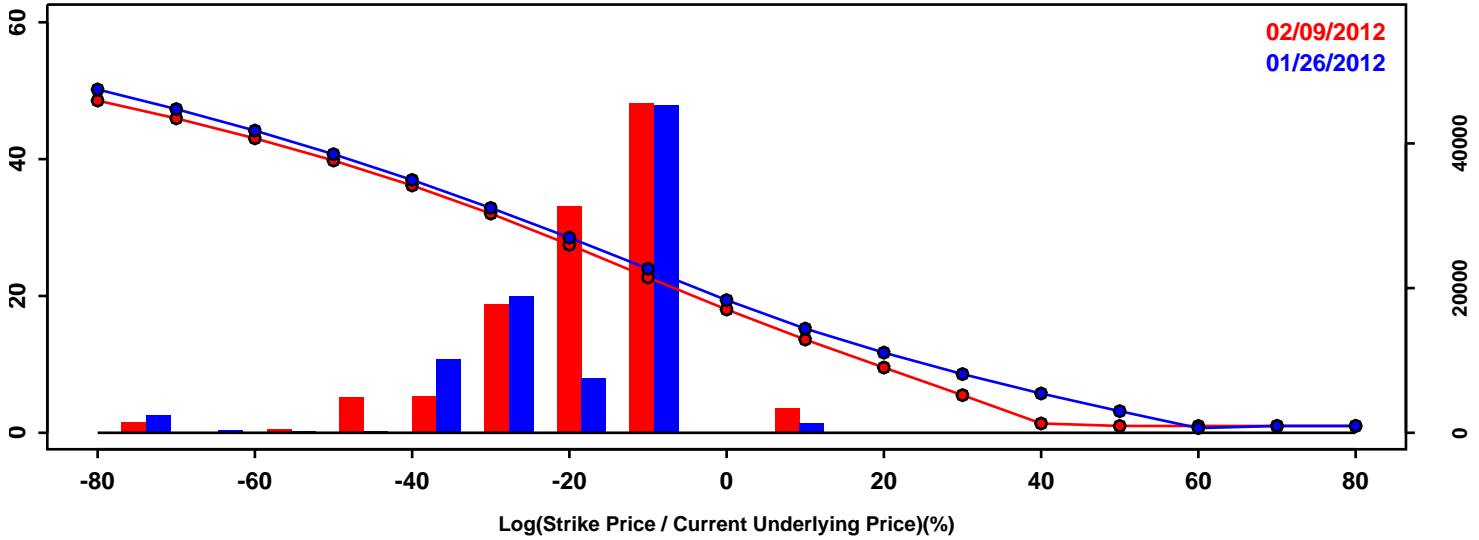# RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- S&P 500

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%**
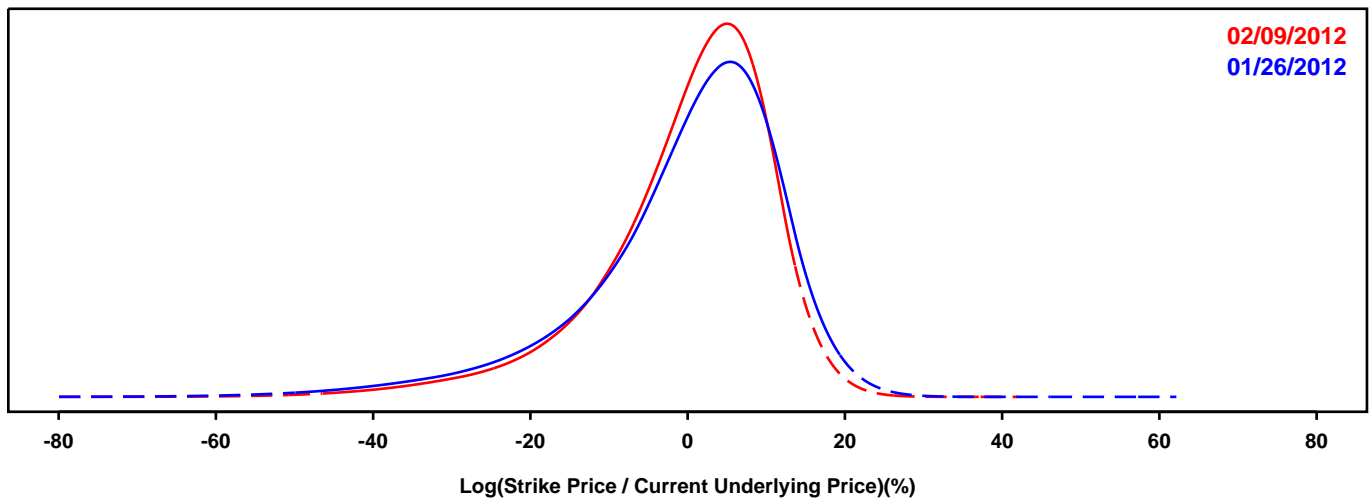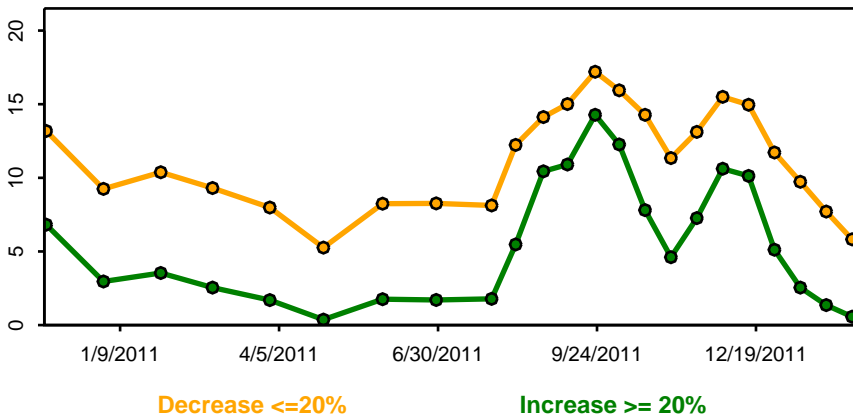
Statistics of the Log Return Distributions

	01/26/2012	02/09/2012	Change
10th Pct	-16.85%	-14.48%	2.37%
50th Pct	2.08%	1.93%	-0.16%
90th Pct	12.86%	11.52%	-1.35%
Mean	-0.30%	-0.12%	0.18%
Std Dev	12.72%	11.14%	-1.58%
Skew	-1.26	-1.24	0.02
Kurtosis	2.51	2.52	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.

