

Monte Carlo Simulations

Three-Month Expectation

as of February 26, 2010

Monte Carlo simulations produce probable outcomes of complex systems. The Kase Monte Carlo program was written to simulate future prices, and thus allow risk estimates based on historical price and volatility data for any particular instrument, or portfolio of instruments for which such data is available. Kase's unique approach generates seven possible market trend scenarios: Strong Down, Normal Down, Weak Down, No Bias or Middle Observation, Weak Up, Normal Up, and Strong Up.

Proprietary models that front-end the simulator allows Kase to establish volatility and bias. Then prices are randomly generated for an inputted simulation period. For the quarterly, a 63-day period is used to approximate a three-month forward period. The simulations are run for thousands of iterations. The data from all of these runs are then statistically analyzed and made into percentile ranking tables that are used to find probabilities for price moves in scenarios that are based upon increased or decreased bias and volatility.

In January 2010, Kase made significant improvements to the model to account for the fact that a particular portfolio of instruments – for example – the futures contracts by month included in a 12 month strip changes over time. In the past, the simulator chose for the twelve-month strip the current price of the prompt 12 months. Now the simulator evaluates the contract months that will comprise the 12-month strip at the end of the simulation period, for example, in three months.

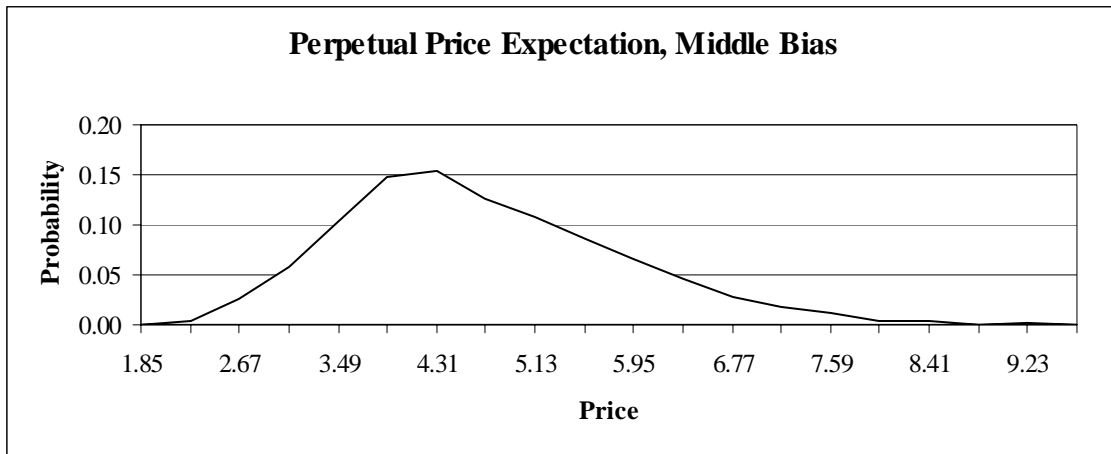
Recent studies have found that contango or backwardation affects degree of positive and negative trends. Therefore in addition, the program now considers market condition, either contango or backwardation, from the start date of the simulation.

A third improvement was to allow for the middle value, which had been hard coded to zero bias, to be an input percentile, such as the 50th percentile, which is not necessarily zero.

It is possible to run the model on periods of differing lookforward periods. Should you wish to have a custom time frame or custom portfolio run, please call our office at (505) 237-1600. The results for each instrument are shown in the standard format following.

