

MRA Volume III: Changes for Reprinting December 2008

When counting lines matrices and formulae count as one line and spare lines and footnotes do not count.

'Line -n' means n lines up from the bottom, so 'Line -1' means the last line.

Page	Location	Comment
BackFlap	Line 8	Replace 'increase' by 'increasingly'
xxviii	6	Insert 'show' after 'numerical examples'
2	Line 21	Insert full stop after 'notes'
3	Line 11	Insert 'the' before 'period'
6	Line 4 of III.1.2.4	Change '9 months from now' to '6 months from now'
8	Line 1, Section III.1.3	Delete 'is the amount invested' and, after 'of the bond' insert 'is the amount to be repaid to the bond holder at maturity (if the bond is issued at a discount or premium, the principal is not the amount invested)'
9	Line 7	Change 'bonds prices' to bond prices'
9	Table III.1.2	Change 3031 to 2031
11	Line 2 of III.1.4.1	Replace 'coupon annual' to 'annual coupon'
16	Line - 7	Replace n by T
16	Line - 5	Replace 'are' with 'at'
17	Footnote 19	Replace 'process' with 'processes'
18	Table III.1.7	In title, change 'models' to 'model'
19	Footnote 22	Change WBOR to LIBOR
21	Line 13	Change 'decreases' to 'increases'
22	Table III.1.8	In header row, change 'Years to maturity' and 'Maturity' both to 'Year'
23	Line 3	Insert '(including all reinvested coupons)' after bond. Add the footnote: 'This analysis is based on the assumption that all realised spot rates (i.e. the spot rates at which coupons are reinvested) are equal to the current forward rates.'
23	Line 7	Insert 'a' before 'measure'
24	Line 3	Replace 'change per unit change' with 'per unit change', i.e. delete first 'change'
24	Line after (III.1.36)	Replace T by P
24	Line - 2	Delete 'it'
26	(III.1.44)	3 lines below insert 'adverse' before 'interest rate movements'
26	Line - 5	Insert 'present value of the' before 'cash flows'; i.e. p in price in Table III.1.10
27	Bullet (a)	For clarification, add the following footnote at the end (i.e. after 'each bond.'): 'Note that we have computed value durations here as the actual price change for a 1 basis point change in yield, rather than with respect to a 1% change in yield. This is so that the value duration and the PV01 have similar orders of magnitude, as demonstrated by Table III.1.17.'
27-28	Ex III.1.10	Last 2 lines of page 27, move '=' to end and change to '=0'. Top of p28, remove minus sign from 97.59 and 128.02, add minus sign to 32.05. Next two bullets interchange 'buying' and 'selling' four times. Change 'shirts' to 'shifts'
28	Table III.1.13	In header row change 'Bonds 2' to 'Bond 2'. Add minus to 32,049 and change minus to plus on 1,289,198. Insert 'a' before 'bond portfolio' 2 lines below table
28	Line - 10	Replace 'amounted' with 'amount'
29	Line 2	Replace 'bonds' with 'bond'
29	Footnote	Change $1/2t$ to $t/2$
30	Lines 4 - 6, solution	Change 2.453 to 2.718, change 1.04 to 1.0498 and change 2.336 to 2.589. Typo in spreadsheet, please download corrected version from website.
30	Line 5, solution	Delete first 'by'
31	(III.1.53)	Should read $P_{t+T}^s = (B_{t+T}^s - B_{t+T}^0) + 100(1+c-s)(1+tR_0)^{-1}$ and two lines below change 'coupon s' to 'coupon c'
32	Example III.1.13	Add footnote: 'The solution assumes the 60bp spread is not a reflection of a lower than AA credit rating, If it is, then discounting should be not at LIBOR but at LIBOR + 60bp and the price would simply be 100.'
32	Solution Line 4	Change 83.865 to 83.866
32	Solution Line 7	Change 102.114 to 102.144
32	(III.1.54)	Should read $P_{t+T}^s = 100 \left(\sum_{\tau=t}^{t+T-1} s(1+y)^{-\tau} - (1-s)(1+y)^{-t+T} + (1+c-s)(1+y)^{-t} \right)$
32	Lines - 4 to - 1	Change 6.37 to 4.98, 1.048 to 1.0549, 0.985 to 0.999 and 0.004 to 0.028. Updated

		spreadsheet available on website.
