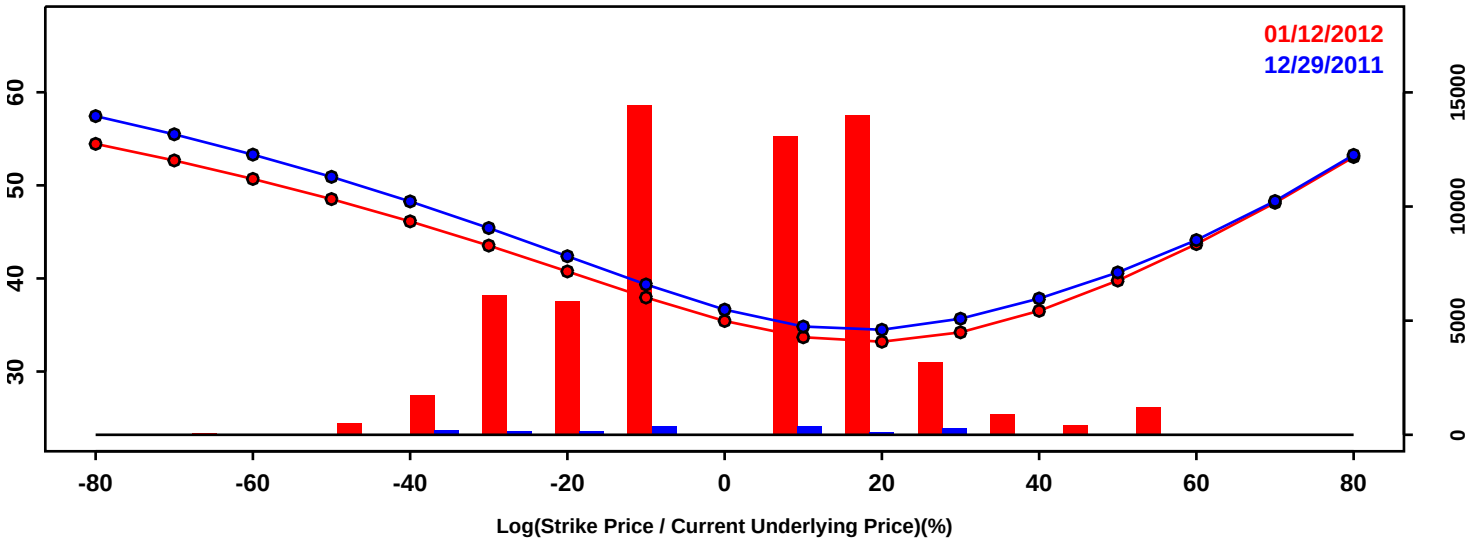
Statistics of the Log Return Distributions

	12/29/2011	01/12/2012	Change
10th Pct	-6.41%	-4.93%	1.48%
50th Pct	0.34%	0.19%	-0.15%
90th Pct	5.87%	4.68%	-1.19%
Mean	0.01%	0.01%	-0.01%
Std Dev	4.96%	3.87%	-1.08%
Skew	-0.46	-0.34	0.12
Kurtosis	0.72	0.62	-0.10

