

		Real Options Valuation, Inc.	Oracle / Crystal Ball	Palisades, Inc.
NUEVOS PRODUCTOS DE SOFTWARE	ROV Risk Simulator	★	★	★
	ROV BizStats	★	Ninguno	★
	ROV Modeling Toolkit	★	Ninguno	Ninguno
	ROV Quantitative Data Miner	★	Ninguno	Ninguno
	ROV Real Options SLS	★	Ninguno	Ninguno
	ROV Modeler, ROV Optimizer, ROV Valuator	★	Ninguno	Ninguno
	ROV Employee Stock Options Toolkit	★	Ninguno	Ninguno
	ROV Extractor and Evaluator	★	Ninguno	Ninguno
	ROV Web Models	★	Ninguno	Ninguno
	ROV Compiler	★	Ninguno	Ninguno
	ROV Visual Modeler	★	Ninguno	Ninguno
	ROV Dashboard	★	Ninguno	Ninguno

SIMULACIÓN			
FUNCIONALIDAD	RISK SIMULATOR 2011®	DECISION TOOLS Industrial Ver. 5.7	CRYSTAL BALL 11.1.2.1.000
Árboles de Decisión	Visual Modeler	SI	NO
Compatible Windows 7, VISTA, y Windows XP	SI	SI	SI
Compatible con Excel 2010, 2007, y 2003	SI	SI	SI
Compatible with Excel VBA	SI	SI	NO
Compatibilidad 64-Bit y 32-Bit	SI	SI	SI
Comprensibles Reportes de Simulación, Resultados Estadísticos, y Extracción de Datos	SI	SI	SI
Cópula Normal, T, y Quasi-Normal	SI	NO	NO
Creación de Múltiples Perfiles en la Simulación para Análisis de Escenarios	SI	NO	NO
Distribuciones de Probabilidad	45	40	26
Funciones basadas en Excel	SI	SI	NO
Generadores de Números Aleatorios	6	8	1
Idiomas disponibles	10	7	3
Simulación Multidimensional	SI	SI	SI
Simulación por Hiper Cubo Látino	SI	SI	SI
Simulación por Monte Carlo	SI	SI	SI
Truncamiento de Distribuciones y Simulaciones Correlacionadas	SI	SI	SI
Verificación y Revisión de Modelos	SI	SI	NO
Versión RUN TIME	SI	NO	NO

HERRAMIENTAS ANALÍTICAS

FUNCIONALIDAD	RISK SIMULATOR 2011®	DECISION TOOLS Industrial Ver. 5.7	CRYSTAL BALL 11.1.2.1.000
Ajuste Distribucional Por Percentiles	SI	NO	NO
Ajuste Distribucional Sobre Información Existente (Una y Múltiples Variables con Correlaciones)	SI	SI	SI
Análisis de Cambio Estructural	SI	NO	NO
Análisis de Componentes Principales	SI	SI	NO
Análisis de distribución de probabilidad (PDF,CDF,ICDF)	SI	SI	NO
Análisis de Escenarios	SI	SI	SI
Análisis de Intervalos de Confianza	SI	SI	NO
Análisis de Segmentación de Grupo - Conglomerados	SI	NO	NO
Análisis de sensibilidad	SI	SI	SI
Análisis estadístico de datos (Estadística Descriptiva, Ajuste de distribución, Histograma y gráficos, Pruebas de Hipótesis, Extrapolación No Lineal, Prueba de Normalidad, Estimación de Parámetro de Procesos Estocástico, Correlograma de Series de Tiempo, Pronóstico de Series de Tiempo, Proyección de Línea de Tendencia, Ajuste de Líneas de Tendencia.)	SI	NO	NO
Análisis Six SIGMA	Modeling Toolkit	SI	NO
Control de Precisión para Número de Simulaciones	SI	SI	SI
Desestacionalización y eliminación de tendencia	SI	NO	NO
Diagnóstico de datos (Autocorrelación, Correlación, Micronumerosidad, Heteroscedasticidad, No Linealidad, Valores Atípicos, Estimación de Parámetros Estocásticos, Rezagos de Distribución)	SI	NO	NO
Diseñador de Distribución (Distribución Personalizada)	SI	NO	NO
Extracción de variables de entrada y pronóstico simuladas	SI	SI	SI
Gráficas Sobrepuestas (Comparación de Múltiples Gráficas de Pronóstico)	SI	SI	SI
Gráficos y tablas distribucionales (Comparación de Múltiples Distribuciones y sus Momentos)	SI	SI	SI
Histogramas y gráficos de pronóstico con probabilidad acumulada, ajuste de distribución y análisis estadístico.	SI	SI	SI
Pruebas de Hipótesis de las Distribuciones	SI	SI	NO
Pruebas de Normalidad	SI	SI	NO
Pruebas No Paramétricas	SI	SI	NO
Simulación No-Paramétrica Bootstrap	SI	SI	NO
Tablas ANOVA	SI	SI	NO
Tablas de Tornado y Araña para el Análisis de Sensibilidad Estático	SI	SI	SI
Test de Independencia Chi - cuadrado	SI	SI	NO