32	Footnote 31	Replace ‘measures’ by ‘measured’
33	Line 2	Change ‘this’ to ‘the’, also in Line 5
33	Second bullet	Replace c by $c - s$ (twice)
34	Last equation	Replace 1.14 by 1.014 (twice), and change \$131,579 to \$147,929
35	Line 3 after bullets	Change ‘forward’ to ‘spot’
35	Line 7 after bullets	Delete spurious semi-colon
35	Line – 8	Delete ‘because it uses forward rates’
35	Footnote 34	Extend as follows: ‘... sheet instruments, in the sense that the notional does not appear on the balance sheet. However, under the EU accountancy standards IAS 39, all derivatives are marked-to-market on the balance sheet.
35	Footnote 35 line 1	Insert ‘market’ after ‘bond’
36	Line 4	For clarification, after ‘SOLUTION’ add ‘Although the floating payments are determined by the spot LIBOR at the previous fixing date, for valuation purposes we can assume that realised spot rates are equal to current forward rates.’
36	Table III.1.4	New spreadsheet available on the website, with the replacement table. Below table change \$0.62267 to \$0.61605, \$0.57852 to \$0.58120 and –\$44,155 to –\$34,851
37	Footnote 36	Numbers need changing to reflect error in spreadsheet, as follows: \$10.19139 → \$10.18830; \$0.19139 → \$0.18830; \$10.17032 → \$10.16701; \$10.14815 → \$10.14463.
38	Table III.1.5	Replace GBP/USD with USD/GBP (twice)
39	Lines 2 and 4	Change £1,296,961 to £1,295,961
39	Line – 13	Change 0.0586 to 0.0522
40	Footnotes	For clarity, at end of FN 38 add ‘In this case we have a cross-currency swap without basis risk.’ Reduce size of italic font in FN 39.
40	Line 4	Replace ‘covert’ with ‘convert’
40	Line 8	Change ‘based on a forward rate’ to ‘based on a rate’
40	Line 16	Add ‘date’ after ‘payment’ at end of line
41	Line 3	Replace ‘manger’ with ‘manager’. Also in footnote 39.
41	Line 8	Change 0.0045 to 0.045
41	Section III.1.8	Insert ‘a’ after ‘of’ in heading
43	(III.1.57)	Delete ‘0.01 ie’
44	Line 1	Change ‘103.6697’ to ‘103.6579’
45	Table III.1.18	Last column, 806.42 should be 876.42.
46	Line 2	Change ‘maturity’ to ‘tenor’
46	Solution	Line 2: Change Table III.1.20 to III.1.19; Line 4/5, change £4.81 to £4.82 and (III.1.59) to (III.1.62). Then in displayed calculation below change 1.75 to 0.75.
47	Table III.1.20	Copied incorrectly: delete first column of (3) figures under line, shift the rest one place to the left and insert the following figures under header 11: 4.98, 42, 1590.
47	Line 4	For clarity, add ‘(shown on the horizontal axis)’ after ‘cash flow is received’
48	Footnote 43	Update link http://epp.eurostat.cec.eu/ is now http://www.ecb.int/stats/money/yc/html/index.en.html
49	Footnote 47	Change ‘Swannel’ to ‘Swannell’ – also in reference list
50	Line above Table III.1.22	Change $y_n = n^{-1}(\delta_n - 1)$ to $y_n = n^{-1}(\delta_n^{-1} - 1)$
50	Line -10	Delete full stop at the end
51	Lines 1 – 4	Change ‘discount rate’ to discount factor’ three times
51	Line 16	Insert ‘a’ before ‘misleading’
54	Line – 4	Delete ‘errors’
55	Line 11	Insert footnote ‘See Section III.3.8.5 for further details about the LIBOR model.’
59	Line – 14	Insert ‘that’ before ‘are’
60	Line – 15	Insert ‘is’ before ‘usually’
60	Line – 1	Delete ‘a’ before ‘the’
63	Line 15	Change ‘corresponds’ to ‘correspond’
63	Line – 6	Change ‘forward’ to ‘interest’
64	Line 14	For clarity, insert ‘, in basis points,’ after ‘...deviation of the discount rate’
64	Line 16	Change ‘at time T , t is’ to ‘at time T is’
69	Footnote 10	Replace ‘tic’ with ‘tick’
73	Para 2, Line 4-5	Delete ‘where secondary trading at the current forward rate is also possible.’

85	Line 1	For clarity, replace ‘They’ by ‘Counterparties’
85	Line 7	Delete second ‘futures’, it is superfluous
86	Line 14	For consistency, change ‘20’ to ‘twenty’
88	Line - 5	Delete ‘a spot position plus’ and then at end of sentence insert ‘and with nominal equal to the value of the spot’
91	Ex III.2.4	Change $-\pounds 126.4$ to $-\pounds 123.58$ and change $\pounds 126.0$ to $\pounds 124.02$. Typo (minus sign missing) in spreadsheet. Please download corrected version.
