Actual volatility, 15
Albatross spread, 261–267
  long-call, 264
  strategy, 264–266
American style options, 8, 68
Appreciating collars, 181
Asset classes
  defined, 14
  spreads as, 227
  theta as, 107–108
  volatility as, 14–16, 154–155
Assignment of contracts, 131–132
At-the-money
  butterfly spreads, 250
  covered calls, 140
  defined, 8
  gamma and, 76–79
  implied volatility and, 35, 41
  theta and, 100–101, 103–106
  vega and, 87, 91, 96
  vertical spreads and, 206–215
Back spreads
  butterfly spread and, 244–245
  configuring and pricing, 236–238
  defined, 24
  greek values and, 232–236
  overview and examples, 227–229
  volatility and, 238–239
Bear spreads, 204, 206,
Bell curve/normal distribution, 33, 43–50
Black-Scholes pricing model, 39, 40, 45, 52, 68, 106
Bleed, 84
Bull spreads, 201–204, 214
Butterfly spreads
  back spreads and, 244–245
  benefits of, 241
  greek values and, 247–249
  setting up, 241–245
  structuring and pricing, 250
  volatility, 244–246, 250–251
Buy-write, 131, 133, 135. See also
  Covered calls
Calendar spreads, 218–225
Call options. See also Covered calls;
  Straddles/strangles; Vertical spreads
  back spreads, 228–230
  butterfly spreads, 245–246
  defined, 9
  delta and, 70, 74
  gamma and, 76–84
  long/short, 75–76, 87
  ratio spreads, 228–229, 231–236
  stocks vs., 10–11, 45
  theta and, 99–101, 102–107
  vega and, 91
Cash-secured puts
  definition and overview, 148–149
  exit strategy, 155–156
  naked puts, 134–135, 154–155
  risks and consequences, 152–154
  volatility and, 149–152
<table>
<thead>
<tr>
<th>Term</th>
<th>Page(s)</th>
<th>Term</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casselberry, Donald</td>
<td>26</td>
<td>Straddles/strangles</td>
<td>189</td>
</tr>
<tr>
<td>Chicago Board of Options Exchange (CBOE)</td>
<td>14</td>
<td>Time to expiration</td>
<td>71</td>
</tr>
<tr>
<td>Chicago Museum of Science and Industry</td>
<td>26</td>
<td>Vertical spreads</td>
<td>208–209</td>
</tr>
<tr>
<td>Clarke, Arthur C.</td>
<td>26</td>
<td>Volatility and</td>
<td>69–74</td>
</tr>
<tr>
<td>Collars</td>
<td>175–178</td>
<td>Wingspreads and</td>
<td>255–256</td>
</tr>
<tr>
<td>Flexible collars</td>
<td>178–181</td>
<td>Derivatives</td>
<td></td>
</tr>
<tr>
<td>Protective collars</td>
<td>174–175</td>
<td>Cost-efficiency</td>
<td>9–10</td>
</tr>
<tr>
<td>Reset collars</td>
<td>182–183</td>
<td>Curvature and</td>
<td>75</td>
</tr>
<tr>
<td>Revised collars</td>
<td>183–185</td>
<td>Defined</td>
<td>7</td>
</tr>
<tr>
<td>Types of collars</td>
<td>173–174</td>
<td>Higher moments of</td>
<td>45–47</td>
</tr>
<tr>
<td>Condor spreads</td>
<td>258–261</td>
<td>Vega insensitivity and</td>
<td>93–94</td>
</tr>
<tr>
<td>Strategy</td>
<td>260</td>
<td>Divergence, capturing</td>
<td>252</td>
</tr>
<tr>
<td>Time structure and</td>
<td>261</td>
<td>Edison, Thomas</td>
<td>22</td>
</tr>
<tr>
<td>Underlying and</td>
<td>261</td>
<td>Einstein, Albert</td>
<td>52</td>
</tr>
<tr>
<td>Volatility environments and</td>
<td>261</td>
<td>Equities</td>
<td>9–10, 23, 34–36, 68</td>
</tr>
<tr>
<td>Convergence, capturing</td>
<td>252</td>
<td>European style options</td>
<td>8, 60</td>
</tr>
<tr>
<td>Covered calls</td>
<td></td>
<td>Exchange-traded options</td>
<td>8</td>
</tr>
<tr>
<td>Collars and</td>
<td>170–171, 173</td>
<td>Exotic derivatives</td>
<td>7–8</td>
</tr>
<tr>
<td>Defined</td>
<td>131</td>
<td>Expiration</td>
<td></td>
</tr>
<tr>
<td>Theory and reality</td>
<td>133–137</td>
<td>Calendar spreads and</td>
<td>218–219, 220–222</td>
</tr>
<tr>
<td>Credit/debit spreads</td>
<td>201, 204, 205, 215</td>
<td>Delta</td>
<td></td>
</tr>
<tr>
<td>Curvature</td>
<td>75</td>
<td>Delta</td>
<td></td>
</tr>
<tr>
<td>Day trading</td>
<td>123–124</td>
<td>Back spreads and ratio spreads</td>
<td>233–234</td>
</tr>
<tr>
<td>Debit/credit spreads</td>
<td>201, 204, 205, 215</td>
<td>Butterfly spreads</td>
<td>248</td>
</tr>
<tr>
<td>Delta</td>
<td></td>
<td>Calculations and examples</td>
<td>66–67</td>
</tr>
<tr>
<td>Back spreads and ratio spreads</td>
<td>232–234</td>
<td>Defined</td>
<td>17–18, 63, 65–66</td>
</tr>
<tr>
<td>Calculations and examples</td>
<td></td>
<td>Gamma</td>
<td></td>
</tr>
<tr>
<td>Butterfly spreads</td>
<td>247</td>
<td>Back spreads and ratio spreads</td>
<td>233–234</td>
</tr>
<tr>
<td>Defined</td>
<td>17–18, 63, 65–66</td>
<td>Butterfly spreads</td>
<td>248</td>
</tr>
<tr>
<td>Gamma</td>
<td></td>
<td>Calculations and examples</td>
<td>76–78</td>
</tr>
<tr>
<td>Hedging</td>
<td>18–20, 65, 73, 80</td>
<td>Defined</td>
<td>23–24, 63, 75–76</td>
</tr>
<tr>
<td>Probability and</td>
<td>63–65</td>
<td>Expiration</td>
<td>105–106</td>
</tr>
<tr>
<td>Rules of</td>
<td>68–69</td>
<td>Management of</td>
<td>79–84</td>
</tr>
<tr>
<td>Volatility and</td>
<td>69</td>
<td>Flexibility, capturing</td>
<td>252</td>
</tr>
</tbody>
</table>