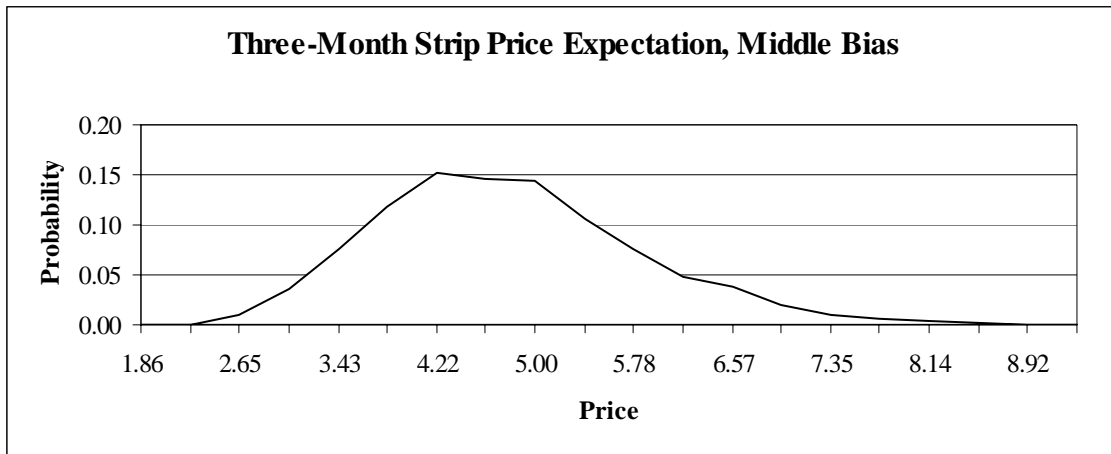
The output tables show standard statistics such as average, minimum, maximum standard deviation, etc., for each simulation as well as a rank and percentile table. The rank and percentile table can be used to determine probable outcomes, risk or VAR, over the next 63-days for each scenario (i.e. strong up, normal up, weak up, etc). The 50th percentile shows the most likely expectation for each scenario. In the down market scenarios the odds increase for prices below the 50th percentile and increase for prices above the 50th percentile. In the up market scenarios odds decrease for prices below the 50th percentile and increase for prices above the 50th percentile. To determine VAR, take the difference between the current price and the price in a given cell.

Expectations for the Perpetual Contract from \$4.81 on 02/26/10



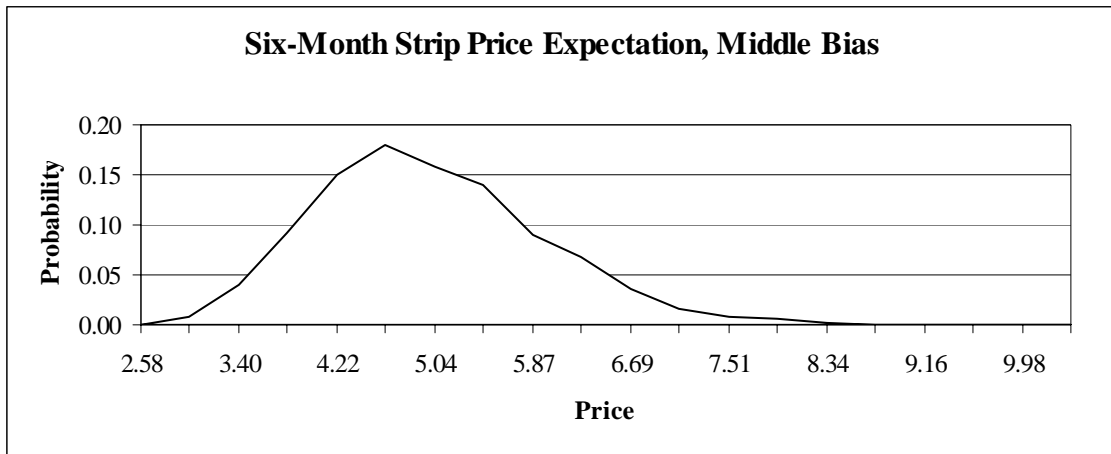
Perpetual	Strong Down	Normal Down	Weak Down	Middle Bias	Weak Up	Normal Up	Strong Up
Mean	2.94	3.56	4.14	4.50	4.98	5.40	6.12
StdDev	0.91	0.92	1.08	1.19	1.30	1.41	1.95
Variance	0.84	0.85	1.17	1.41	1.69	2.00	3.80
Percentile							
2.5	1.56	2.10	2.39	2.62	2.94	3.11	3.13
5	1.70	2.27	2.59	2.80	3.15	3.41	3.48
10	1.89	2.49	2.87	3.14	3.47	3.77	3.89
15	2.02	2.64	3.08	3.33	3.69	4.03	4.24
20	2.16	2.75	3.24	3.50	3.87	4.20	4.52
25	2.28	2.89	3.38	3.64	4.04	4.36	4.74
30	2.40	3.01	3.52	3.79	4.21	4.56	4.98
35	2.48	3.13	3.63	3.92	4.37	4.72	5.20
40	2.59	3.24	3.76	4.05	4.52	4.88	5.41
45	2.69	3.35	3.87	4.18	4.67	5.04	5.62
50	2.81	3.45	4.02	4.33	4.82	5.23	5.85
55	2.91	3.56	4.14	4.49	4.99	5.39	6.07
60	3.03	3.69	4.28	4.65	5.16	5.57	6.31
65	3.17	3.80	4.42	4.82	5.33	5.76	6.60
70	3.30	3.94	4.57	5.00	5.52	5.96	6.89
75	3.45	4.12	4.76	5.21	5.71	6.19	7.20
80	3.64	4.29	4.95	5.45	5.97	6.48	7.53
85	3.86	4.51	5.22	5.72	6.28	6.81	7.99
90	4.13	4.81	5.58	6.09	6.69	7.23	8.59
95	4.60	5.21	6.10	6.66	7.28	8.03	9.56
97.5	4.97	5.67	6.64	7.20	8.01	8.65	10.82

