

Assignment 4

Total marks 20

Individual Assignment

Last date of assignment submission is November 8, 2024 (midnight)

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I have saved a case study titled “*Parliamentary election impact on Indian capital markets*”. It is an interesting case study about possible outcomes of a general election result and formulation of options strategies. You are supposed to go through the case study and answer the following questions. *There is no word limit but be precise and work with numbers.*

1. Create options strategies for May 15, 2009 (based on an understanding of the political scenario in India in 2009). For this, data for May 15, 2009, given in case Exhibit 3, can be utilized.
2. Evaluate the performance of options strategies created with the data from case Exhibit 3.
3. Explore the hedging effectiveness of options involving stocks/equity. You can use the two highly liquid stock options data given below:

DATA FOR OPTION STOCK ICICI BANK

Call American — May 15, 2009										
Strike Price	Open	High	Low	Close	LTP	No. of Contracts	Turnover in ₹ million	Open Interest (OI)	Change in OI	Underlying Value
540	36	60	36	58.1	58.5	341	140.041	172,900	-34,300	574.7
560	29.7	46	27	43.65	45	953	398.008	632,100	32,900	574.7
580	19.9	34.65	19.5	32.55	31.75	803	341.627	1,328,600	9,100	574.7
600	14	25	14	23.7	23	451	195.839	194,600	-7,000	574.7
620	9	18.9	9	17.05	18.9	241	107.140	240,100	9,800	574.7
19-May-09										
540	160	252	150	248	248	113	59.980	123,200	-49,700	756.15
560	130	234.65	130	197.15	194.05	251	132.835	541,800	-90,300	756.15
580	128.95	219	64.8	174.3	174.5	275	1,44.695	1,280,300	-48,300	756.15
600	149	199	77	169.75	163.4	245	127.726	158,900	-35,700	756.15
620	81	180	70.1	147.3	136.15	190	100.332	211,400	-28,700	756.15
Put American										
15-May-09										
500	18	18	10.95	13	13.4	481	173.037	649,600	77,700	574.7
510	18.5	18.95	14	14.9	14.75	37	13.633	107,800	700	574.7
520	22	22	15.25	16.7	17	211	79.469	176,400	37,100	574.7
540	28.55	29	19.95	22.2	23	459	181.332	438,200	120,400	574.7
560	38	38	26	28.7	29.1	526	217.837	280,000	207,200	574.7
19-May-09										
500	2	3	1	1.6	1.85	276	96.905	667,800	18,200	756.15
510	1.2	1.9	1	1.6	1.65	41	14.680	107,100	-700	756.15
520	3.5	4	1	1.65	2.45	95	34.724	155,400	-21,700	756.15
540	4	5	0.7	2.15	2.45	126	47.833	396,900	-41,300	756.15
560	5	5.1	1.7	2.7	2.5	183	72.138	253,400	-27,300	756.15

Source: NSE, India.

DATA FOR OPTION STOCK RELIANCE

Call American — May 15, 2009										
Strike Price	Open	High	Low	Close	LTP	No. of Contracts	Turnover in ₹ million	Open Interest (OI)	Change in OI	Underlying Value
1,890	113.95	130	100.5	122.9	130	86	51.637	91,500	3,600	1,950.7
1,920	94	115	82.05	107.05	114	661	399.531	153,600	18,300	1,950.7
1,950	79.6	96	68	89.75	95	547	332.995	344,700	0	1,950.7
1,980	62	80	54.15	72.15	80	408	250.21	376,200	-9,600	1,950.7
2,010	50.9	66	43.05	60.85	66	268	165.961	60,000	1,500	1,950.7
19-May-09										
1,890	550	550	360	365	370	91	63.169	72,600	-18,900	2,230.9
1,920	330	440	311.25	333.35	350	187	129.734	121,200	-32,400	2,230.9
1,950	400	410	210	306	300	105	72.553	338,100	-6,600	2,230.9
1,980	299	417	200	275.15	265.5	229	157.921	361,200	-14,400	2,230.9
2,010	241	350	241	243.75	242	101	69.515	48,000	-12,000	2,230.9
Put American										
15-May-09										
1,830	47.55	50	40	43	40.5	63	35.446	38,400	600	1,950.7
1,860	60	62	47.2	51.1	48	158	90.75	83,400	3,000	1,950.7
1,890	72	73	56.1	61.5	56.1	260	152.459	135,300	24,600	1,950.7
1,920	87.9	87.9	68.15	74.1	71	570	341.479	127,800	62,400	1,950.7
1,950	91.7	96	80.1	85.35	84	141	86.13	59,700	20,700	1,950.7
19-May-09										
1,830	0.1	6.8	0.1	6.2	5	24	13.208	36,900	-1,500	2,230.9
1,860	8	9	3.5	6.95	6.15	89	49.816	76,500	-6,600	2,230.9
1,890	15	15	4	8.25	8.95	179	101.833	111,600	-23,700	2,230.9
1,920	20	20	4.1	11.4	12.25	283	163.693	115,200	-12,600	2,230.9
1,950	25	25	2.2	13.75	15.75	125	73.476	69,300	9,600	2,230.9

Source: NSE, India.

- Explore the return potential of key stocks of the Indian capital markets. Case Exhibit 5 can be utilized for this, as close analysis of case Exhibit 5 clearly shows that not all stocks perform in tandem with the markets. You may also give the reasons for this.
- Formulate the options strategies in a scenario where Nifty either hits the lower circuits, plunges heavily or remains highly volatile, like the one presented in case Exhibit 2.