*Note: The text is extracted from a list and does not form a complete sentence.*
straddles/strangles, 189
vega and, 90–91
vertical spreads and, 208–210
volatility and, 78–79
wingspreads and, 256
Goodyear, Charles, 22
Greeks. See also specific greeks, such as Gamma
back spreads and ratio spreads, 232–236
butterfly spreads, 247–249
calendar spreads, 225
importance of, 103
limitations of, 92–93
risks and, 63
vertical spreads, 204–205, 208–2011
wingspreads and, 255–257
Gulf War, 93

Hedging
covered calls, 134
delta and, 17–19, 65, 73, 79, 196–197
downside risk, 10
gamma and, 81–82
position trading, 125–126
vertical spreads, 201
Historical volatility, 49
calculation of, 27–32
defined, 15, 25
implied volatility vs., 17–21, 37–38, 192–193
Hutton, E. F., 17

Implied volatility. See also Collars; Vega
analysis of, 16–17
calculation of, 32–35
calendar spreads and, 223–225
covered calls, 137–144
defined, 15–16, 25
equities and, 22, 34–35
vs. historical volatility, 17–20, 36–38, 52, 192–193
prediction of, 25–27
term structure, 111–114
as a trading range, 146–147
value of, 20–21
vega and, 88–90
vertical spreads and, 211–215
VIX and, 59–60
Index, VIX, 54–55
In-the-money
back spreads, 236
covered calls, 139–140
defined, 8
delta and, 18
equity prices and, 35
gamma and, 76–79
implied volatility and, 8, 34, 40
theta and, 100–101, 103–106
vega and, 87–89
vertical spreads and, 206–215