PRONÓSTICO

FUNCIONALIDAD	RISK SIMULATOR 2011®	DECISION TOOLS Industrial Ver. 5.7	CRYSTAL BALL 11.1.2.1.000
Análisis de Regresión Múltiple	SI	SI	SI
Cadenas de Markov	SI	NO	NO
Combinatoria de Lógica Difusa	SI	NO	NO
Curvas Esponenciales J y Logísticas S	SI	NO	NO
Extrapolación No-lineal	SI	NO	NO
Modelación de Auto Econometría	SI	NO	NO
Modelación de Econometría Básica	SI	NO	NO
Modelo Spline cúbico	SI	NO	NO
Modelos ARIMA P, D, Q (Autorregresivo Integrado de Media Móvil)	SI	NO	NO
Modelos Auto ARIMA	SI	NO	SI
Modelos de Variables Dependientes Limitadas LOGIT, PROBIT, y TOBIT	SI	NO (Logit Only)	NO
Procesos Estocásticos (Caminata Aleatorio, Movimiento Browniano, Reversión a la Media, Salto de Difusión)	SI	NO	NO
Programación de Pronósticos (XML)	SI	NO	NO
Pronóstico de Línea de Tendencia	SI	NO	NO
Pronóstico de Redes Neuronales	SI	NO	NO
Pronóstico de Series de Tiempo	SI	SI	SI
Pronósticos de Volatilidad GARCH (GARCH, GARCH-M, TGARCH, TGARCH-M, EGARCH, EGARCH-T, GJR GARCH, GJR TGARCH)	SI	NO	NO
Regresión Stepwise (Forward, Backward, Combinada, Correlación)	SI	SI	NO

OPTIMIZACIÓN

FUNCIONALIDAD	RISK SIMULATOR 2011®	DECISION TOOLS Industrial Ver. 5.7	CRYSTAL BALL 11.1.2.1.000
Análisis de Frontera Eficiente	SI	SI	SI
Buscar Objetivo (Búsqueda Rápida)	SI	NO	NO
Optimización con Variables Binarias	SI	SI	SI
Optimización con Variables Continuas	SI	SI	SI
Optimización con Variables Discretas	SI	SI	SI
Optimización Dinámica	SI	SI	SI
Optimización Estática	SI	SI	SI
Optimización Estocástica	SI	NO	NO
Optimización Lineal	SI	SI	SI
Optimización Multifase para Búsqueda de Óptimo Global	SI	NO	NO
Optimización No-lineal	SI	SI	SI
Optimización para una Variable	SI	NO	NO
Optimización por Algoritmos Genéticos	SI	SI	NO
Precisión, Tolerancia, y Control de Convergencia	SI	SI	SI
Simulación a Súper Velocidad con Optimización	SI	NO	NO

ESTADÍSTICAS

FUNCIONALIDAD	RISK SIMULATOR 2011®	DECISION TOOLS Industrial Ver. 5.7	CRYSTAL BALL 11.1.2.1.000
Calculos a Súper Velocidad	SI	NO	NO
Gráficas de Resultados y Estadísticas	SI	NO	NO
Herramienta de Visualización	SI	NO	NO
Idiomas Disponibles	10	0	0
Modelos Múltiples por Perfil	SI	NO	NO
Perfiles programables y editables en XML	SI	NO	NO
Perfiles Salvables para sus Modelos	SI	NO	NO
Lista Detallada de Metodos Estadísticos Soportados			
Adelantos	SI	NO	NO
Ajuste de Distribución de Datos	SI	NO	NO
Análisis de Componentes Principales	SI	NO	NO
Análisis de Segmentación de Grupo - Conglomerados	SI	NO	NO
Análisis de Series de Tiempo (Aditivo Estacional)	SI	NO	NO
Análisis de Series de Tiempo (Auto)	SI	NO	NO
Análisis de Series de Tiempo (Holt-Winter Aditivo)	SI	NO	NO
Análisis de Series de Tiempo (Holt-Winter Multiplicativo)	SI	NO	NO
Análisis de Series de Tiempo (Multiplicativo Estacional)	SI	NO	NO
Análisis de Series de Tiempo (Promedio Movil Doble)	SI	NO	NO
Análisis de Series de Tiempo (Promedio Movil Simple)	SI	NO	NO
Análisis de Series de Tiempo (Suavizamiento Exponencial Doble)	SI	NO	NO
Análisis de Series de Tiempo (Suavizamiento Exponencial Simple)	SI	NO	NO
ANOVA: Análisis de Dos Caminos	SI	NO	NO
ANOVA: Tratamiento de Bloques Múltimes Aleatorizados	SI	NO	NO
ANOVA: Tratamiento Simple de Factores Múltiples	SI	NO	NO
ARIMA	SI	NO	NO
Auto ARIMA	SI	NO	NO
Autocorrelación y Autocorrelación Parcial	SI	NO	NO
Autoeconometría (Detallada)	SI	NO	NO
Autoeconometría (Rápida)	SI	NO	NO
Cadenas de Markov	SI	NO	NO
Cambio Estructural	SI	NO	NO
Conteo	SI	NO	NO
Correlación	SI	NO	NO
Covarianza	SI	NO	NO
Curva de Rendimientos (Bliss)	SI	NO	NO
Curva de Rendimientos (Nelson-Siegel)	SI	NO	NO
Curva Esponencial J	SI	NO	NO
Curva S logística	SI	NO	NO
Desestacionalización	SI	NO	NO
Desviación Estándar (Muestral)	SI	NO	NO
Desviación Estándar (Poblacional)	SI	NO	NO