91	(III.2.12)	Interchange subscripts f and d ; line above, interchange (III.2.11) and (III.2.10)
92	Ex III.2.5	Change 0.045 to -0.045 and 055 to -0.055 ; Change $\pounds 1534$ to $\pounds 1467$ and change $-\pounds 1542$ to $-\pounds 1459$. Same typo in spreadsheet. Please download correction.
93	Line 17	Delete ‘or hot’ (because winter is not usually ‘hot!’)
93	Line – 9	For clarity, insert ‘the underlying of’ before ‘financial futures’
99	Line -1, -2	Replace the entire sentence here with ‘Companies usually risk-manage their commodity exposures by planning their requirements in advance and taking positions on futures, rather than buying on the spot market.’
106	Line 8	The wrong annualizing factor has been used: it should be $\sqrt{1/12}$ and not $\sqrt{250/10}$. The result is a futures stdev of \$5.77 instead of \$4, a spot stdev of \$5.92 instead of \$4.1, and a covariance of $0.95 \times 5.77 \times 5.92 = 32.46$. Below this the price risk is \$18,541 instead of \$12,845 and finally in (III.2.37) the optimal beta is $32.46/5.77^2$ (and this is still equal to 0.97375)
109	Line – 3	Delete ‘, as shown in Section I.6.3.2’
110	Line – 12	Replace 11.55 by 0.49 and 10.31 by 0.42. Also at top of page 111 replace 90,000 by $0.25 \times 15,000$. [Although these typos are in the calculation the results are correct.]
114	Line 8	For clarity, replace ‘cash flow of $\pounds 1,059,400$ in 9 months’ by ‘cash flow in 9 months with present value $\pounds 1,059,400$ ’. And in line 10, replace 108.56639 with 109.9882.
115	Line – 9	For clarity, after ‘within 2 index points’ insert ‘of the spot price’.
116	(III.2.50)	Switch signs on interest rate and dividend yield terms, also in bullets below.
124	Line – 1	Replace CFT with CTD
126	Line – 7	Insert comma after ‘been’ and replace ‘observe’ by ‘obscure’
134	Line 19	Replace ‘hedger’ by ‘hedgers’
134	4 th Bullet	Delete (and put full stop after 3 rd bullet)
138	4 th Bullet	For clarity, change ‘underlying and the underlying volatility’ to ‘underlying price and its volatility’
139	Line 19	‘rate’ not ‘rates’
140	Line 6	Insert ‘motion’ after ‘Brownian’ (also line 14)
140	Line 18	Delete ‘little’
140	Line 25	‘price’ not ‘prices’
140	Footnote 6	Insert ‘rather’ before ‘than by a normal variable’
141	(III.3.4)	Close gap between σ and $S(t)$ and put this before $f_S(S, t)$. Replace Z by W
141	Line 13	i.e. line below (III.3.5): replace ‘are’ with ‘is’
141	Line 25	i.e. line below (III.3.7): replace ‘or’ with ‘of’
141	Footnote 7	Line should read $df \approx \left(f_t + a f_s + \frac{1}{2} b^2 f_{ss} \right) dt + b f_s dW$
142	Line 8	Change ‘expected return’ to ‘expected value, discounted at the risk free rate’ (& l. -3)
142	Line 10	Replace ‘expected value’ with ‘risk-free rate’
143	Footnote 15	Replace (1969) by (1959)
143	19	Change ‘the price of’ to ‘the value of’
143	22	Insert comma after ‘complete’
145	(III.3.13)	Insert ‘ $-\frac{1}{2} \sigma^2 t$ ’ before ‘ $\sigma W(t)$ ’ and also in next equation but one
148	Line – 3	Replace ‘as a well’ by ‘as well’
151	1 st Line of III.3.3	Delete first ‘the’
153	After 1 st two bullets	Change ‘strategies pay-off’ to ‘strategies pay’. Also after 2 nd two bullets.
159	Footnote 33	‘rebalancing until’ should not be in italics
160	Line 4	Delete redundant ‘future’
163	Line 12	Interchange OTM with ITM twice
166	Lines 15 & 16	Replace ‘one’ by ‘x in’ in line 15 and replace ‘one’ by ‘y in’ in line 16
167	Line – 4	To be more precise, replace ‘there is an unlimited potential for losses.’ by ‘there is a huge potential for losses, limited only by the value of strike.’