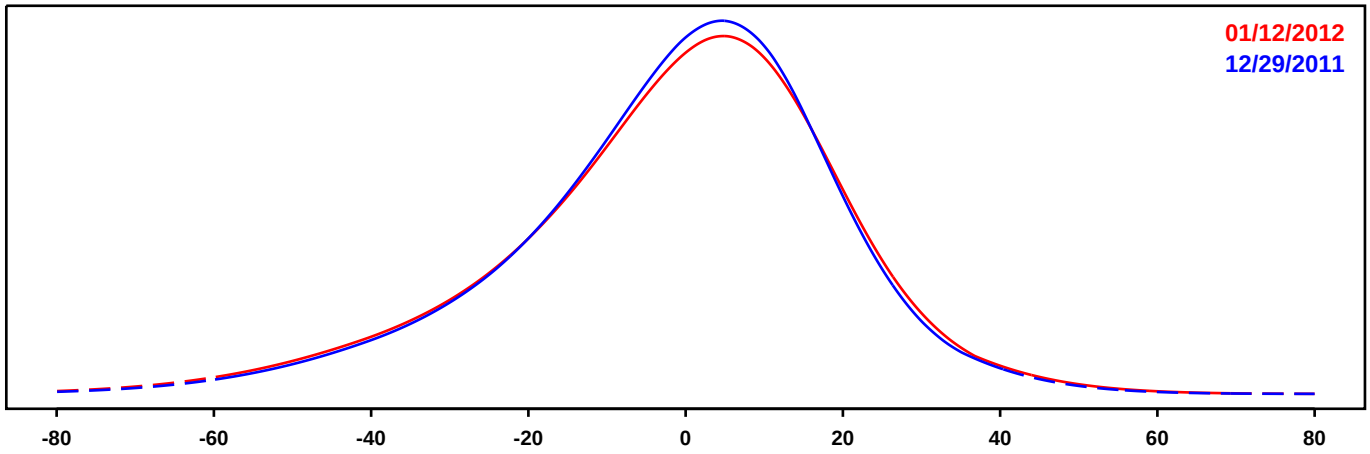
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- CRUDE OIL FUTURES

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

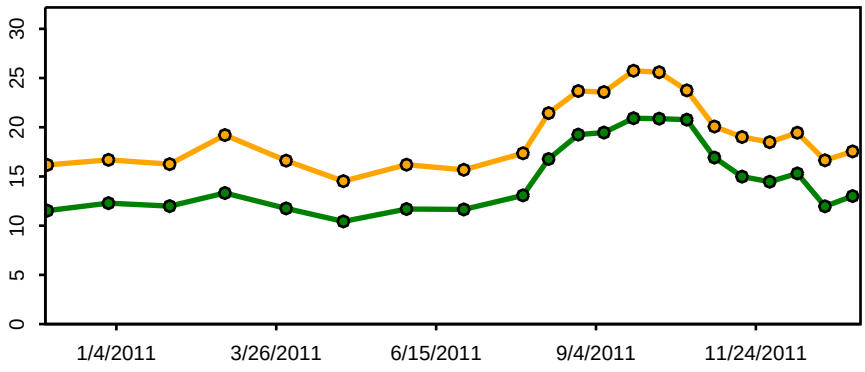
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



Decrease <=20% Increase >= 20%

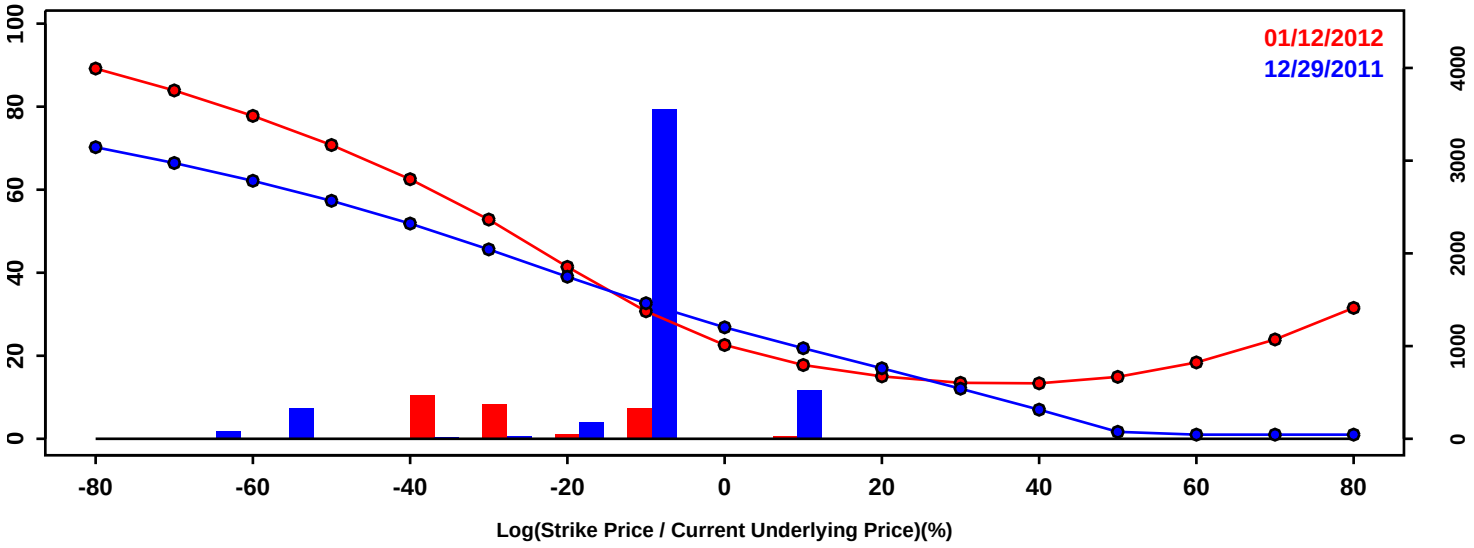
Statistics of the Log Return Distributions