Desviación Semi-estándar (Inferior)	SI	NO	NO
Desviación Semi-estándar (Superior)	SI	NO	NO
Diferencia	SI	NO	NO
Estacionalidad	SI	NO	NO
Estadística Descriptiva de Datos	SI	NO	NO
Estadística Noparamétrica: Independencia Chi-Square	SI	NO	NO
Estadística Noparamétrica: Prueba de Bondad de Ajuste Chi-Square	SI	NO	NO
Estadística Noparamétrica: Prueba de Friedman	SI	NO	NO
Estadística Noparamétrica: Prueba de Kruskal-Wallis	SI	NO	NO
Estadística Noparamétrica: Prueba de Lilliefors	SI	NO	NO
Estadística Noparamétrica: Prueba de Runs	SI	NO	NO
Estadística Noparamétrica: Varianza Poblacional Chi-Square	SI	NO	NO
Estadística Noparamétrica: Wilcoxon Signed-Rank (One Var)	SI	NO	NO
Estadística Noparamétrica: Wilcoxon Signed-Rank (Two Var)	SI	NO	NO
Estadística Paramétrica: Media para Una Variable (t)	SI	NO	NO
Estadística Paramétrica: Media para Una Variable (Z)	SI	NO	NO
Estadística Paramétrica: Medias para Dos Variables Dependientes (t)	SI	NO	NO
Estadística Paramétrica: Medias para Dos Variables Independientes (Z)	SI	NO	NO
Estadística Paramétrica: Proporción de Dos Variables Independientes (Z)	SI	NO	NO
Estadística Paramétrica: Proporción para Una Variable (Z)	SI	NO	NO
Estadística Paramétrica: Varianza para Dos Variables (F)	SI	NO	NO
Estadística Paramétrica: Varianzas Diferentes para Dos Variables Independientes (t)	SI	NO	NO
Estadística Paramétrica: Varianzas Iguales para Dos Variables Independientes (t)	SI	NO	NO
GARCH	SI	NO	NO
Gráfica de Control de Calidad: C	SI	NO	NO
Gráfica de Control de Calidad: NP	SI	NO	NO
Gráfica de Control de Calidad: P	SI	NO	NO
Gráfica de Control de Calidad: R	SI	NO	NO
Gráfica de Control de Calidad: U	SI	NO	NO
Gráfica de Control de Calidad: X	SI	NO	NO
Gráfica de Control de Calidad: XMR	SI	NO	NO
Gráfico de Área Estándar 2D	SI	NO	NO
Gráfico de Área Estándar 3D	SI	NO	NO
Gráfico de Barras Estándar 2D	SI	NO	NO
Gráfico de Barras Estándar 3D	SI	NO	NO
Gráfico de Línea Estándar 2D	SI	NO	NO
Gráfico de Línea Estándar 3D	SI	NO	NO
Gráfico de Puntos Estándar 2D	SI	NO	NO
Gráfico de Puntos Estándar 3D	SI	NO	NO
Gráfico de Scatter 2D	SI	NO	NO
Gráfico de Scatter 3D	SI	NO	NO
Heterocedasticidad	SI	NO	NO
Interpolación Lineal	SI	NO	NO
Jerarquía Ascendente	SI	NO	NO

Jerarquía Descendente	SI	NO	NO
Línea de Tendencia (Difference Detrended)	SI	NO	NO
Línea de Tendencia (Eliminación de Tendencia Lineal)	SI	NO	NO
Línea de Tendencia (Eliminación de Tendencia Logarítmica)	SI	NO	NO
Línea de Tendencia (Eliminación de Tendencia Polinomial)	SI	NO	NO
Línea de Tendencia (Eliminación de Tendencia por Media Estática)	SI	NO	NO
Línea de Tendencia (Eliminación de Tendencia Por Mediana Estática)	SI	NO	NO
Línea de Tendencia (Eliminación de Tendencia por Potencias)	SI	NO	NO
Línea de Tendencia (Eliminación de Tendencia por Promedios Móviles)	SI	NO	NO
Línea de Tendencia (Eliminación de Tendencia por Tasas)	SI	NO	NO
Línea de Tendencia (Exponential Detrended)	SI	NO	NO
Línea de Tendencia (Exponential)	SI	NO	NO
Línea de Tendencia (Lineal)	SI	NO	NO
Línea de Tendencia (Logarítmica)	SI	NO	NO
Línea de Tendencia (Polinomial)	SI	NO	NO
Línea de Tendencia (Potencia)	SI	NO	NO
Línea de Tendencia (Promedio Móvil)	SI	NO	NO
Logaritmo base 10	SI	NO	NO
Logaritmo Natural	SI	NO	NO
Máximo	SI	NO	NO
Mediana	SI	NO	NO
Mínimo	SI	NO	NO
Moda	SI	NO	NO
Modelo Econométrico Personalizado	SI	NO	NO
Modelos No Lineales	SI	NO	NO
Potencia	SI	NO	NO
Procesos Estocásticos (Movimiento Browniano Geométrico)	SI	NO	NO
Procesos Estocásticos (Movimiento Browniano Exponencial)	SI	NO	NO
Procesos Estocásticos (Reversión a la Media con Salto de Difusión)	SI	NO	NO
Procesos Estocásticos (Reversión a la Media)	SI	NO	NO
Procesos Estocásticos (Salto de Difusión)	SI	NO	NO
Promedio	SI	NO	NO
Pronóstico de Combinatoria Lógica Difusa	SI	NO	NO
Redes Neuronales	SI	NO	NO
Regresión Lineal	SI	NO	NO
Regresión No Lineal	SI	NO	NO
Regresión Stepwise (Backward)	SI	NO	NO
Regresión Stepwise (Correlación)	SI	NO	NO
Regresión Stepwise (Forward)	SI	NO	NO
Regresión Stepwise (Forward-Backward)	SI	NO	NO
Retornos Relativos	SI	NO	NO
Retornos Relativos en LN	SI	NO	NO
Rezagos	SI	NO	NO
Spline Cúbico	SI	NO	NO