168	Line – 10	To be more precise, replace ‘unlimited’ by ‘huge’

170	Line 4	For clarity, change ‘This is a.’ to ‘An ATM straddle is a...’
170	Line 7	Interchange ‘call’ and ‘put’; insert ‘relative to the ATM strike,’ after ‘a higher strike,’
174	Line – 13	Insert ‘is’ after ‘these cases it’
175	Line – 1	Insert ‘dt’ before ‘=’
175	Footnote 43	Replace ‘see’ by ‘See’
177	Line 5	Change reference from (III.3.47) to (III.3.49)
178	Line 8	Insert ‘the dividend yield,’ before y
178	Line 15	Change ‘word’ to ‘words’
180	Line 14	Interchange ‘call’ and ‘put’
180	Line 16	Insert minus sign between = and 16.61
184	Lines – 2 & – 1	For clarity, change ‘And our.’ to ‘Our ...’; insert ‘the BSM vega and’ before $V(\sigma)$ and insert ‘both of’ before ‘which’
186	Table III.3.4	Gamma: the exponential should be in the numerator not the denominator, Vanna: insert minus sign. Download corrected spreadsheets, Ex III.3.7 and III.5.10.
187	Line 12	Remove minus sign before $\frac{1}{2}$
187	Line 14	Replace δ_C here by δ_P
192	(III.3.80)	Same typo (missing minus sign) for vanna, so insert minus sign before l.h.s. in last equation and flip graph on vertical axis (see new spreadsheet)
194	Last formula	Change 50 to 51
195	Line – 13	Insert ‘is’ before ‘called’
195	(III.3.81)	For clarity, use T_m not m after N in both lines. Also in (III.3.82)
195	Line – 4	For clarity, change m to T_m and in next line replace ‘(e.g. 6 months)’ by ‘in years (e.g. $T_m = \frac{1}{2}$ for 6 month rates)’
196	(III.3.82)	Increase font size for equation tag ‘(III.3.82)’
196	Line – 11	Insert ‘of’ after ‘sequence’
197	Line 10	No new paragraph, and place full stop after Section III.4.2.6. Capitalize S in ‘Since’
197	Ex III.3.9	In Line 3 change ‘January 2012’ to ‘January 2013’
197	Table III.3.7	Row 2, last column: change C_1 to C_2
197	Line – 1	Change 5% to 4%, also in two equations on next page
200	(III.3.90) & (III.3.91)	Insert ‘exp(’ before the integral and an additional ‘)’ after ds
200	Line 10	Change ‘bond prices’ to ‘bond option prices’
201	Line – 6	Make ‘function’ plural
202	(III.3.97)	Replace M by M_i
203	Line 2	Change (III.3.9.5) to (III.3.95)
203	Line 3	Replace M by M_i^2 and σ_i by σ_i^2 . In case study ‘volatility factors’ spreadsheet, column F, insert square root in denominator, so Table III.3.9 changes slightly.
207	1 st line of III.3.9	Delete ‘may’ and ‘quite’ and replace ‘. The pay-off may’ with ‘which’
210	Line – 4	Replace ‘options’ with ‘option’s’
211	3 rd bullet	Replace ‘two underlying’ by ‘two assets’