Expectations for the Three-Month Strip from \$4.88 on 02/26/10



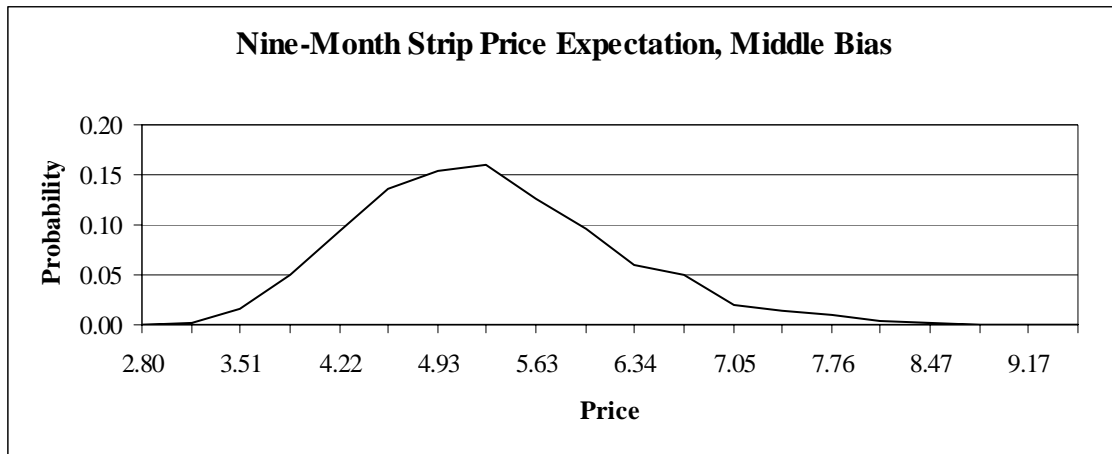
Three	Strong Down	Normal Down	Weak Down	Middle Bias	Weak Up	Normal Up	Strong Up
Mean	3.12	3.72	4.29	4.60	5.08	5.52	6.14
StdDev	0.87	0.87	1.03	1.06	1.19	1.26	1.70
Variance	0.76	0.76	1.06	1.13	1.42	1.60	2.89
Percentile							
2.5	1.74	2.30	2.65	2.85	3.14	3.41	3.39
5	1.88	2.49	2.82	3.05	3.38	3.64	3.79
10	2.09	2.72	3.07	3.34	3.63	4.00	4.16
15	2.24	2.86	3.27	3.54	3.87	4.28	4.43
20	2.37	2.98	3.42	3.70	4.07	4.49	4.65
25	2.50	3.09	3.57	3.84	4.22	4.64	4.88
30	2.60	3.20	3.70	3.98	4.36	4.80	5.12
35	2.71	3.31	3.82	4.09	4.52	4.94	5.33
40	2.82	3.41	3.93	4.23	4.67	5.07	5.53
45	2.93	3.51	4.04	4.36	4.80	5.22	5.74
50	3.03	3.61	4.16	4.50	4.96	5.37	5.94
55	3.13	3.72	4.30	4.62	5.10	5.54	6.15
60	3.26	3.83	4.42	4.76	5.27	5.69	6.37
65	3.36	3.96	4.56	4.89	5.42	5.87	6.61
70	3.48	4.07	4.72	5.04	5.58	6.05	6.87
75	3.62	4.23	4.88	5.23	5.79	6.27	7.13
80	3.79	4.39	5.08	5.43	6.03	6.49	7.42
85	3.98	4.58	5.31	5.68	6.31	6.80	7.84
90	4.24	4.85	5.62	6.04	6.65	7.15	8.41
95	4.69	5.31	6.21	6.49	7.19	7.80	9.36
97.5	5.14	5.73	6.71	6.96	7.76	8.47	10.02