Suma	SI	NO	NO
Variables Dependientes Limitadas (Logit)	SI	NO	NO
Variables Dependientes Limitadas (Probit)	SI	NO	NO
Variables Dependientes Limitadas (Tobit)	SI	NO	NO
Varianza (Muestral)	SI	NO	NO
Varianza (Poblacional)	SI	NO	NO
Volatilidad: Aproximación por Retornos Logaritmicos	SI	NO	NO
Volatilidad: EGARCH	SI	NO	NO
Volatilidad: EGARCH-T	SI	NO	NO
Volatilidad: GARCH	SI	NO	NO
Volatilidad: GARCH-M	SI	NO	NO
Volatilidad: GJR GARCH	SI	NO	NO
Volatilidad: GJR TGARCH	SI	NO	NO
Volatilidad: TGARCH	SI	NO	NO
Volatilidad: TGARCH-M	SI	NO	NO

MODELING TOOLKIT	<p>El Modeling Toolkit comprende más de 800 funciones, modelos y herramientas, así como más de 300 modelos en Excel y SLS basado en plantillas del Risk Simulator, Opciones Reales SLS, Excel, así como las siguientes funciones avanzadas:</p> <ul style="list-style-type: none"> • Análisis de Crédito • Análisis de Deuda • Análisis de Decisiones • Pronósticos • Aplicaciones Industriales • Análisis de Opciones • Probabilidad de Impago • Gerencia de proyectos • Cobertura de Riesgos • Six Sigma and Quality Analysis Tools • Herramientas Estadísticas • Modelos de Valoración • Curvas de Rendimiento 	★	Ninguno	Ninguno
-------------------------	--	---	---------	---------

REAL OPTION SUPER LATTICE SOLVER (SLS)	Opciones de Abandono, Contracción, Expansión y Chooser	★	Ninguno	Ninguno
	Opciones Americanas, Bermuda, Personalizadas y Europeas	★	Ninguno	Ninguno
	Opciones con cambio de Volatilidad	★	Ninguno	Ninguno
	Ejemplos de modelos avanzados SLS	★	Ninguno	Ninguno
	Opciones Exóticas Simple y Doble barrera	★	Ninguno	Ninguno
	Calculadora de Opciones Exóticas con más de 300 modelos	★	Ninguno	Ninguno
	Opciones Financieras, Opciones Reales y Stock Options para empleados	★	Ninguno	Ninguno
	Lattice Maker (add-in de Excel)	★	Ninguno	Ninguno
	Opciones de Fases y Activos Múltiples	★	Ninguno	Ninguno
	Opciones Compuestas	★	Ninguno	Ninguno
	Opciones Especializadas (Reversión a la media, Jump Diffusion, Arco iris)	★	Ninguno	Ninguno
	Simulación y optimización compatible con las funciones de Excel	★	Ninguno	Ninguno
	Redes Trinomiales, Cuadrinomiales, Pentanomiales con reversión A la media y Jump Difussion con Opciones Arco Iris de 2 activos		Ninguno	Ninguno
	Ecuaciones Visibles y Cálculos de las funciones de Modelos de volatilidad	★	Ninguno	Ninguno
Type of Employee Stock Options <ul style="list-style-type: none"> • Blackout Period • Changing Forfeiture Rates • Changing Risk-free Rates • Changing Volatilities • Forfeiture Rates (Pre- and Post-vesting) • Stock Price Barrier Requirements • Suboptimal Exercise Behavior Multiple • Vesting Periods • Todas las demás variables exóticas 	★	Ninguno	Ninguno	

SERVICIOS DE CONSULTORÍA	Servicios de Modelaje Avanzado	★	Ninguno	Ninguno
	Servicios de Construcción De Modelaje Básico	★	★	★
	Employee Stock Options Valuation 2004 FAS 123	★	Ninguno	Ninguno
	Valoración de Instrumentos financieros Exóticos (Warrants, Convertibles, Swaptions, CDO, MBS, y muchos otros instrumentos personalizados)	★	Ninguno	Ninguno
	Seguros y Análisis Actuarial	★	Ninguno	Ninguno
	Servicios de Valoración de Opciones Reales	★	Ninguno	Ninguno
	Análisis de Riesgo y Estrategias de Valoración	★	Ninguno	Ninguno
	Servicios de Valoración	★	Ninguno	Ninguno