	12/29/2011	01/12/2012	Change
10th Pct	-28.58%	-29.92%	-1.34%
50th Pct	0.79%	0.84%	0.05%
90th Pct	21.75%	22.63%	0.88%
Mean	-1.44%	-1.54%	-0.10%
Std Dev	20.46%	21.34%	0.87%
Skew	-0.57	-0.58	-0.00
Kurtosis	0.87	0.84	-0.03

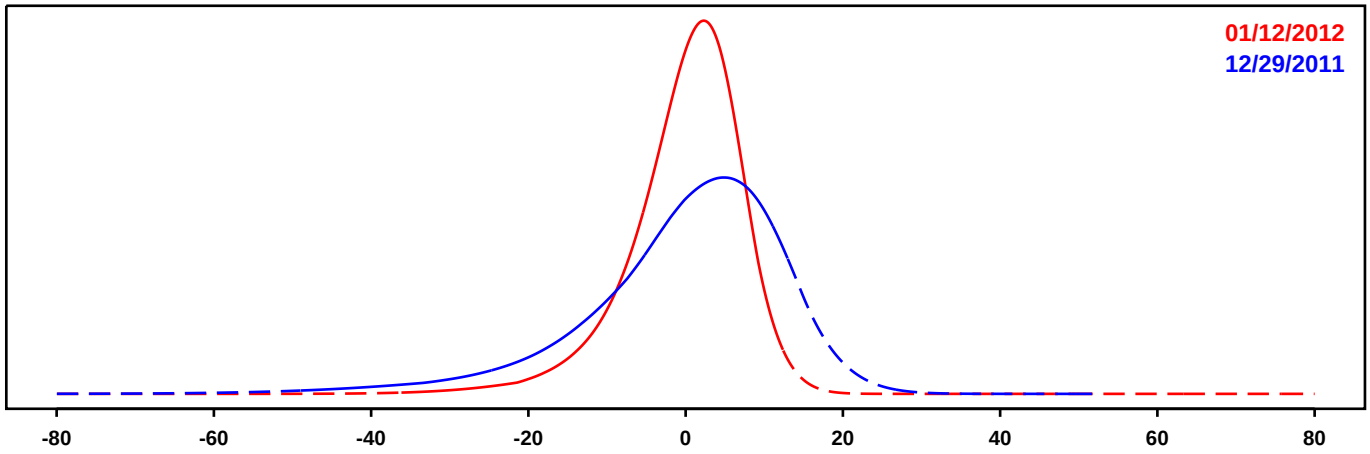
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- iSHARES DOW JONES US REAL ESTATE INDEX

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

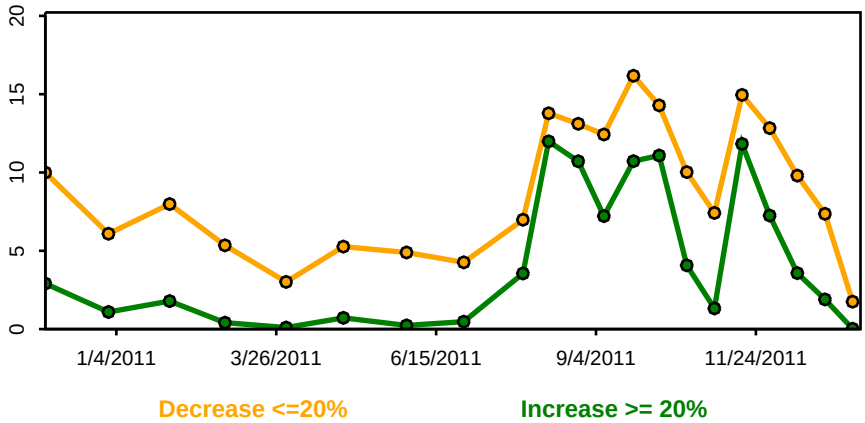
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