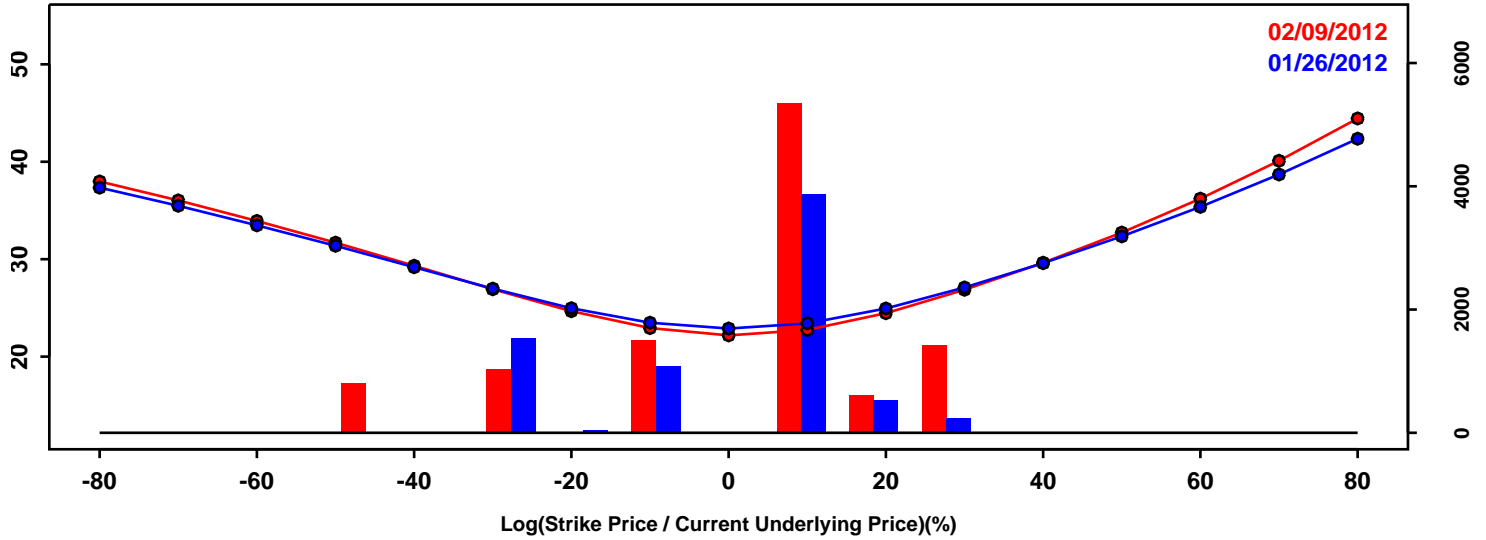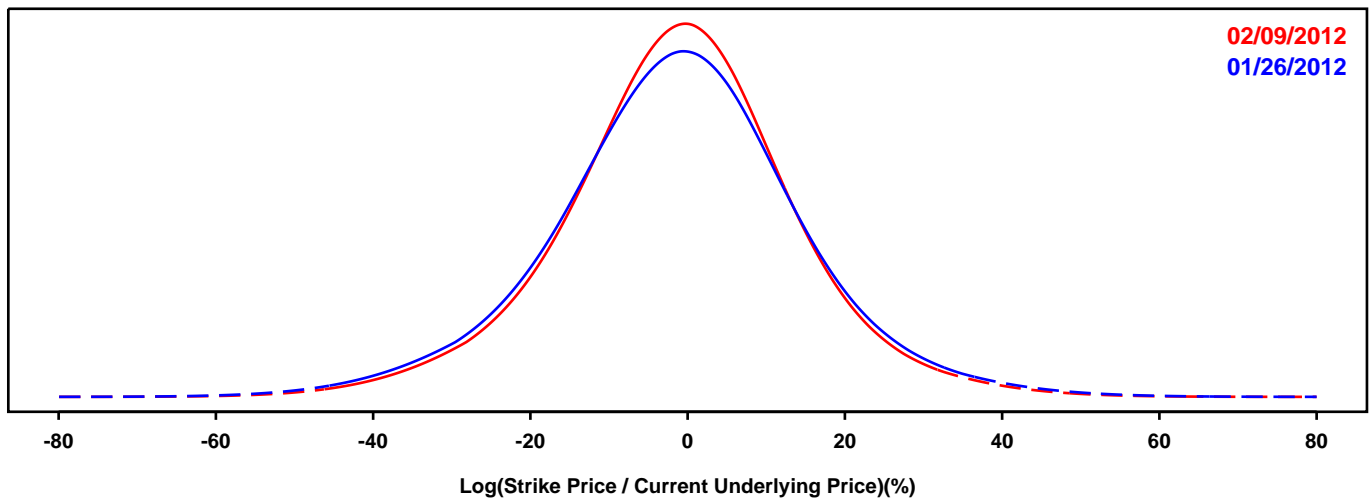### Implied Volatilities (lines--left axis) and Volume (bars--right axis)

02/09/2012
01/26/2012

Log(Strike Price / Current Underlying Price)(%)

Risk Neutral PDF of the Log Return Distribution

02/09/2012
01/26/2012

Log(Strike Price / Current Underlying Price)(%)

Probability of a Large Change

Decrease <=20%   **Increase >= 20%**

Statistics of the Log Return Distributions

	01/26/2012	02/09/2012	Change
10th Pct	-21.21%	-19.73%	1.47%
50th Pct	-1.01%	-0.81%	0.20%
90th Pct	18.23%	17.02%	-1.22%
Mean	-1.23%	-1.06%	0.18%
Std Dev	16.13%	15.08%	-1.05%
Skew	-0.04	-0.06	-0.02
Kurtosis	0.79	0.85	0.05

RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- SILVER FUTURES

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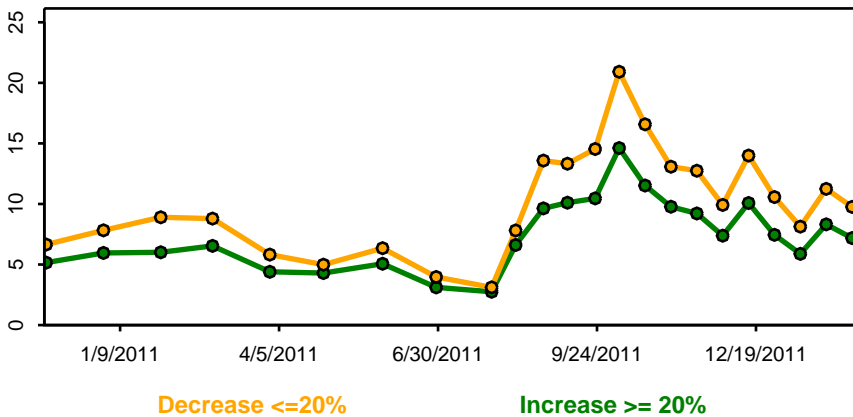derived from options that expire in approximately 6 months.*

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

Risk Neutral PDF of the Log Return Distribution
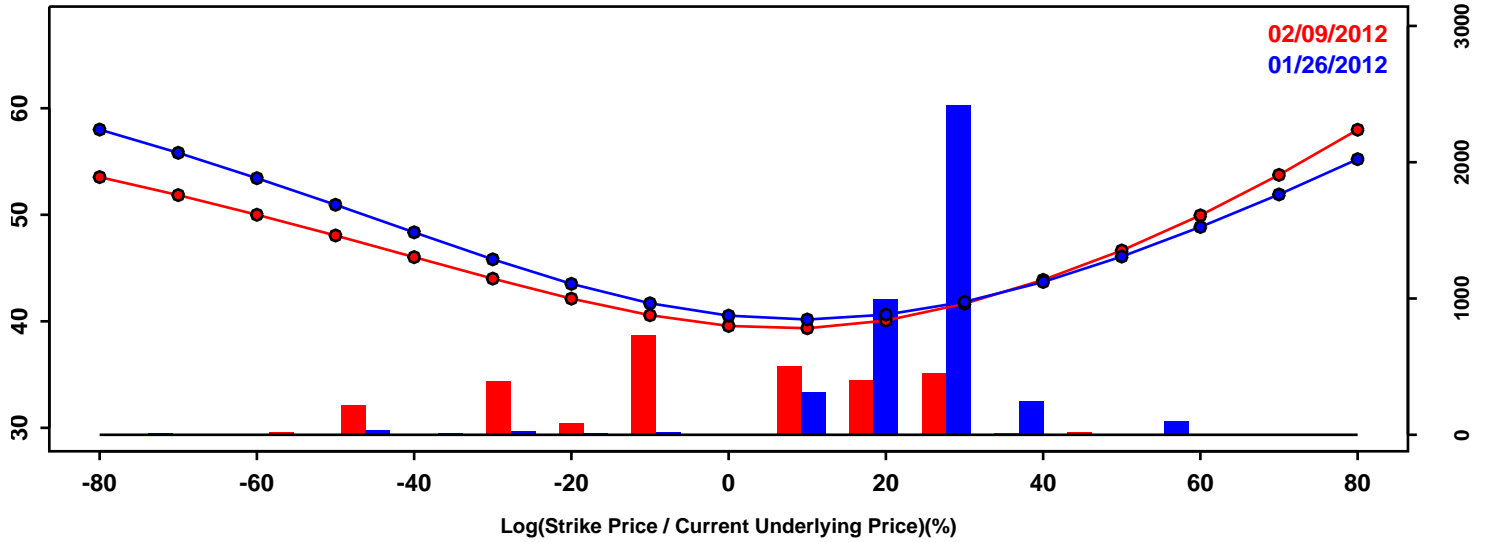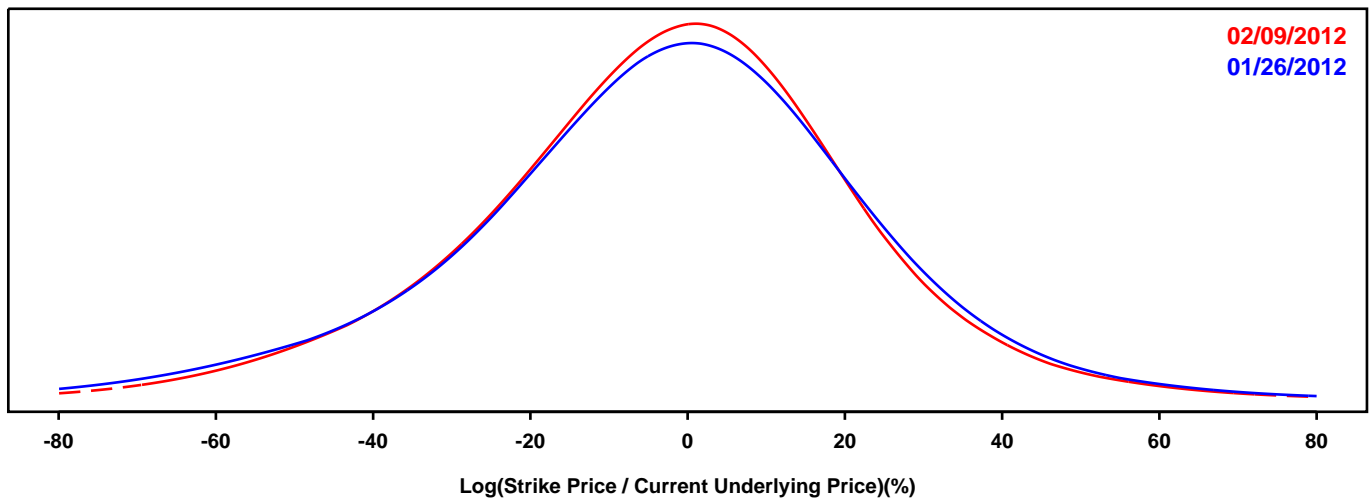