SERVICIOS DE ENTRENAMIENTO

Certificado en Gestión de Riesgo (CRM)	★	Ninguno	Ninguno
Análisis de Riesgo de Mercado Y Riesgo de Crédito De acuerdo a Basilea II	★	Ninguno	Ninguno
Risk Analysis Courses: Cursos de Análisis de Riesgo : <ul style="list-style-type: none"> Analytical Tools Herramientas Analíticas <ul style="list-style-type: none"> Basic Real Options (SLS software) Opciones Reales Básicas (software SLS) <ul style="list-style-type: none"> Forecasting (Risk Simulator) Pronósticos (Risk simulator) <ul style="list-style-type: none"> Monte Carlo Simulation (Risk Simulator) Simulación de Montecarlo (Risk simulator) <ul style="list-style-type: none"> Optimization (Risk Simulator) Optimización (Risk simulator)	★	★	★
Real Options for Analyst Opciones Reales para Analistas : <ul style="list-style-type: none"> Advanced real options analytics Análisis Avanzado de Opciones Reales <ul style="list-style-type: none"> Understanding the SLS software Comprendiendo el Software SLS <ul style="list-style-type: none"> Framing options Diseño de Opciones	★	Ninguno	Ninguno
Real Options for Executives Opciones Reales para Ejecutivos: <ul style="list-style-type: none"> The basics of real options Lo básico de las Opciones Reales <ul style="list-style-type: none"> Making strategic decisions in real options Tomando decisiones Estratégicas con Opciones Reales <ul style="list-style-type: none"> Framing strategic options Diseñando Opciones estratégicas <ul style="list-style-type: none"> Interpreting options results Interpretando los resultados de las Opciones	★	Ninguno	Ninguno
Valoración de Stock Options para Empleados	★	Ninguno	Ninguno
Customized Seminars Seminarios Especializados: Cursos personalizados a sus necesidades específicas	★	Ninguno	Ninguno

MODELING TOOLKIT

Real Options Valuation, Inc. se enorgullece en presentar su más reciente innovación: Modeling Toolkit (edición Premium). Esta herramienta consta de más de 800 modelos analíticos, funciones y herramientas, y cerca de 300 modelos analíticos en Excel /plantillas SLS y ejemplos en hojas de cálculo que cubre áreas de análisis de riesgo, simulación, predicción, análisis de riesgos de acuerdo a Basilea II, Riesgo de crédito y Riesgo de incumplimiento, los modelos estadísticos, y mucho más! . Esta herramienta es un conjunto de modelos matemáticos sofisticados escrito en C++ vinculadas en hojas de cálculo de Excel. Hay más de 1100 modelos, funciones, con plantillas de hojas de cálculo y plantillas SLS en este Modeling Toolkit:

Analytics

1. Central Limit Theorem
2. Central Limit Theorem (Lottery Analysis)
3. Flaw of Averages
4. Mathematical Integration
5. Parametric and Nonparametric Hypothesis Tests
6. Projectile Motion
7. Regression Diagnostics
8. Ships in the Night
9. Statistical Analysis
10. Weighting of Ratios

Banking Models

11. Audit of Construction Lending
12. Banker's Construction Budget
13. Classified Breakeven Loan
14. Classified Loan Borrowing Base
15. Classified Loan Cash Budget and Overdraft
16. Federal Reserve Camels Rating
17. Firm in Financial Distress
18. Project Finance Risk Rating
19. Queuing Models
20. Reconciling Enron's Cash Flow
21. Risk Rating Model
22. Sample Cash Flows
23. Sensitivity Projections
24. Stochastic Loan Pricing Model
25. Valuation and Appraisal

Credit Analysis

26. Credit Default Swaps/Credit Spread Options
27. Credit Default Swaps Correlated Counterparty Defaults
28. Credit Premium
29. Credit Risk and Price Effects
30. External Debt Rating Spreads
31. Internal Credit Risk Rating
32. Profit-Cost of New Credit

Debt Analysis

33. Asset Equity Parity Model
34. Cox Model on Price and Yield of Risky Debt with Mean Reverting Rates
35. Debt Repayment and Amortization
36. Debt Sensitivity Models
37. Merton Price of Risky Debt Stochastic Asset and Interest
38. Vasicek Debt Option Valuation

39. Vasicek Price/Yield Risky Debt

Decision Analysis

40. Decision Tree Basics
41. Decision Tree, EVPI, Minimax, Bayes Theorem
42. Economic Order Quantity and Inventory Reorder Point
43. Economic Order Quantity and Optimal Manufacturing
44. Expected Utility Analysis
45. Inventory Control
46. Queuing Models

Exotic Options

47. American, Bermudan and European Options
48. Asian Arithmetic
49. Asian Geometric
50. Asset or Nothing
51. Barrier Options
52. Binary Digital Options
53. Cash or Nothing
54. Commodity Options
55. Complex Chooser
56. Credit Spread Options
57. Currency Options
58. Double Barriers
59. Exchange Assets
60. Extreme Spread
61. Foreign Equity Linked Forex
62. Foreign Equity Domestic Currency
63. Foreign Equity Fixed Forex
64. Foreign Takeover Options
65. Forward Start
66. Futures and Forward Options
67. Gap Options
68. Graduated Barriers
69. Index Options
70. Inverse Gamma Out-of-the-money Options
71. Jump Diffusion
72. Leptokurtic and Skewed Options
73. Lookback Fixed Strike Partial Time
74. Lookback Fixed Strike
75. Lookback Floating Strike Partial Time
76. Lookback Floating Strike
77. Min and Max of Two Assets
78. Option Collar
79. Options on Options
80. Perpetual Options
81. Simple Chooser

82. Spread on Futures
83. Supershares
84. Time Switch
85. Trading Day Corrections
86. Two Assets Barrier
87. Two Assets Cash
88. Two Assets Correlated
89. Uneven Dividends
90. Writer Extendible