211	Line – 7	Insert ‘two’ before ‘processes’ and change 1 to ‘one’
214	Line – 8	Replace $\frac{1}{2}$ by $\frac{1}{2}$
215	Line 4	Insert ‘the’ before ‘risk free rate’. Also on p216 line 3.
215	Line 10	Change ‘The’ after comma to ‘the’
215	Figure III.3.34	Change 50 on horizontal scale to 0 and delete ‘(days before expiry)’ from legend. (NB. In spreadsheet, cell C8 is ‘days from now’, not days before expiry)
221	Line 4	Replace 2.5639 by 2.5642
222	Line 10	Replace ‘put in’ by ‘put. In’
223	Line – 2	Replace ‘average strike’ by ‘forward price’
224	Line 1	Replace 2.1861 by 2.4834
225	Line 7	Change ‘factor sensitivities’ to ‘factors’
225	Line 8	Change ‘sensitivity’ to ‘sensitivities’
225	Line 9	Change ‘cross-sensitivities’ to ‘factor combinations,’
225	Line 12	Change ‘The’ to ‘An’
228	Line 13	Insert ‘(or model)’ after ‘market’
228	Lines 16 - 18	Delete ‘model’ (occurs once in each line)
228	Line 21	Insert ‘market’ before ‘option’
228	Line – 6	Insert ‘may’ before ‘have’
231	Line 16	Add footnote: ‘Of course, the market price is set by supply and demand, but it still depends on the time t at which it is made and on the underlying price F at this time.’

234	Line – 8	Replace ‘TTM’ with ‘in-the-money (ITM)’
240	Line – 4	Insert T_1 after first bracket on right hand side.
245	Line 2	Insert comma after ‘at this time’
245	Point 1.	Insert ‘(puts)’ after ‘illiquid calls’ and insert ‘(calls)’ after ‘liquid puts’
248	Line 8	For clarity, insert ‘, even’ after time and insert a comma after 100
251	2 lines after (III.4.20)	Delete ‘and expiry time T ’. In line -10, insert ‘the’ after ‘in’
252	Displayed equations	In both equations change 0.0636 to 5.21%, change 52.25% to 59.32%, change 0.9364 to 94.79% and change 9.80% to 9.94%. Change 12.5% to 12.51% below (twice)
256	Line 13	For clarity, replace ‘they’ by ‘spreads at different strikes’
259	Footnote 36	Change ‘170 days’ to ‘6 months’
260	Line 8	Interchange ‘low’ and ‘high’
269	(III.4.45)	Change first minus to a plus sign
274	Line - 6	Insert ‘(t)’ after V three times and after B .
275	Line 9	Delete ‘so’
283	Footnote 63	Change III.3.24 to III.4.24
283	Footnote 64	Replace ‘This is’ by ‘This figure was generated using’
285	Line – 3	Insert comma after ‘process’ and after ‘random numbers’ in next line
288	Line – 3	Delete redundant ‘the’ before ‘implied’
290	Line – 6	Replace ‘We’ by ‘, we’. Insert ‘the’ before ‘stochastic’ and change ‘model’ to ‘models’
291	Line 11	Change ‘saw’ to ‘seen’, and in line – 10 insert ‘, for example’ after ‘So’
294	Line – 7	Change ‘Where’ to ‘where’, insert full stop after ‘smile, replace ‘so’ with ‘So’
296	Line 18	Replace ‘fits often’ by ‘often fits’
304	Line 11	‘RV’ in text below equation should be italic
304	Line below (III.4.106)	Insert ‘ P_t is the price of the underlying index, and’ after ‘where’
304	Line – 4	Change ‘long’ to ‘short’
305	Line below (III.4.108)	Change $PV_{t,T}^2$ to $K_{t,T}$
305	Line – 1	Change K to PV
308	Line 3	Change ‘to’ to ‘do’
308	(III.4.113)	Insert T^{-1} before last integral sign
309	Line 10	For clarity, insert ‘short’ before ‘log’
311	Line – 13	For clarity change ‘swaps’ to ‘swap rates’
311	Line – 4	For clarity, change ‘volatility is lower now’ to ‘at the time of writing volatility is lower’
312	Line – 10	Insert comma after ‘time-consuming’
313	Line – 8	Reads better if you change ‘but’ to ‘and’ and delete ‘quickly’
314	Line – 6	Insert ‘volatilities of’ before ‘long term options’
319	Line – 9	Make first ‘portfolio’ plural (leave second singular)
319	Line - 1	For clarity, insert ‘By contrast,’ before ‘With’ (and l.c. w of course)
321	Line – 3	For clarity, change ‘interest rate’ to ‘curve’
322	Line 18	For clarity, change ‘zero coupon’ to ‘discount’
323	1 st bullet	Insert ‘and credit spread’ before ‘risk factors’
325	Line 5	Change first ‘zero’ to ‘yield’ and second ‘zero’ to ‘discount’ (also at 3 lines below). In line 6 change ‘future’ to ‘futures’
325	Line – 6	Change ‘these portfolio-specific’ to ‘the portfolio’s specific’
326	Line 10	Insert ‘be’ after ‘theoretically’
326	Line 17	Change ‘Asset managers base’ to ‘They base’
326	Line 22	For clarity, insert ‘with respect to each factor’ after ‘beta’
326	Line 23	Insert ‘that’ before 50%
326	Line 28	Change ‘an asset manager’s’ to ‘his’
326	Line 31	Change ‘asset manager aims’ to ‘aim is’
326	Line 32	Change ‘to find’ to ‘that define’
327	Line 4	Insert ‘Usually’ before ‘A risk manager’
327	Line 6	Replace ‘Instead’ with ‘Unless he seeks a decomposition of risk into risks due to various sub-portfolios’
330	Section III.5.2.6	For clarity, insert ‘some’ before ‘highly collinear’ in para 1, line 1; and change ‘term structure’ in para 3 to ‘highly collinear system’ at line 3 and to ‘system’ at line 7.