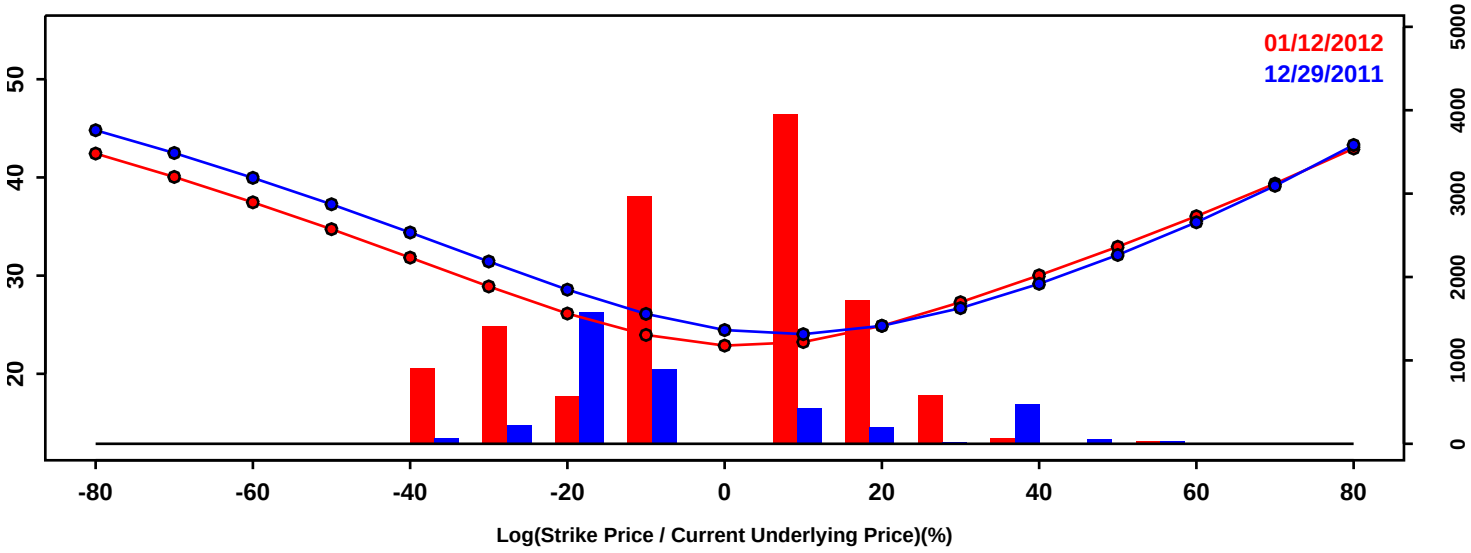
Statistics of the Log Return Distributions

	12/29/2011	01/12/2012	Change
10th Pct	-16.56%	-9.27%	7.29%
50th Pct	1.83%	0.89%	-0.94%
90th Pct	13.56%	7.92%	-5.64%
Mean	-0.23%	-0.08%	0.15%
Std Dev	12.90%	7.32%	-5.58%
Skew	-1.19	-1.07	0.12
Kurtosis	2.57	2.56	-0.01