Probability of a Large Change

Decrease <=20%   **Increase >= 20%**
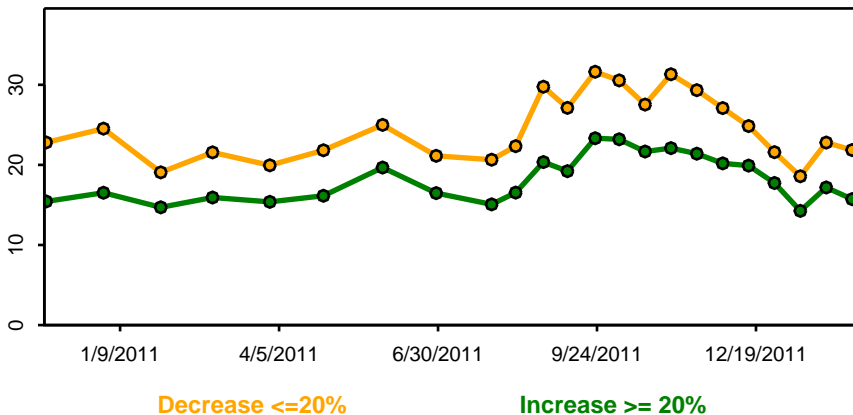
Statistics of the Log Return Distributions

	01/26/2012	02/09/2012	Change
10th Pct	-36.26%	-34.19%	2.06%
50th Pct	-1.52%	-1.57%	-0.05%
90th Pct	28.10%	26.39%	-1.71%
Mean	-2.92%	-2.70%	0.21%
Std Dev	26.24%	24.52%	-1.71%
Skew	-0.31	-0.21	0.11
Kurtosis	0.77	0.63	-0.14

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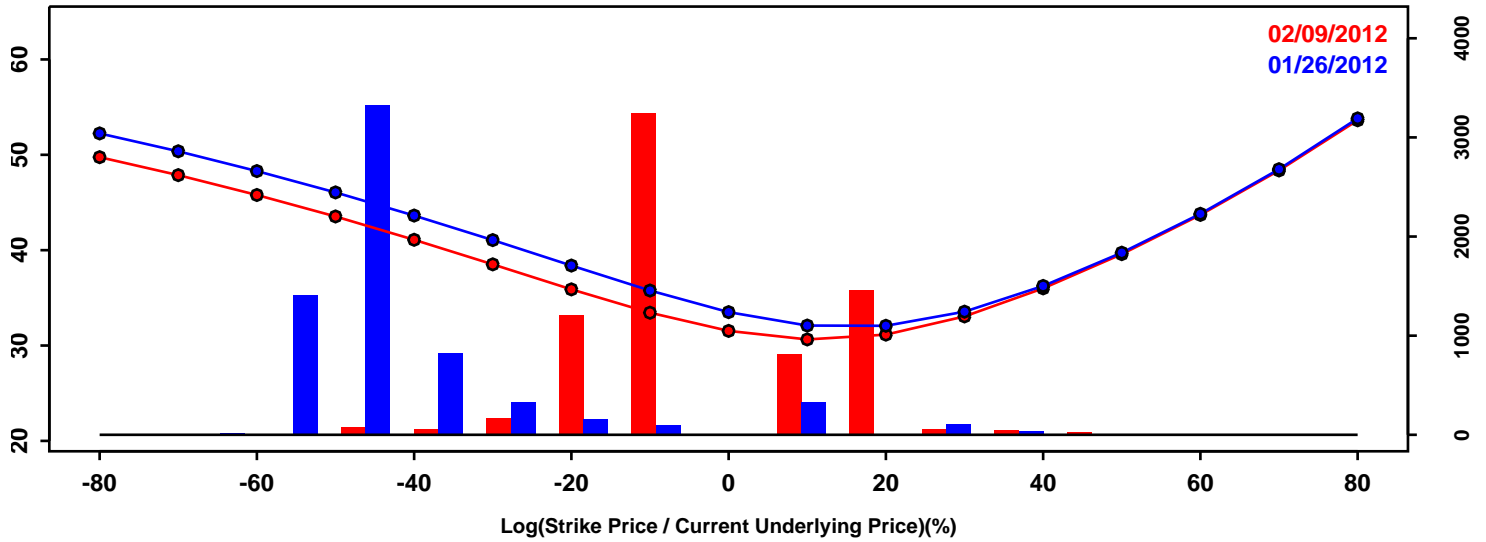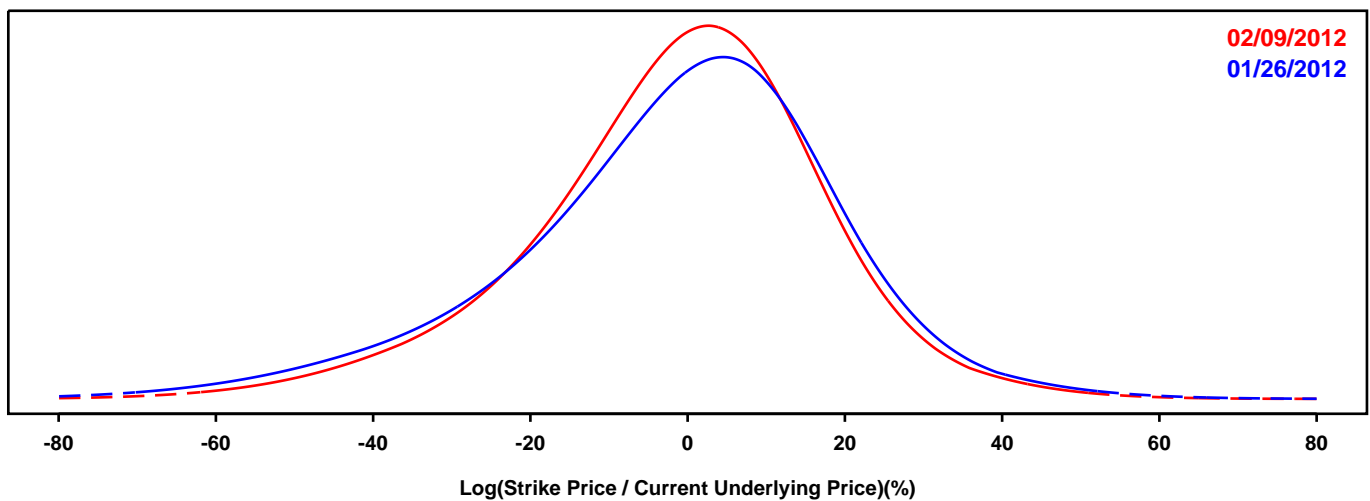
Implied Volatilities (lines--left axis) and Volume (bars--right axis)

02/09/2012
01/26/2012

Log(Strike Price / Current Underlying Price)(%)

Risk Neutral PDF of the Log Return Distribution

02/09/2012
01/26/2012

Log(Strike Price / Current Underlying Price)(%)