331	Table III.5.1	In column 2 change ‘Zero curve’ to ‘Zero curve and credit spread curve’. In column 3 add ‘and dividend yields’ after ‘plus zero curve’
331	Line – 7	For clarity, change ‘interest rates’ to ‘discount rates and credit spreads,’
332	Line 5	Insert comma after factors (also in line 7)

332	Line 5 of III.5.3	Delete redundant 'zero'
332	Footnote 16	Reduce font size on symbol €
333	Line – 14	Delete redundant LIBOR
333	Line – 1	Insert $\times 10^{-4}$ after \$T
333	Table III.5.2	Insert $\times 10^4$ after PV01
334	Line 5 after table	Insert $\times 10^{-4}$ after $\$T(1 + R)^{-1}$
335	Line 2	Delete 'uniquely'
337	Line 7	For clarity, change 'This gives' to 'The solution is not unique because the volatility constraint is quadratic. One solution is'
337	Line – 18	Change 'i.e.' to 'e.g.'
337	Line – 16	Delete redundant 'therefore'
338	Line 5	Insert 'curve' after 'discount'
341	Line 5,6	Change 'risk factor mapping and it is very simple to simulate' to 'function, simulating' and delete parentheses round phrase at end of sentence.
341	Line 8	Change 'mapping' to 'sensitivities' and 'provides' to 'provide'
341	Line 9	Change 'It provides' to 'They provide'
341	Line 10	Change 'ignores' to 'ignore' and 'Its' to 'The'
341	Line 11	Delete 'estimate portfolio risk and to'
341	Line 3 of III.5.5.1	Delete first two 'the', also first 'the' in next line.
341	Footnote 18	Insert 'we' before 'sometimes'
343	First bullet	Insert 'two' before 'short'
343	Second bullet	Change 'two' to 'four' and delete 'lose' after 'gain' in line below equation.
346	Table III.5.5	Align £ signs in lower part of second column
350	First line of Solution	Insert comma before 'to infer'
351	(III.5.38)	Last bold upper case R should be bold lower case r
352	Table III.5.8	Change second row of figures to: 0.0442, 0.0456, 0.0468, 0.0095 and position gamma at end is 0.0532. Please download spreadsheet with typo corrected.
352	Line – 1	Change 0.0537 to 0.0532
354	Lines 3 & 4	Replace 0.5417 by -.0269, 0.6013 by 0.6024, 0.02685 by 0.0532 and 0.1994 by 0.1963
354	Line – 15	Move] to end of line before full stop.
355	Line 2	For clarity, insert ', ρ ' after 'correlation'.
355	(III.5.43)	Insert 2 before γ_{12}
356	Footnote 32	Replace 'to OLS' with 'than OLS'
357	Line 10	Replace 'number underlyings' by 'number of underlyings'
358	Table III.5.9	Change 'Option B Short put' to Option B Long put'
358	Line 5	Change 'volatilities of the two...' to 'variances of the two...'
358	Line 6	Insert hyphens between 'in the money'
361	Line - 1	Replace 2005 with 2006 twice.
363	Line – 11	Move subscript i on first w_i closer to w .
364	Line 12	Replace 'discount' by 'interest'
364	Line 28/29	Replace 'options value' by 'option'
365	Line – 9	Delete redundant : after i.e.