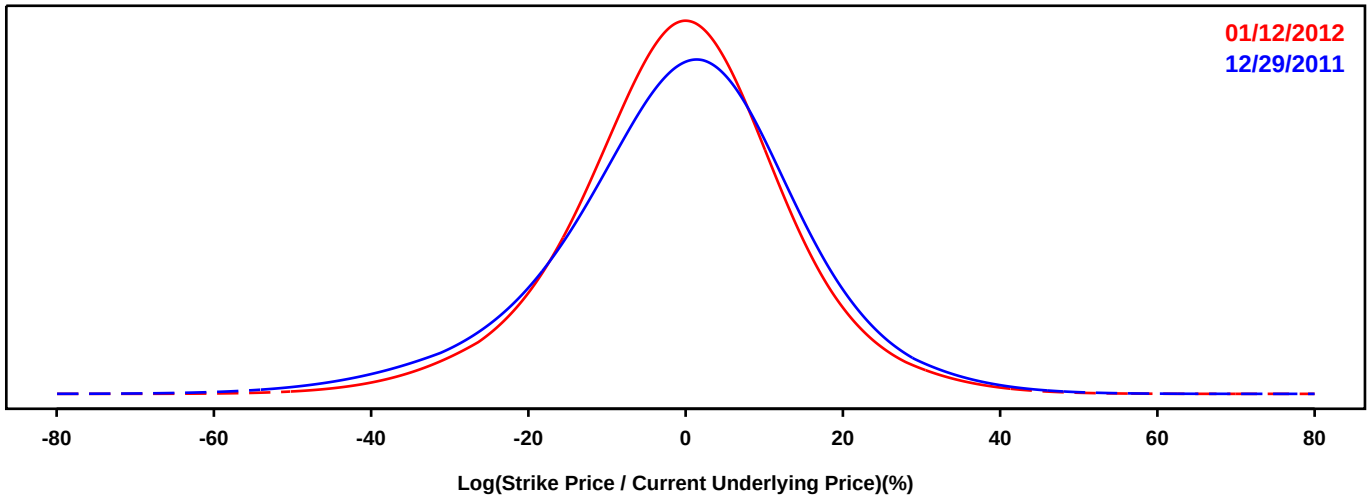
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- GOLD FUTURES

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

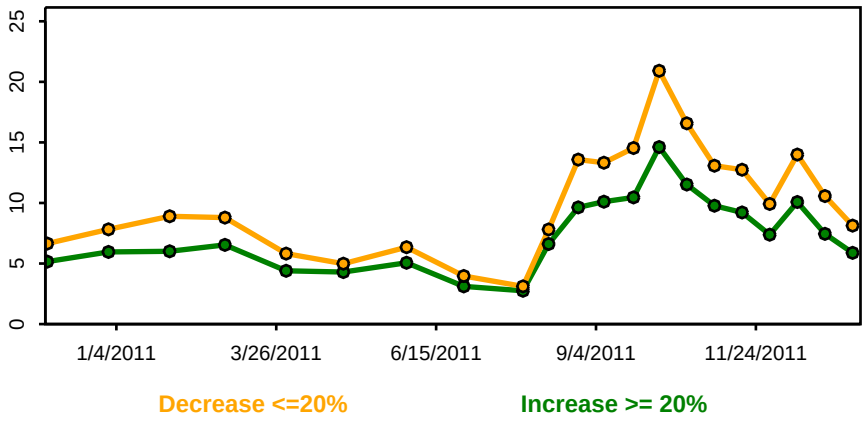
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