Expectations for the Six-Month Strip from \$4.99 on 02/26/10



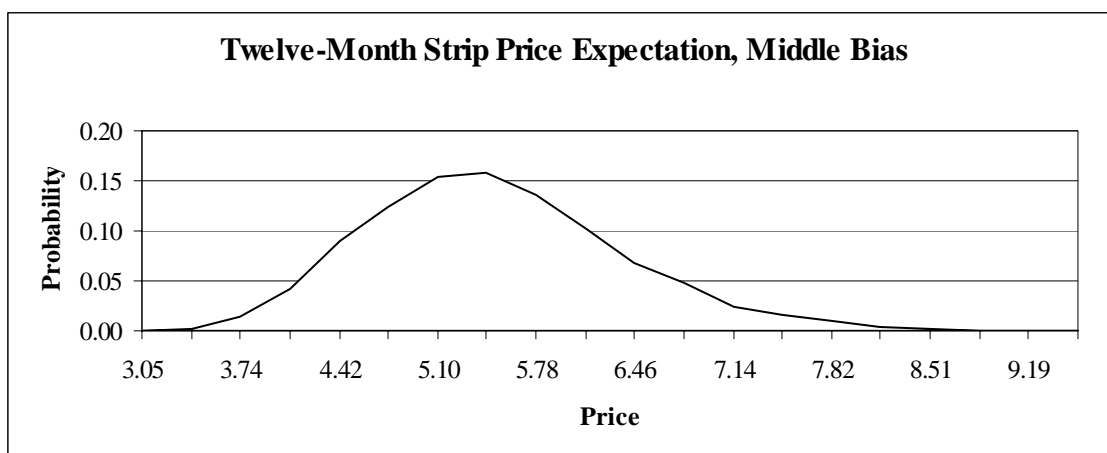
Six	Strong Down	Normal Down	Weak Down	Middle Bias	Weak Up	Normal Up	Strong Up
Mean	3.30	4.00	4.50	4.81	5.18	5.61	6.14
StdDev	0.81	0.81	0.90	0.97	1.05	1.11	1.52
Variance	0.65	0.65	0.82	0.94	1.09	1.23	2.30
Percentile							
2.5	2.00	2.63	3.02	3.21	3.43	3.75	3.67
5	2.13	2.80	3.20	3.40	3.64	3.99	3.98
10	2.35	3.01	3.41	3.65	3.91	4.28	4.36
15	2.51	3.16	3.58	3.84	4.11	4.51	4.66
20	2.62	3.29	3.72	3.97	4.28	4.69	4.89
25	2.71	3.42	3.86	4.10	4.42	4.82	5.08
30	2.81	3.52	3.98	4.24	4.57	4.97	5.26
35	2.92	3.63	4.09	4.36	4.70	5.11	5.44
40	3.02	3.73	4.19	4.46	4.82	5.24	5.61
45	3.11	3.84	4.30	4.59	4.94	5.36	5.77
50	3.21	3.94	4.40	4.70	5.07	5.51	5.94
55	3.31	4.03	4.51	4.84	5.21	5.64	6.15
60	3.42	4.14	4.64	4.96	5.33	5.79	6.31
65	3.53	4.24	4.78	5.09	5.47	5.93	6.55
70	3.66	4.36	4.91	5.23	5.63	6.08	6.76
75	3.78	4.48	5.05	5.39	5.80	6.26	7.01
80	3.92	4.65	5.22	5.58	6.00	6.46	7.31
85	4.13	4.83	5.43	5.81	6.26	6.75	7.62
90	4.38	5.07	5.69	6.08	6.58	7.04	8.18
95	4.79	5.42	6.07	6.51	7.06	7.65	8.97
97.5	5.13	5.72	6.52	6.93	7.49	8.11	9.71