Forecasting

91. Brownian Motion Stochastic Process
92. Data Diagnostics
93. Econometric, Correlations and Multiple Regression
94. Exponential J-Growth Curves
95. Forecasting Manual Computations
96. Jump-Diffusion Stochastic Process
97. Linear Interpolation
98. Logistic S-Growth Curves
99. Markov Chains and Market Share
100. Mean-Reverting Stochastic Process
101. Multiple Regression
102. Nonlinear Extrapolation
103. Stochastic Processes and Yield Curves
104. Stock Distribution at Horizon
105. Time-Series Analysis
106. Time-Series ARIMA

Industry Applications

107. Asset Liability Management ALM
108. Biotech – Manufacturing Strategy
109. Biotech – In-licensing and Deal Structuring
110. Biotech – Investment Valuation
111. Electric Utility – Efficient Frontier Generation
112. Electric Utility – Electricity Contract Risk
113. Information Technology – Forecasting Use
114. Information Technology – Decision Analysis
115. Pensions – Closed Group Portfolio Matching
116. Pensions – Accounting Modeling and Optimization
117. Real Estate – Commercial ROI

Optimization

118. Capital Investments (Part A)
119. Capital Investments (Part B)
120. Continuous Portfolio Allocation
121. Discrete Project Selection

- 122. Inventory Optimization
- 123. Investment Portfolio Allocation
- 124. Military Portfolio and Efficient Frontier
- 125. Optimal Pricing with Elasticity
- 126. Optimization of a Harvest Model
- 127. Optimizing Ordinary Least Squares
- 128. Stochastic Portfolio Allocation

Options Analysis

- 129. Binary Digital Instruments
- 130. Inverse Floater Bond Lattice Maker
- 131. Options Adjusted Spreads on Debt
- 132. Options on Debt
- 133. Options Trading Strategies

Probability of Default

- 134. Empirical (Individuals)
- 135. External Options Model (Public Company)
- 136. Merton Internal Model (Private Company)
- 137. Merton Market Options Model (Industry Comparable)
- 138. Yields and Spreads (Market Comparable)

Project Management

- 139. Cost Estimation Model
- 140. Critical Path Analysis (CPM PERT GANTT)
- 141. Project Timing

Real Options SLS

- 142. Employee Stock Options - Simple American Call
- 143. Employee Stock Options - Simple Bermudan Call with Vesting
- 144. Employee Stock Options - Simple European Call
- 145. Employee Stock Options - Suboptimal Exercise
- 146. Employee Stock Options - Vesting and Suboptimal Exercise
- 147. Employee Stock Options - Vesting, Blackout, Suboptimal, Forfeiture
- 148. Exotic Options - American Call Option with Dividends
- 149. Exotic Options - Accruals on Basket of Assets
- 150. Exotic Options - American Call Option on Foreign Exchange
- 151. Exotic Options - American Call Option on Index Futures
- 152. Exotic Options - Barrier Option - Down and In Lower Barrier
- 153. Exotic Options - Barrier Option - Down and Out Lower Barrier

- 154. Exotic Options - Barrier Option - Up and In Upper Barrier Call
- 155. Exotic Options - Barrier Option - Up and In, Down and In Double Barrier Call
- 156. Exotic Options - Barrier Option - Up and Out Upper Barrier
- 157. Exotic Options - Barrier Option - Up and Out, Down and Out Double Barrier
- 158. Exotic Options - Basic American, European, versus Bermudan Call Options
- 159. Exotic Options - Chooser Option
- 160. Exotic Options - Equity Linked Notes
- 161. Exotic Options - European Call Option with Dividends
- 162. Exotic Options - Range Accruals
- 163. Options Analysis - Plain Vanilla Call I
- 164. Options Analysis - Plain Vanilla Call II
- 165. Options Analysis - Plain Vanilla Call III
- 166. Options Analysis - Plain Vanilla Call IV
- 167. Options Analysis - Plain Vanilla Put
- 168. Real Options - Abandonment American Option
- 169. Real Options - Abandonment Bermudan Option
- 170. Real Options - Abandonment Customized Option
- 171. Real Options - Abandonment European Option
- 172. Real Options - Contraction American and European Option
- 173. Real Options - Contraction Bermudan Option
- 174. Real Options - Contraction Customized Option
- 175. Real Options - Dual-Asset Rainbow Pentanomial Lattice
- 176. Real Options - Excel-based Options Models
- 177. Real Options - Exotic Complex Floating American Chooser
- 178. Real Options - Exotic Complex Floating European Chooser
- 179. Real Options - Expand Contract Abandon American and European Option
- 180. Real Options - Expand Contract Abandon Bermudan Option
- 181. Real Options - Expand Contract Abandon Customized I
- 182. Real Options - Expand Contract Abandon Customized II
- 183. Real Options - Expansion American and European Option