Probability of a Large Change

Decrease <=20%   **Increase >= 20%**

Statistics of the Log Return Distributions

	01/26/2012	02/09/2012	Change
10th Pct	-29.59%	-25.76%	3.83%
50th Pct	0.59%	0.14%	-0.45%
90th Pct	22.35%	20.46%	-1.90%
Mean	-1.63%	-1.34%	0.29%
Std Dev	21.19%	18.84%	-2.35%
Skew	-0.54%	-0.41	0.13
Kurtosis	0.90	0.81	-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
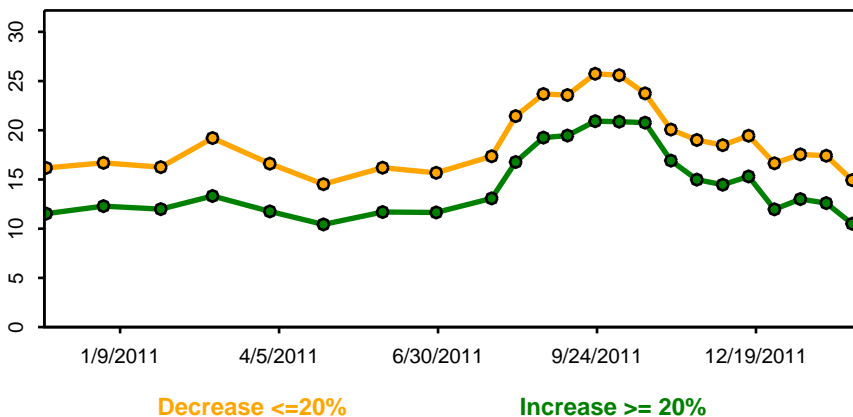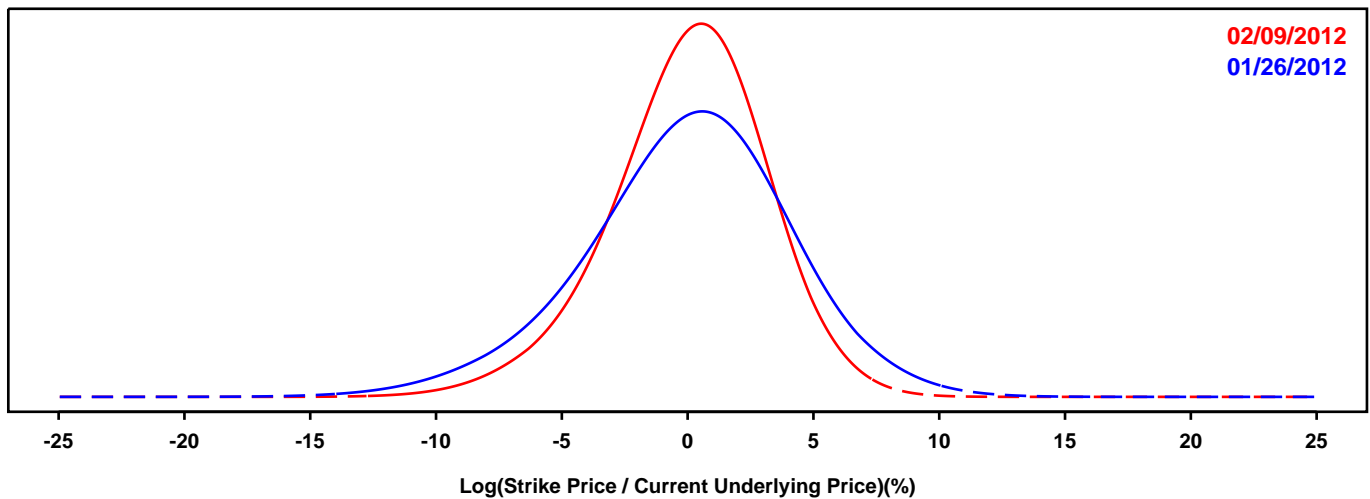derived from options that expire in approximately 3 months.*

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

02/09/2012
01/26/2012

Log(Strike Price / Current Underlying Price)(%)

Risk Neutral PDF of the Log Return Distribution

02/09/2012
01/26/2012

Log(Strike Price / Current Underlying Price)(%)
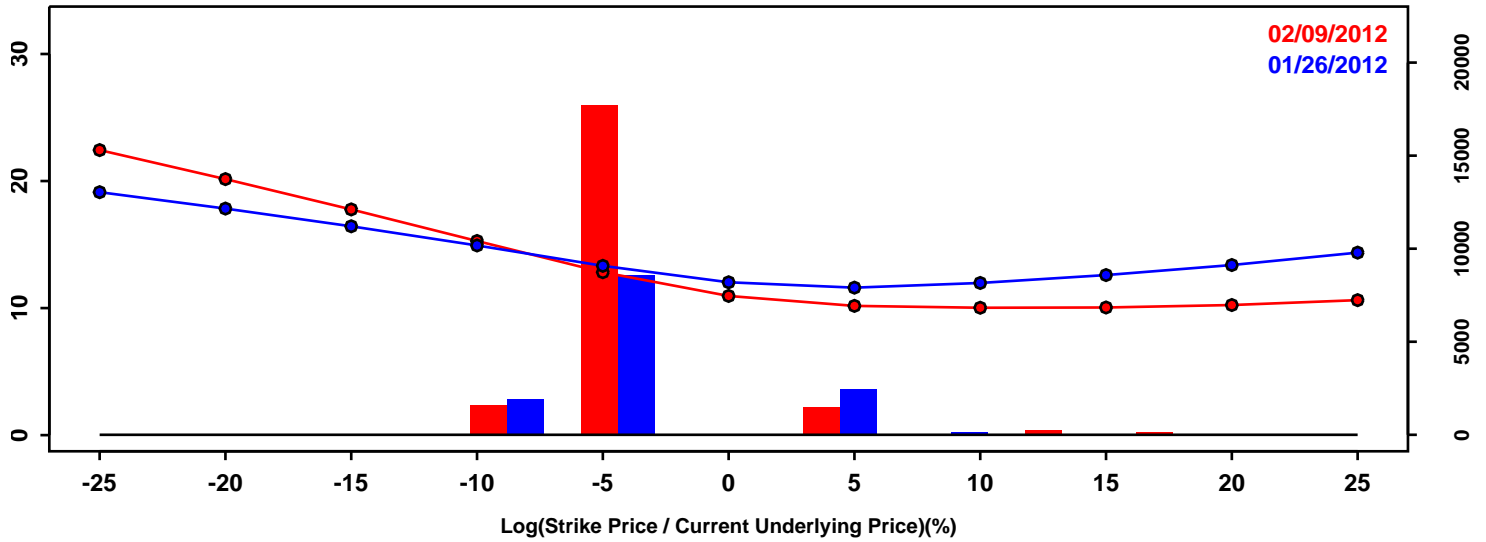
Probability of a Large Change

Statistics of the Log Return Distributions

	01/26/2012	02/09/2012	Change
10th Pct	-5.40%	-4.09%	1.31%
50th Pct	0.19%	0.19%	0.00%
90th Pct	5.07%	3.87%	-1.20%
Mean	0.02%	0.06%	0.04%
Std Dev	4.16%	3.17%	-0.99%
Skew	-0.28	-0.35	-0.07
Kurtosis	0.40	0.44	0.04

Decrease <=10%   **Increase >= 10%**

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

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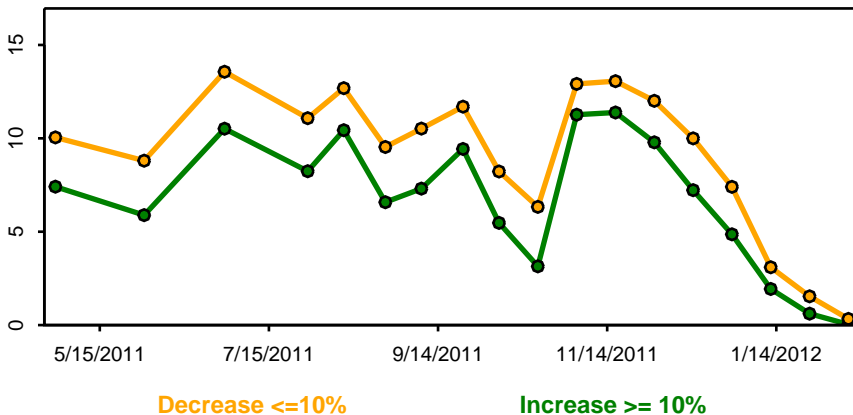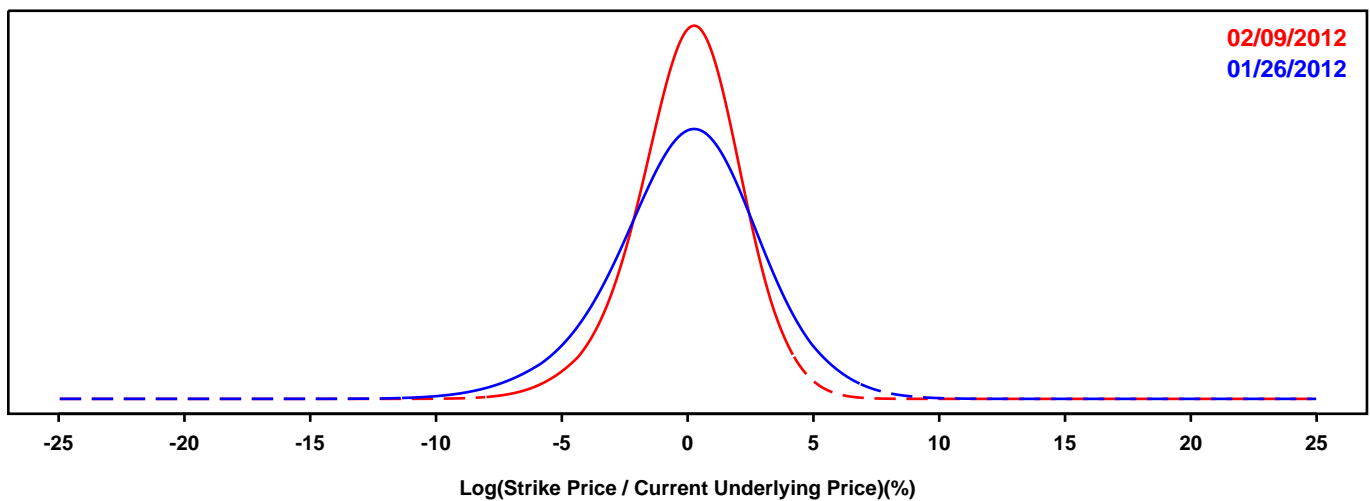derived from options that expire in approximately 3 months.*