Expectations for the Nine-Month Strip from \$5.19 on 02/26/10



Nine	Strong Down	Normal Down	Weak Down	Middle Bias	Weak Up	Normal Up	Strong Up
Mean	3.65	4.37	4.91	5.10	5.50	5.84	6.31
StdDev	0.80	0.80	0.90	0.91	0.97	1.04	1.35
Variance	0.65	0.64	0.80	0.83	0.94	1.09	1.81
Percentile							
2.5	2.31	3.03	3.36	3.55	3.78	4.01	4.10
5	2.48	3.20	3.58	3.78	4.03	4.27	4.37
10	2.70	3.42	3.79	4.00	4.34	4.58	4.72
15	2.84	3.59	3.99	4.17	4.53	4.79	4.97
20	2.97	3.69	4.15	4.31	4.69	4.96	5.18
25	3.08	3.79	4.28	4.46	4.82	5.12	5.38
30	3.19	3.90	4.40	4.57	4.95	5.23	5.55
35	3.29	4.00	4.51	4.69	5.06	5.37	5.70
40	3.39	4.10	4.62	4.79	5.19	5.51	5.84
45	3.48	4.20	4.72	4.92	5.30	5.65	5.99
50	3.58	4.29	4.83	5.02	5.43	5.77	6.18
55	3.67	4.38	4.93	5.14	5.54	5.89	6.35
60	3.77	4.48	5.05	5.24	5.67	6.02	6.53
65	3.88	4.59	5.19	5.36	5.79	6.15	6.72
70	4.00	4.71	5.32	5.50	5.93	6.30	6.88
75	4.12	4.84	5.46	5.66	6.07	6.47	7.09
80	4.26	4.99	5.64	5.83	6.23	6.67	7.32
85	4.46	5.17	5.82	6.04	6.45	6.92	7.62
90	4.69	5.43	6.08	6.34	6.76	7.24	8.07
95	5.07	5.81	6.50	6.70	7.22	7.66	8.75
97.5	5.46	6.18	6.91	7.15	7.70	8.19	9.35

Expectations for the Twelve-Month Strip from \$5.41 on 02/26/10



Twelve	Strong Down	Normal Down	Weak Down	Middle Bias	Weak Up	Normal Up	Strong Up
Mean	3.94	4.69	5.16	5.33	5.72	6.04	6.48
StdDev	0.78	0.79	0.88	0.89	0.94	1.00	1.24
Variance	0.60	0.63	0.77	0.78	0.88	1.00	1.54
Percentile							
2.5	2.62	3.34	3.63	3.81	4.04	4.26	4.40
5	2.79	3.51	3.85	4.03	4.29	4.51	4.66
10	3.00	3.74	4.06	4.25	4.60	4.82	5.00
15	3.15	3.91	4.26	4.42	4.78	5.02	5.24
20	3.28	4.01	4.42	4.56	4.94	5.19	5.44
25	3.39	4.12	4.55	4.70	5.07	5.34	5.62
30	3.50	4.22	4.67	4.81	5.19	5.45	5.78
35	3.60	4.33	4.78	4.92	5.30	5.58	5.93
40	3.69	4.42	4.88	5.03	5.43	5.72	6.05
45	3.78	4.52	4.98	5.15	5.54	5.86	6.19
50	3.88	4.61	5.09	5.25	5.66	5.98	6.37
55	3.97	4.71	5.19	5.36	5.77	6.09	6.53
60	4.06	4.80	5.31	5.46	5.89	6.22	6.69
65	4.17	4.92	5.44	5.58	6.01	6.34	6.87
70	4.28	5.03	5.57	5.71	6.14	6.48	7.01
75	4.40	5.16	5.71	5.87	6.28	6.65	7.21
80	4.54	5.31	5.88	6.03	6.44	6.83	7.43
85	4.72	5.49	6.06	6.24	6.64	7.07	7.69
90	4.94	5.74	6.30	6.52	6.94	7.38	8.10
95	5.30	6.12	6.71	6.87	7.38	7.77	8.71
97.5	5.67	6.47	7.10	7.30	7.83	8.27	9.24