- 184. Real Options - Expansion Bermudan Option
- 185. Real Options - Expansion Customized Option
- 186. Real Options - Jump Diffusion Calls and Puts using Quadrantomial Lattices
- 187. Real Options - Mean Reverting Calls and Puts using Trinomial Lattices
- 188. Real Options - Multiple Asset Competing Options (3D Binomial)
- 189. Real Options - Multiple Phased Complex Sequential Compound Option
- 190. Real Options - Multiple Phased Sequential Compound
- 191. Real Options - Multiple Phased Simultaneous Compound
- 192. Real Options - Simple Calls and Puts (Trinomial Lattices)
- 193. Real Options - Simple Two Phased Sequential Compound
- 194. Real Options - Simple Two Phased Simultaneous Compound
- 195. Real Options - Strategic Cases - High-Tech Manufacturing Strategy A
- 196. Real Options - Strategic Cases - High-Tech Manufacturing Strategy B
- 197. Real Options - Strategic Cases - High-Tech Manufacturing Strategy C
- 198. Real Options - Strategic Cases - Oil and Gas - Strategy A
- 199. Real Options - Strategic Cases - Oil and Gas - Strategy B
- 200. Real Options - Strategic Cases - R&D Stage-Gate Process A
- 201. Real Options - Strategic Cases - R&D Stage-Gate Process B
- 202. Real Options - Strategic Cases - Switching Option Strategy I
- 203. Real Options - Strategic Cases - Switching Option Strategy II
- 204. Trinomial Lattices - American Call
- 205. Trinomial Lattices - American Put
- 206. Trinomial Lattices - European Call
- 207. Trinomial Lattices - European Put
- 208. Trinomial Lattices - Mean Reverting American Call Option
- 209. Trinomial Lattices - Mean Reverting American Put Option
- 210. Trinomial Lattices - Mean Reverting European Call Option
- 211. Trinomial Lattices - Mean Reverting European Put Option
- 212. Trinomial Lattices - Mean Reverting American Abandonment
- 213. Trinomial Lattices - Mean Reverting American Contraction

- 214. Trinomial Lattices - Mean Reverting American Expansion
- 215. Trinomial Lattices - Mean Reverting American Abandonment, Contraction, Expansion
- 216. Trinomial Lattices - Mean Reverting Bermudan Abandonment, Contraction, Expansion
- 217. Trinomial Lattices - Mean Reverting Abandonment, Contraction, Expansion
- 218. Trinomial Lattices - Mean Reverting European Abandonment, Contraction, Expansion
- 219. Quadranomial Lattices - Jump Diffusion American Call
- 220. Quadranomial Lattices - Jump Diffusion American Put
- 221. Quadranomial Lattices - Jump Diffusion European Call
- 222. Quadranomial Lattices - Jump Diffusion European Put
- 223. Pentanomial Lattices - American Rainbow Call Option
- 224. Pentanomial Lattices - American Rainbow Put Option
- 225. Pentanomial Lattices - Dual Reverse Strike American Call (3D Binomial)
- 226. Pentanomial Lattices - Dual Reverse Strike American Put (3D Binomial)
- 227. Pentanomial Lattices - Dual Strike American Call (3D Binomial)
- 228. Pentanomial Lattices - Dual Strike American Put (3D Binomial)
- 229. Pentanomial Lattices - European Rainbow Call Option
- 230. Pentanomial Lattices - European Rainbow Put Option
- 231. Pentanomial Lattices - Exchange of Two Assets American Put (3D Binomial)
- 232. Pentanomial Lattices - Maximum of Two Assets American Call (3D Binomial)
- 233. Pentanomial Lattices - Maximum of Two Assets American Put (3D Binomial)
- 234. Pentanomial Lattices - Minimum of Two Assets American Call (3D Binomial)
- 235. Pentanomial Lattices - Minimum of Two Assets American Put (3D Binomial)
- 236. Pentanomial Lattices - Portfolio American Call (3D Binomial)

- 237. Pentanomial Lattices - Portfolio American Put (3D Binomial)
- 238. Pentanomial Lattices - Spread of Two Assets American Call (3D Binomial)
- 239. Pentanomial Lattices - Spread of Two Assets American Put (3D Binomial)

Risk Analysis

- 240. Integrated Risk Analysis
- 241. Interest Rate Risk
- 242. Portfolio Risk and Return Profile

Risk Hedging

- 243. Delta Gamma Hedge
- 244. Delta Hedge
- 245. Effects of Fixed versus Floating Rates
- 246. Foreign Exchange Cash Flow Model
- 247. Foreign Exchange Exposure Hedging

Sensitivity

- 248. Greeks
- 249. Tornado and Sensitivity Charts Linear
- 250. Tornado and Sensitivity Nonlinear

Simulation

- 251. Basic Simulation Model
- 252. Best Surgical Team
- 253. Correlated Simulation
- 254. Correlation Effects Model
- 255. Data Fitting
- 256. DCF, ROI and Volatility
- 257. Debt Repayment and Amortization
- 258. Demand Curve and Elasticity Estimation
- 259. Infectious Diseases
- 260. Recruitment Budget (Negative Binomial and Multidimensional Simulation)
- 261. Retirement Funding with VBA Macros
- 262. Roulette Wheel
- 263. Time Value of Money

Six Sigma

- 264. Confidence Intervals with Hypothesis Testing
- 265. Control Charts (c, n, p, u, X, XmR, R)
- 266. Delta Precision
- 267. Design of Experiments and Combinatorics
- 268. Hypothesis Testing and Bootstrap Simulation
- 269. Sample Size Correlation
- 270. Sample Size DPU
- 271. Sample Size Mean
- 272. Sample Size Proportion

- 273. Sample Size Sigma
- 274. Statistical Analysis (CDF, PDF, ICDF) Hypothesis Testing
- 275. Statistical Capability Measures
- 276. Unit Capability Measures

Valuation

- 277. APT, BETA and CAPM
- 278. Buy versus Lease
- 279. Caps and Floors
- 280. Convertible Bonds
- 281. Financial Ratios Analysis
- 282. Financial Statements Analysis
- 283. Valuation Model
- 284. Valuation - Warrant - Combined
- 285. Valuation - Warrant - Put Only
- 286. Valuation - Warrant - Warrant