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

02/09/2012
01/26/2012

Log(Strike Price / Current Underlying Price)(%)

Risk Neutral PDF of the Log Return Distribution

02/09/2012
01/26/2012

Log(Strike Price / Current Underlying Price)(%)

Probability of a Large Change

Decrease <=10%   **Increase >= 10%**

Statistics of the Log Return Distributions

	01/26/2012	02/09/2012	Change
10th Pct	-3.78%	-2.69%	1.08%
50th Pct	0.09%	0.09%	0.00%
90th Pct	3.63%	2.61%	-1.02%
Mean	0.01%	0.04%	0.04%
Std Dev	2.96%	2.13%	-0.83%
Skew	-0.23%	-0.31%	-0.08%
Kurtosis	0.46	0.51	0.05

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

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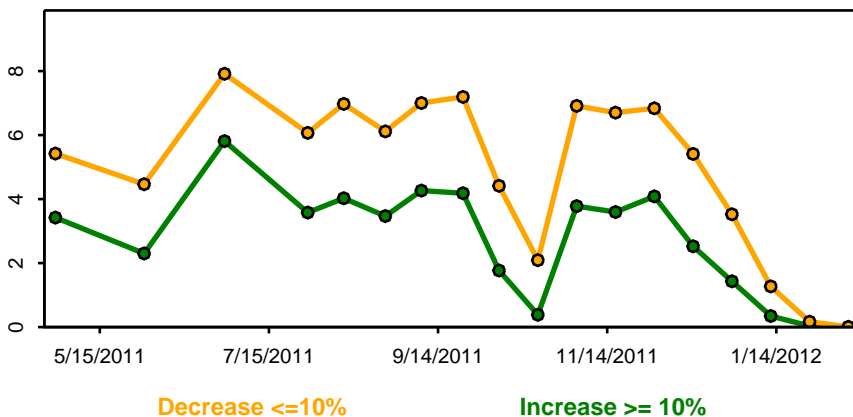derived from options that expire in approximately 3 months.*

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

Log(Strike Price / Current Underlying Price)(%)

Risk Neutral PDF of the Log Return Distribution
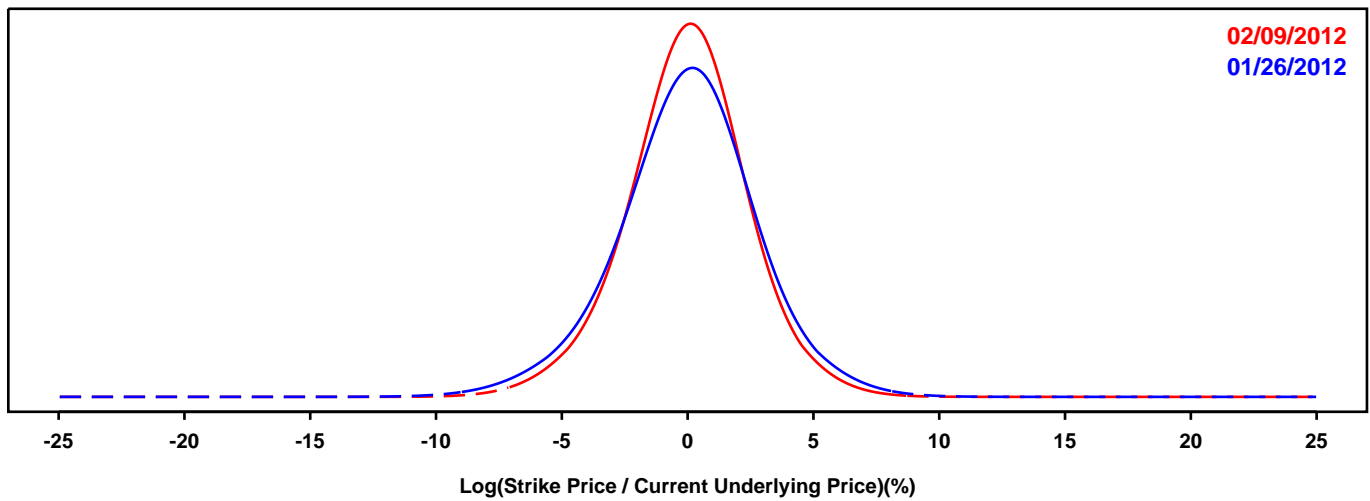

Log(Strike Price / Current Underlying Price)(%)

Probability of a Large Change

Decrease <=10%   **Increase >= 10%**

Statistics of the Log Return Distributions

	01/26/2012	02/09/2012	Change
10th Pct	-3.57%	-3.10%	0.47%
50th Pct	0.04%	0.04%	0.00%
90th Pct	3.39%	3.00%	-0.39%
Mean	0.01%	0.01%	0.00%
Std Dev	2.82%	2.45%	-0.36%
Skew	-0.16	-0.12	0.05
Kurtosis	0.64	0.57	-0.07

RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- SOYBEAN FUTURES

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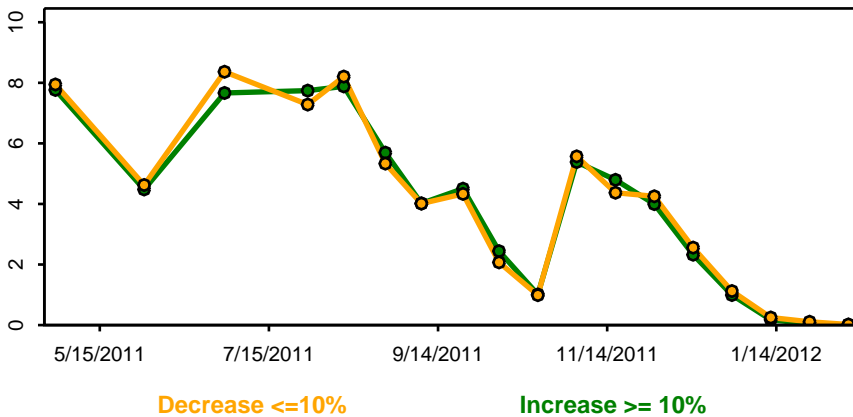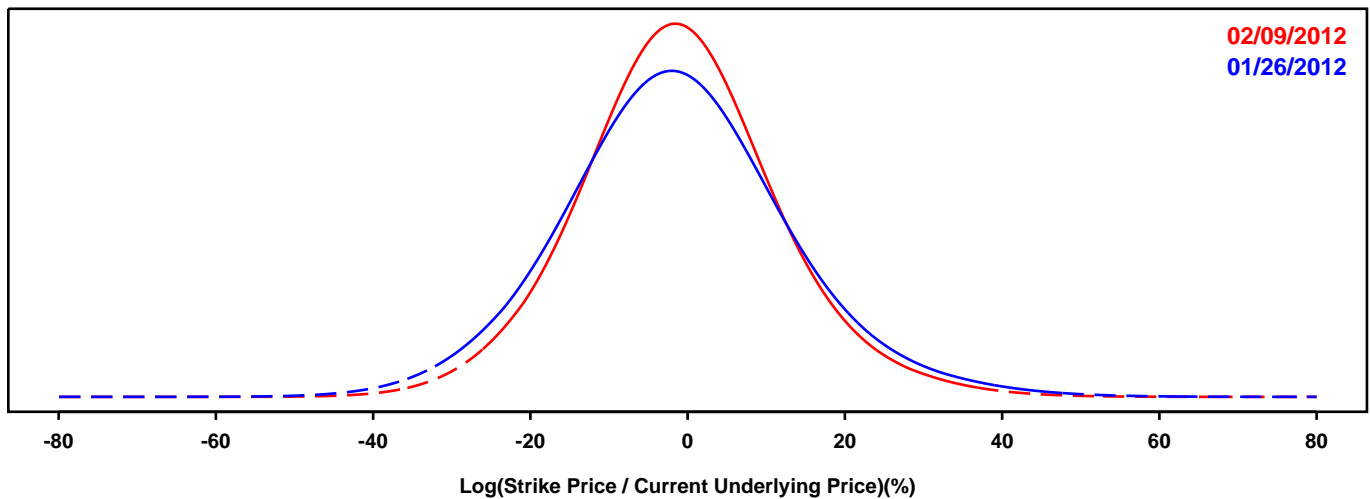*derived from options that expire in approximately 6 months.*