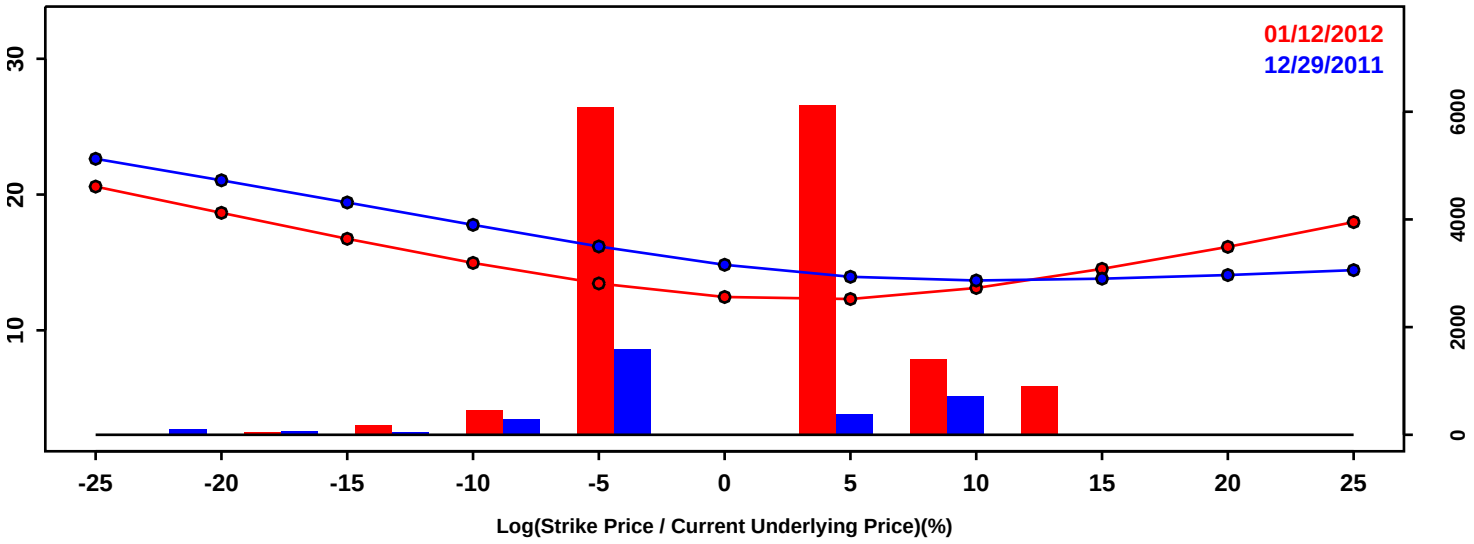
Statistics of the Log Return Distributions

	12/29/2011	01/12/2012	Change
10th Pct	-20.59%	-18.04%	2.55%
50th Pct	0.04%	-0.51%	-0.55%
90th Pct	17.56%	15.78%	-1.78%
Mean	-0.84%	-0.83%	0.01%
Std Dev	15.62%	13.83%	-1.78%
Skew	-0.35	-0.14	0.21
Kurtosis	0.86	0.77	-0.09

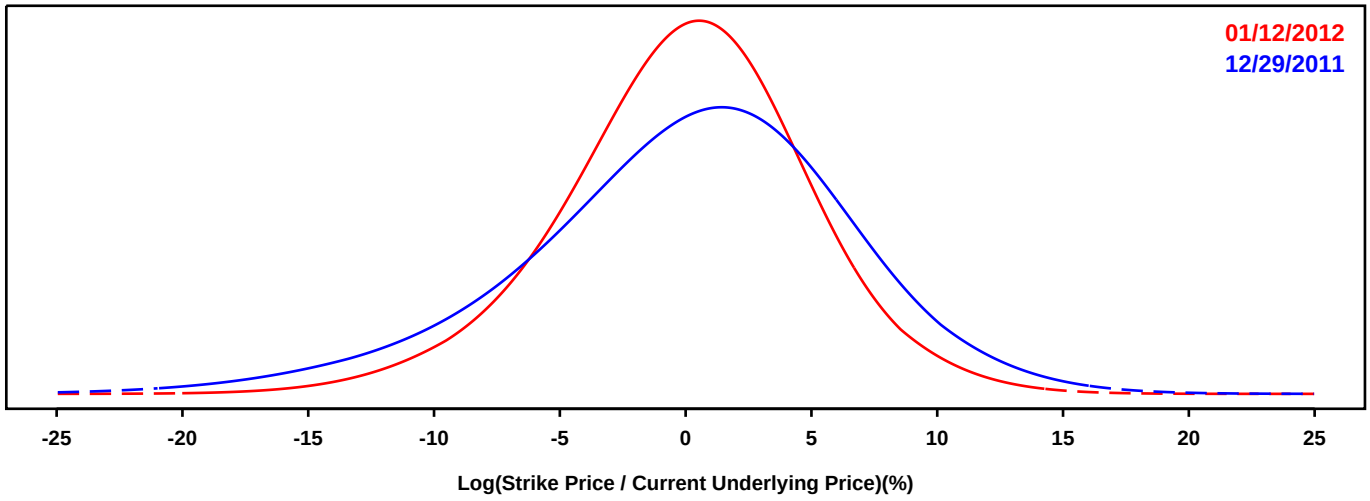
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- DOLLAR-EURO EXCHANGE RATE FUTURES