Kurtosis, 47
Legs, 23
Leverage, 9, 35, 81, 136, 158, 217
Long-call albatross spread, 264
Long/short options
back spreads and ratio spreads, 228–236
butterfly spread, 241–245, 247–250
calendar spreads, 218–225
collars and, 170–172, 174, 177–178, 182–183
covered calls, 131, 135
delta and, 66–68, 73–74, 84, 104
gamma and, 75–76, 79–82, 188
married puts, 166
straddles/strangles and, 23, 147, 189–192, 194–195
theta and, 100–101, 103, 106, 108
vega and, 87–88, 93, 97, 103
vertical spreads, 203–205, 206, 208
Ratio spreads
butterfly spread and, 242–243
configuring and pricing, 236–238
defined, 24
greek values and, 232–236
overview and examples, 227–229
puts and calls, 231–233
volatility and, 238–239
Reagan, Ronald, 26
Real assets, 14
Realized volatility, 15, 27
Reset collars, 182–183
Revised collars, 183–185
Rewards, wingspreads and, 254–255
Rho, 63
Risks. See also Collars; Hedging;
Volatility
butterfly spreads, 241, 245–246
covered calls, 134
defined, 4
delta and, 68, 73–74
dynamic, 14
greeks and, 63
premium, 39
stop-loss orders, 9–10
straddles/strangles, 189
tolerance of, 122–123
vega, 93–95
as volatility, 145–147, 157–158
wingspreads and, 254–255
Rolling down, 142–143
Royko, Mike, 26
Shearson Lehman Brothers, 17
Short/long options. See Long/short options
Short-term trend trading, 124–125
Skew
analysis of, 47–49
defined, 15–16, 20
effect on greeks, 113–114
examples, 40–41
implied volatility and, 113–114
negative, 38, 46
straddles/strangles and, 192–194
third moment/strangles and, 192–194
vertical spread and, 206–207
Spreads. See also Back spreads; Butterfly spreads; Ratio spreads; Vertical spreads
as an asset class, 227
bear, 201
bull, 201–204, 214
calendar, 218–225
debit/credit, 201, 203, 206, 215
Statistical significance, volatility and,
121–122
Stocks, 9–11, 23, 34–36, 45
Stop-loss orders, 10–11, 124–127, 161
Straddles/strangles
buying and selling premium, 188
comparisons, 189–192
definition and overview, 23, 187
historical vs. implied volatility and,
192–193
properties of, 188–189
skew and, 193–194
strangle swap and, 194–199
Strike prices
back spreads and ratio spreads, 227–239
butterfly spreads, 248–253, 247–248,
250–251
calendar spreads and, 219
collars and, 174, 177–178
covered calls, 128
gamma and, 85
historical volatility and, 19
implied volatility and, 15,
20–21, 34
straddles/strangles, 23, 189–192
supply and demand, 108
vertical spreads and, 201, 204–205,
206–208
Swaps, 194–199
Term structure, 111–114
implied volatility, 114–115
Theta
back spreads and ratio
spreads, 234
butterfly spreads, 248–249
calendar spreads and, 220
defined, 23, 63, 99
overview, 99–101
straddles/strangles, 189
vertical spreads and, 209–210, 214
volatility and, 90–91, 101–108
wingspreads and, 256
Third moment of normal
distribution, 46
Time decay, 23, 63, 99. See also
Expiration; Theta
Time spreads, 218–225
Time structure, condor spreads and,
260–261
Trading successfully, 126–129
Transamerica, 17
Travelers Insurance, 17

Uncertainty, 4–5, 21–23
Underlying assets, 7–8

Value of volatility, 117
Vega. See also Implied volatility
back spreads and ratio spreads, 235
butterfly spreads, 249
calendar spreads and, 223–225
complications, 110–111
defined, 23, 63, 87
implications of, 91
implied volatility and, 88–90
overview, 87–88
straddles/strangles, 189
theta and, 91, 101–108
time and, 90, 105
vertical spreads and, 210
volatility and, 91–97
wingspreads and, 256–257
Vertical spreads
definition and overview, 201–203
design of, 205–208
greeks and, 204–206, 208–211
implied volatility and, 211–215
rationale for, 203–206
VIX
calculating, 56
defined, 54
historical volatility and, 52
history, 55–56
implied volatility and, 59–60
interpreting, 56
real event prediction and, 58–59
VIX Index, 54–55
insights, 57–68
Volatility. See also Historical volatility;
Implied volatility; Skew
actual, 15
as an asset class, 14–16, 154–155
back spreads and, 238–239
butterfly spreads, 245–247,
250–251
calculation of, 27–32
cash-secured puts, 149–152
crunch, 89, 90
delta and, 69–74
deposition and, 69
gamma and, 78–79
historical vs. implied, 17–20, 36–38,
192–193
kurtosis, 47
lessons of, 4–7
overview, 13
rare event scenarios, 157, 167,
193–194, 197–199
ratio spreads and, 238–239
realized, 15, 27
as risk, 145–147, 157–158
second moment of normal
distribution and, 46
statistical significance, 109–110
surface, 111–114
<table>
<thead>
<tr>
<th>Term</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>term structure and, 114–115</td>
<td></td>
</tr>
<tr>
<td>theta and, 91, 101–108</td>
<td></td>
</tr>
<tr>
<td>uncertainty and, 21–23</td>
<td></td>
</tr>
<tr>
<td>value of, 19–20, 128</td>
<td></td>
</tr>
<tr>
<td>vega and, 91–97</td>
<td></td>
</tr>
<tr>
<td>of volatility, 115–117</td>
<td></td>
</tr>
<tr>
<td>Wasting assets, 14</td>
<td></td>
</tr>
<tr>
<td>Wingspreads</td>
<td></td>
</tr>
<tr>
<td>price, 257–258</td>
<td></td>
</tr>
<tr>
<td>risks and rewards, 254–255</td>
<td></td>
</tr>
<tr>
<td>time to expiration, 257–258</td>
<td></td>
</tr>
<tr>
<td>Writing options, 131, 133, 135</td>
<td></td>
</tr>
</tbody>
</table>