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

02/09/2012
01/26/2012

Log(Strike Price / Current Underlying Price)(%)

Risk Neutral PDF of the Log Return Distribution

02/09/2012
01/26/2012

Log(Strike Price / Current Underlying Price)(%)

Probability of a Large Change

Decrease <=20%   **Increase >= 20%**
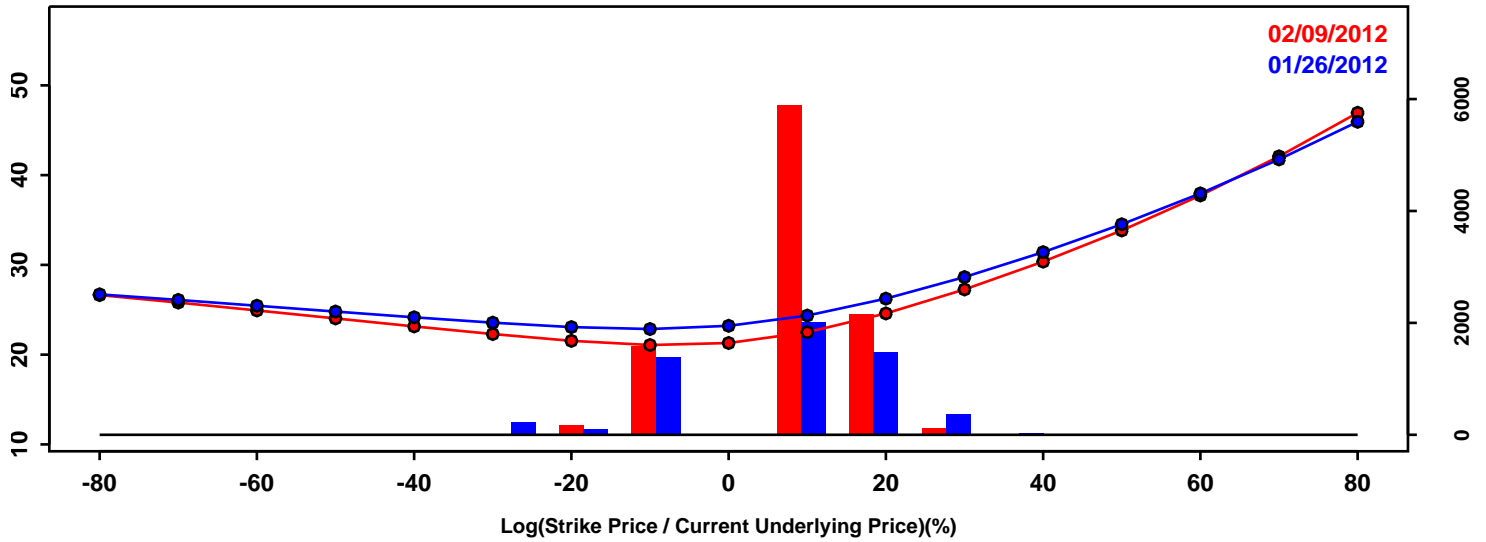
Statistics of the Log Return Distributions

	01/26/2012	02/09/2012	Change
10th Pct	-19.49%	-16.91%	2.58%
50th Pct	-1.67%	-1.31%	0.36%
90th Pct	17.10%	15.10%	-2.00%
Mean	-1.29%	-0.99%	0.31%
Std Dev	14.68%	12.87%	-1.82%
Skew	0.21	0.19	-0.02
Kurtosis	0.54	0.55	0.01

RISK NEUTRAL PROBABILITY DENSITY FUNCTIONS -- CORN FUTURES

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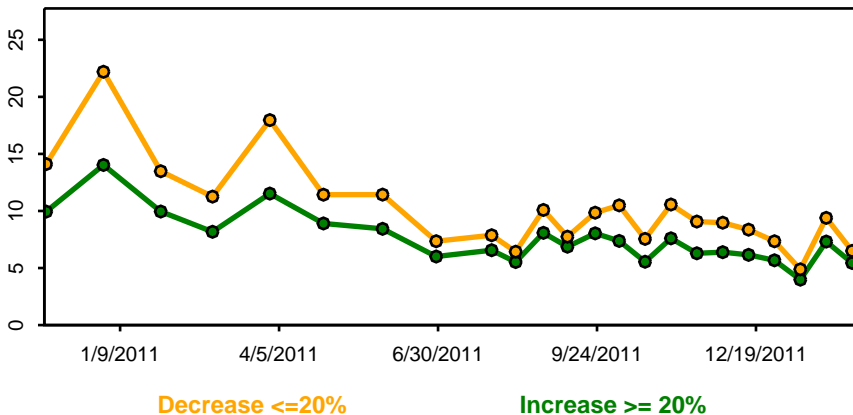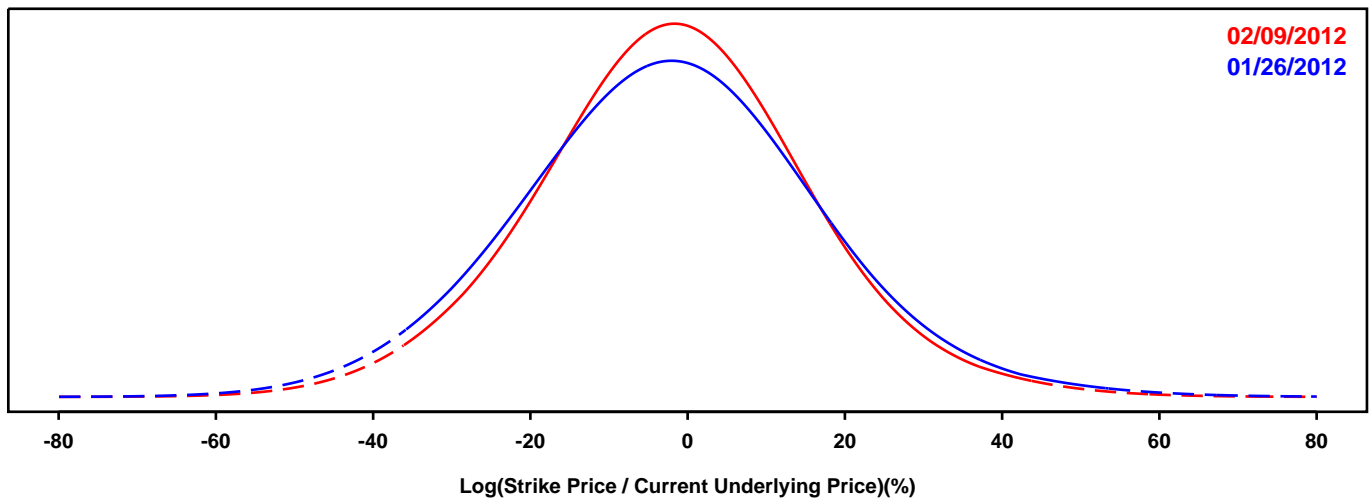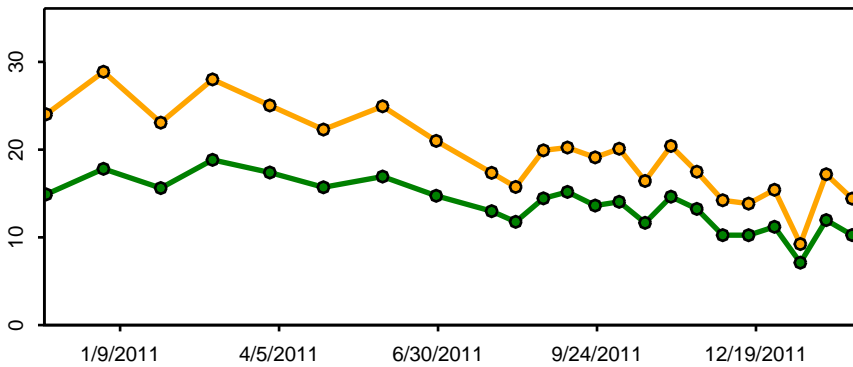derived from options that expire in approximately 6 months.*