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

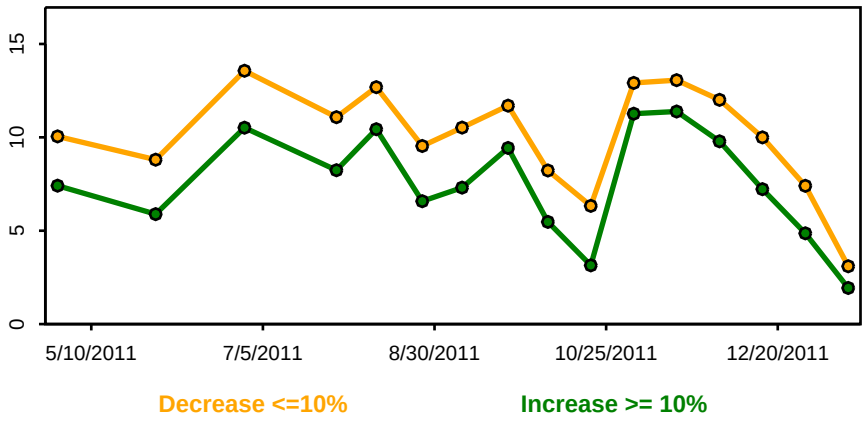
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



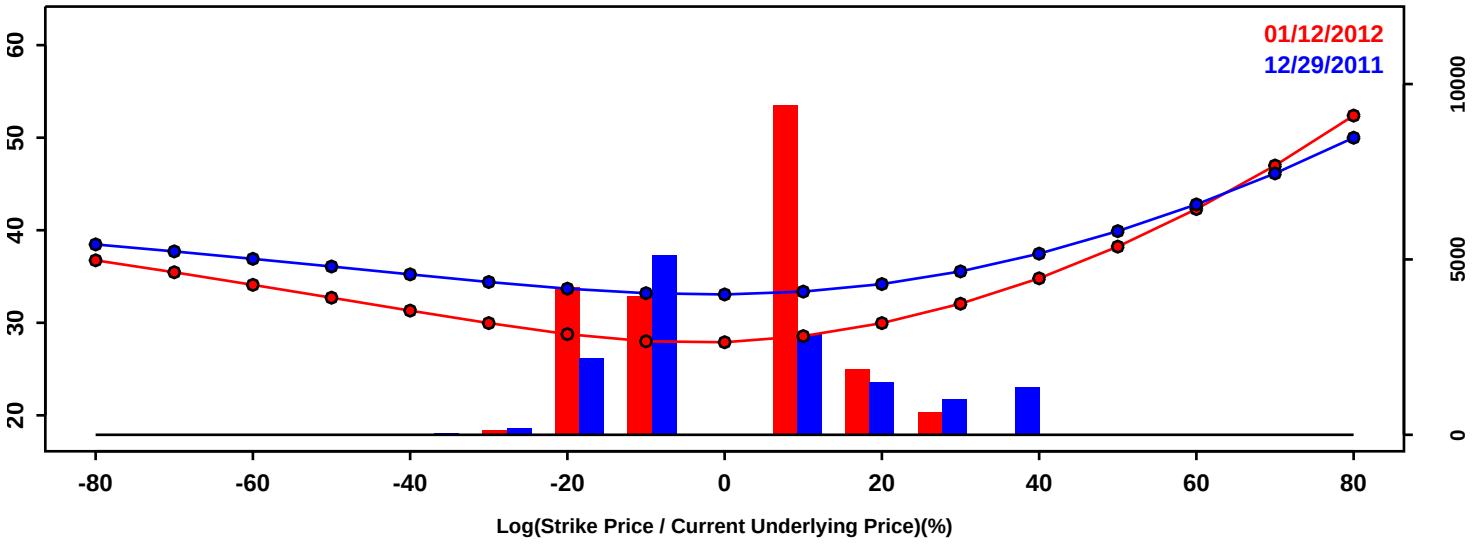
Statistics of the Log Return Distributions

	12/29/2011	01/12/2012	Change
10th Pct	-8.56%	-6.41%	2.16%
50th Pct	0.54%	0.14%	-0.40%
90th Pct	7.79%	5.96%	-1.82%
Mean	0.03%	-0.02%	-0.05%
Std Dev	6.57%	4.95%	-1.62%
Skew	-0.45	-0.22	0.23
Kurtosis	0.60	0.46	-0.13