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

02/09/2012
01/26/2012

Log(Strike Price / Current Underlying Price)(%)

Risk Neutral PDF of the Log Return Distribution

02/09/2012
01/26/2012

Log(Strike Price / Current Underlying Price)(%)
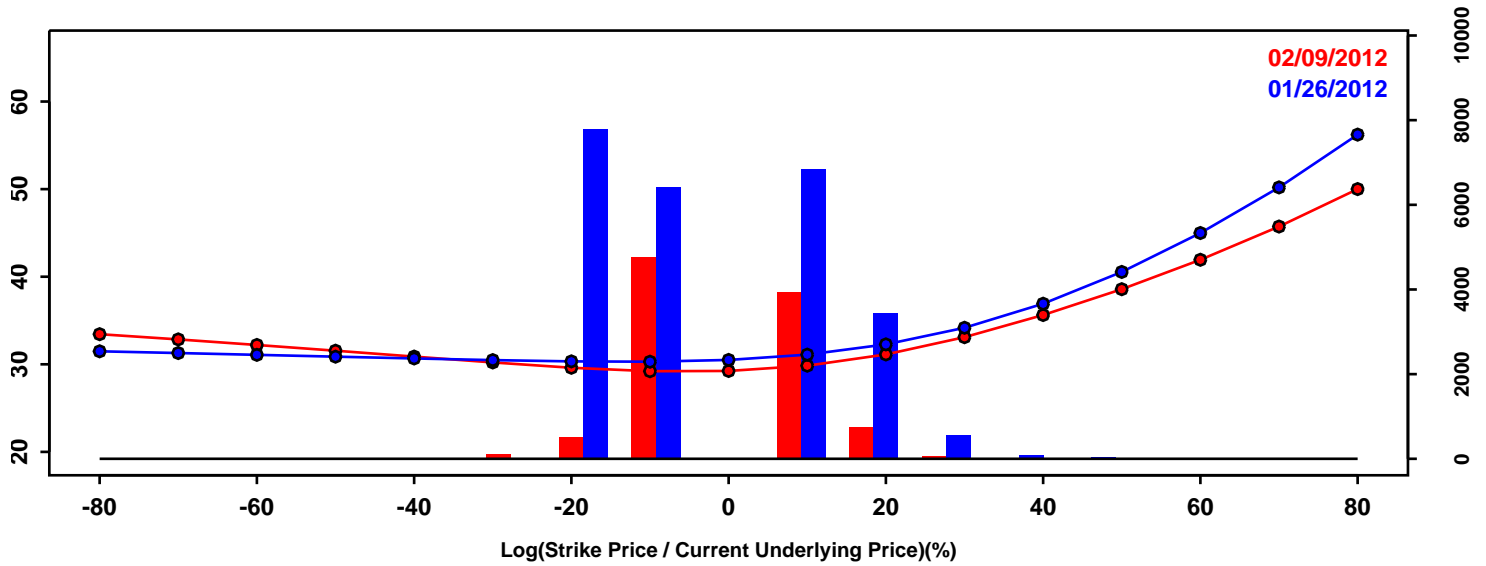
Probability of a Large Change

Decrease <=20%   **Increase >= 20%**

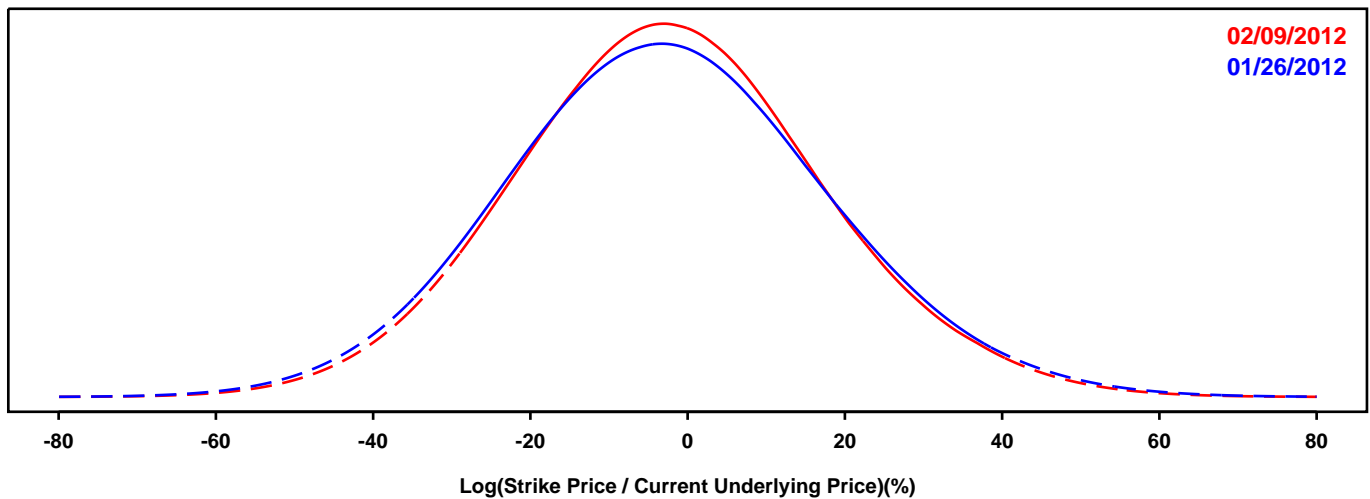| Statistics of the Log Return Distributions			
	01/26/2012	**02/09/2012**	**Change**
10th Pct	-26.47%	-23.96%	2.51%
50th Pct	-2.23%	-1.77%	0.46%
90th Pct	22.11%	20.29%	-1.82%
Mean	-2.05%	-1.70%	0.35%
Std Dev	19.33%	17.66%	-1.67%
Skew	0.12	0.07	-0.04
Kurtosis	0.35	0.39	0.04

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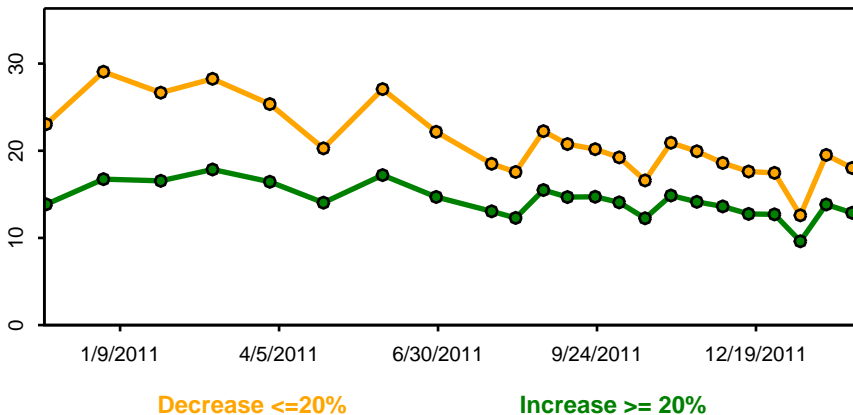
Implied Volatilities (lines--left axis) and Volume (bars--right axis)

02/09/2012
01/26/2012

Log(Strike Price / Current Underlying Price)(%)

Risk Neutral PDF of the Log Return Distribution

02/09/2012
01/26/2012

Log(Strike Price / Current Underlying Price)(%)