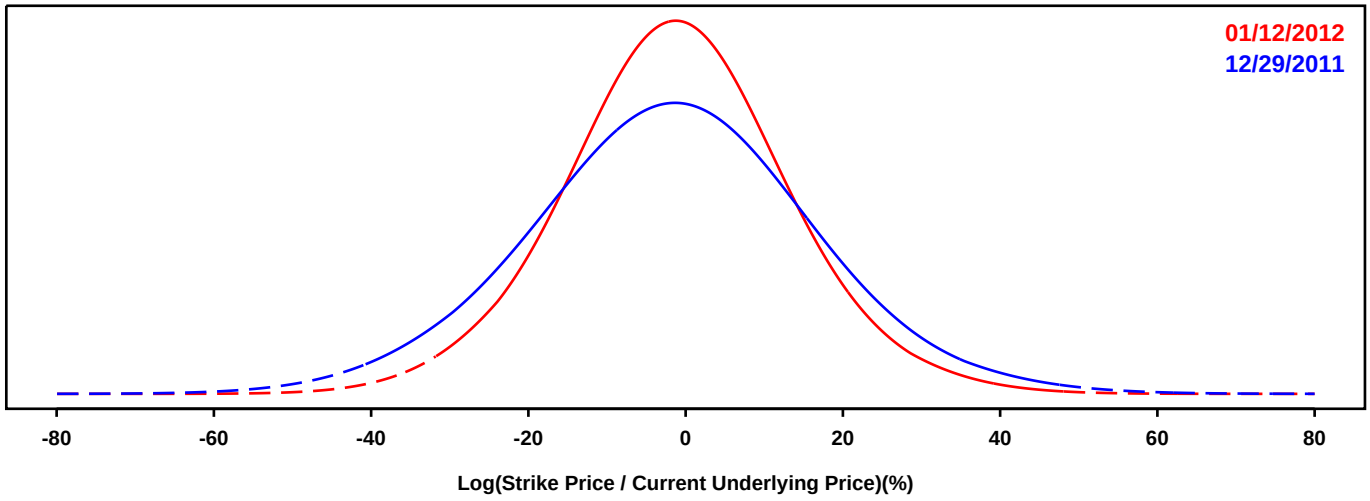
RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- CORN FUTURES

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

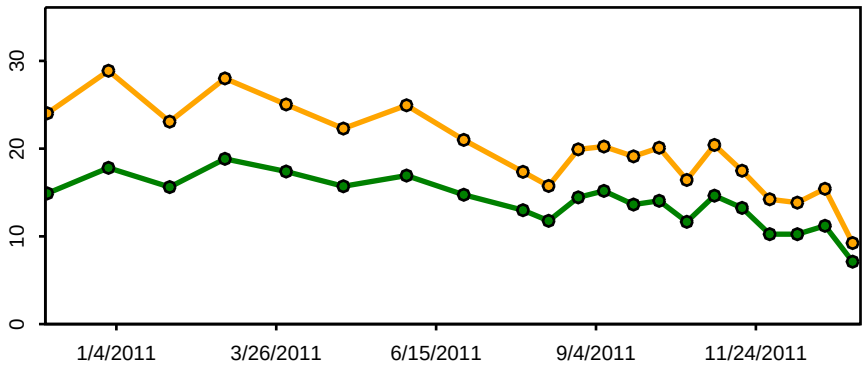
Implied Volatilities (lines--left axis) and Volume (bars--right axis)



Risk Neutral PDF of the Log Return Distribution



Probability of a Large Change



Decrease <=20% Increase >= 20%

Statistics of the Log Return Distributions

	12/29/2011	01/12/2012	Change
10th Pct	-24.99%	-19.31%	5.68%
50th Pct	-1.67%	-1.16%	0.51%
90th Pct	21.23%	17.10%	-4.13%
Mean	-1.70%	-1.08%	0.62%
Std Dev	18.30%	14.49%	-3.81%
Skew	0.01	0.05	0.04
Kurtosis	0.25	0.34	0.09