Probability of a Large Change

Decrease <=20%   **Increase >= 20%**
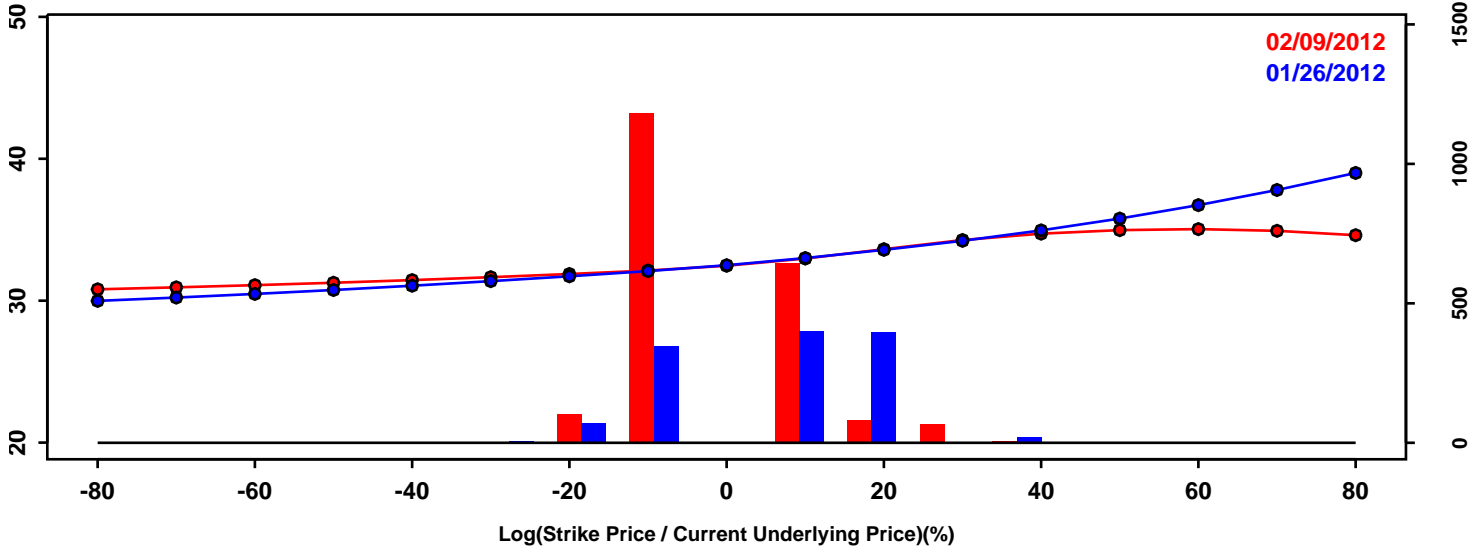
Statistics of the Log Return Distributions

	01/26/2012	02/09/2012	Change
10th Pct	-28.32%	-27.00%	1.32%
50th Pct	-2.79%	-2.49%	0.31%
90th Pct	24.26%	23.19%	-1.07%
Mean	-2.32%	-2.11%	0.22%
Std Dev	20.59%	19.67%	-0.92%
Skew	0.12	0.11	-0.01
Kurtosis	0.09	0.11	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)
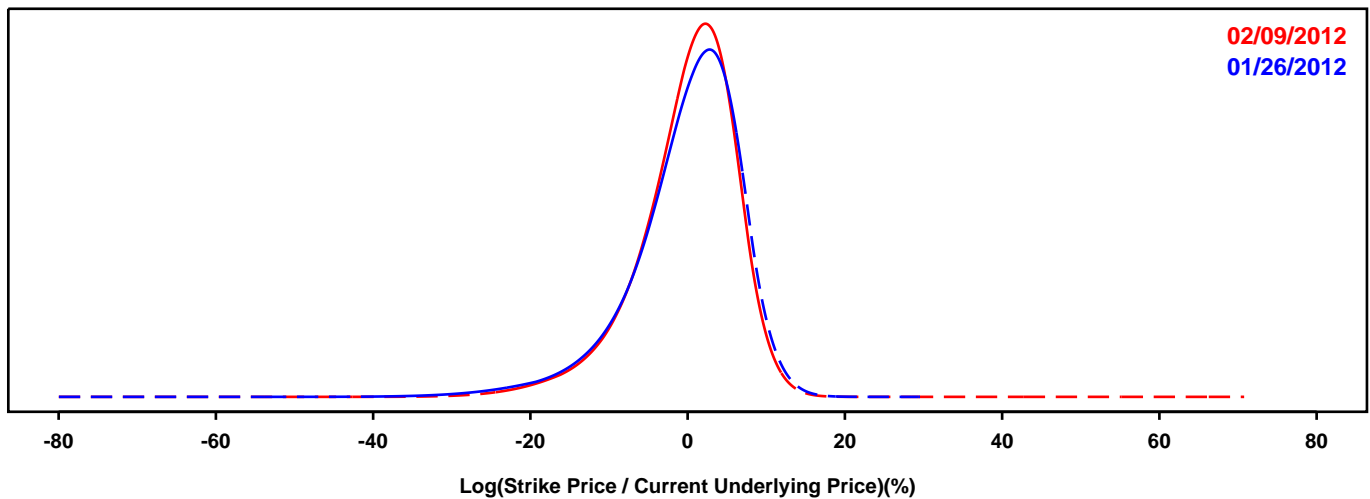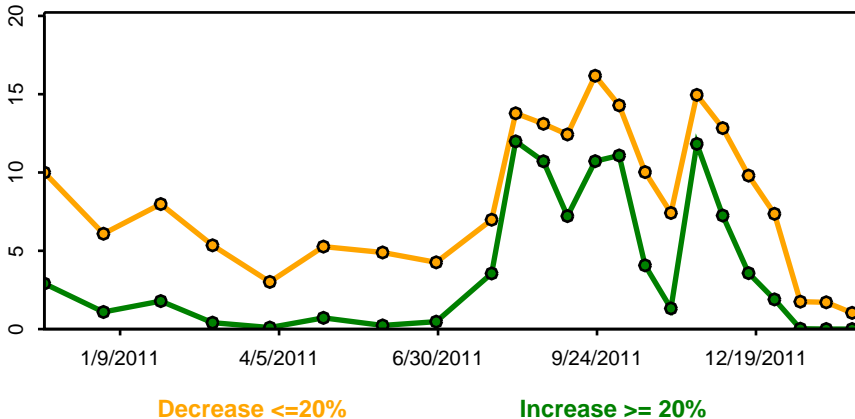

Log(Strike Price / Current Underlying Price)(%)

02/09/2012
01/26/2012

Risk Neutral PDF of the Log Return Distribution

Log(Strike Price / Current Underlying Price)(%)

02/09/2012
01/26/2012

Probability of a Large Change

Decrease <=20%   **Increase >= 20%**
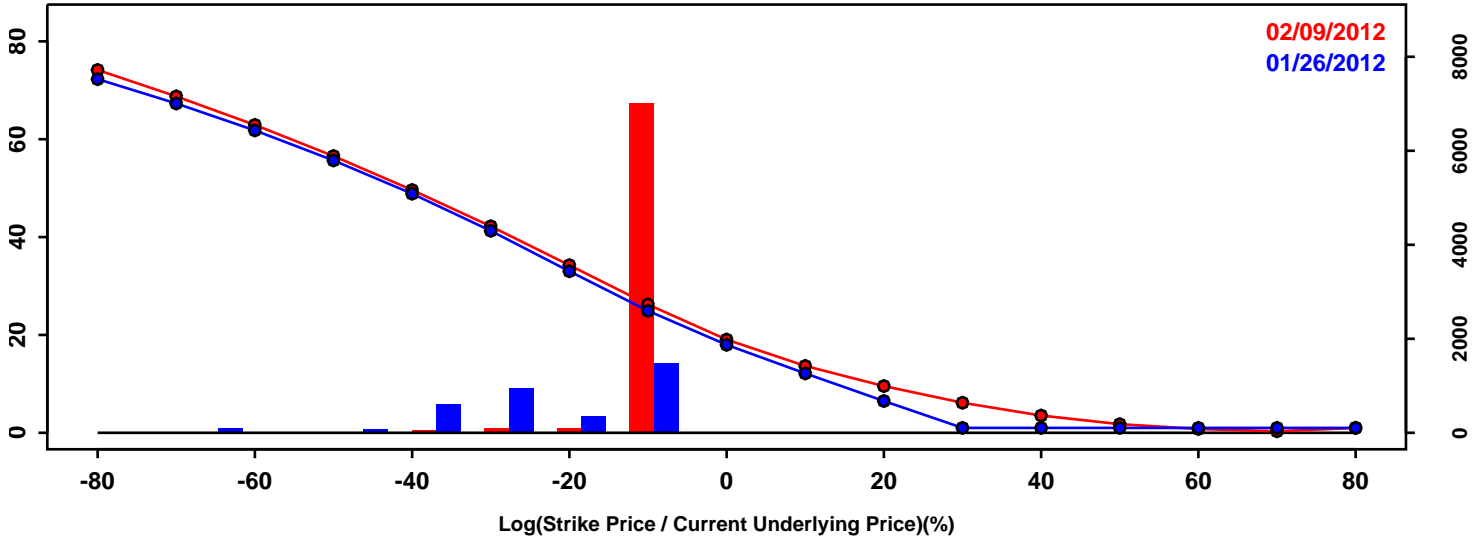
Statistics of the Log Return Distributions

	01/26/2012	02/09/2012	Change
10th Pct	-9.07%	-8.36%	0.70%
50th Pct	0.95%	0.82%	-0.13%
90th Pct	7.42%	6.92%	-0.51%
Mean	-0.13%	-0.09%	0.03%
Std Dev	7.02%	6.38%	-0.65%
Skew	-1.14	-0.98	0.16
Kurtosis	2.42	1.77	-0.65