Value at Risk

- 287. Optimized and Simulated Portfolio VaR
- 288. Options Delta Portfolio
- 289. Portfolio Operational and Capital Adequacy
- 290. Right Tail Capital Requirements
- 291. Static Covariance Method

Volatility

- 292. EWMA Volatility Models
- 293. GARCH Volatility Models
- 294. Implied Volatility
- 295. Log Asset Returns Approach
- 296. Log Cash Flow Returns Approach Probability to Volatility

Yield Curve

- 297. CIR Model
- 298. Curve Interpolation BIM
- 299. Curve Interpolation NS
- 300. Forward Rates from Spot Rates
- 301. Spline Interpolation and Extrapolation.xls
- 302. Term Structure of Volatility
- 303. US Treasury Risk Free Rate
- 304. Vasicek Model

List of Functions

Below is a comprehensive list of the functions in Modeling Toolkit that can be accessed either through the analytical DLL libraries or in Excel. Please keep checking back at the website for a more updated list. The software is continually evolving and newer applications and models are constantly added. Finally, the applicable Risk Simulator tools applicable when using the Modeling Toolkit are also listed at the end.

- | | |
|--|--|
| <p>1. B2AEPMarketValueAsset
Market Value of Asset using the Asset-Equity Parity Model.</p> <p>2. B2AEPMarketValueDebt
Market Value of Debt using the Asset-Equity Parity Model.</p> <p>3. B2AEPRequiredReturnDebt
Required Return on Risky Debt using the Asset-Equity Parity Model.</p> <p>4. B2AltDistributionCallOption
Computes the European Call option for an underlying asset returns distribution with skew and kurtosis, and is not perfectly normal. May return an error for unsolvable inputs.</p> <p>5. B2AltDistributionPutOption
Computes the European Put option for an underlying asset returns distribution with skew and kurtosis, and is not perfectly normal. May return an error for unsolvable inputs.</p> <p>6. B2AnnuityRate
Returns the percentage equivalent of the required periodic payment on an annuity (e.g., mortgage payments, loan repayment). Returns the percentage of the total principal at initiation.</p> <p>7. B2AsianCallwithArithmeticAverageRate
An average rate option is a cash-settled option whose payoff is based on the difference between the arithmetic average value of the underlying during the life of the option and a fixed strike.</p> <p>8. B2AsianCallwithGeometricAverageRate
An average rate option is a cash-settled option whose payoff is based on the difference between the geometric average value of the underlying during the life of the option and a fixed strike.</p> <p>9. B2AsianPutwithArithmeticAverageRate
An average rate option is a cash-settled option whose payoff is based on the difference between a fixed strike and the arithmetic average value of the underlying during the life of the option.</p> <p>10. B2AsianPutwithGeometricAverageRate
An average rate option is a cash-settled option whose payoff is based on the difference between a fixed strike and the geometric average value of the underlying during its life.</p> <p>11. B2AssetExchangeAmericanOption
Option holder has the right at up to and including expiration to swap out Asset 2 and receive Asset 1, with predetermined quantities.</p> <p>12. B2AssetExchangeEuropeanOption
Option holder has the right at expiration to swap out Asset 2 and receive Asset 1, with predetermined quantities.</p> <p>13. B2AssetOrNothingCall
At expiration, if in the money, the option holder</p> | <p>receives the stock or asset. For a call option, as long as the stock or asset price exceeds the strike at expiration, the stock is received.</p> <p>14. B2AssetOrNothingPut
At expiration, if in the money, the option holder receives the stock or asset. For a put option, stock is received only if the stock or asset value falls below the strike price.</p> <p>15. B2BarrierDoubleUpInDownInCall
Valuable or knocked in-the-money only if either barrier (upper or lower) is breached, i.e., asset value is above the upper or below the lower barriers, and the payout is in the form of a call option on the underlying asset.</p> <p>16. B2BarrierDoubleUpInDownInPut
Valuable or knocked in-the-money only if either barrier (upper or lower) is breached, i.e., asset value is above the upper or below the lower barriers, and the payout is in the form of a put option on the underlying asset.</p> <p>17. B2BarrierDoubleUpOutDownOutCall
Valuable or stays in-the-money only if either barrier (upper or lower barrier) is not breached, and the payout is in the form of a call option on the underlying asset.</p> <p>18. B2BarrierDoubleUpOutDownOutPut
Valuable or stays in-the-money only if either barrier (upper or lower barrier) is not breached, and the payout is in the form of a put option on the underlying asset.</p> <p>19. B2BarrierDownandInCall
Becomes valuable or knocked in-the-money if the lower barrier is breached, and the payout is the call option on the underlying asset. Sometimes, cash is paid at maturity assuming that the option has not been knocked in.</p> <p>20. B2BarrierDownandInPut
Becomes valuable or knocked in-the-money if the lower barrier is breached, and the payout is the put option on the underlying asset. Sometimes, cash is paid at maturity assuming that the option has not been knocked in.</p> <p>21. B2BarrierDownandOutCall
Valuable or in-the-money only if the lower barrier is not breached, and the payout is the call option on the underlying asset. Sometimes, cash is paid at maturity assuming that the option has not been knocked out.</p> <p>22. B2BarrierDownandOutPut
Valuable or in-the-money only if the lower barrier is not breached, and the payout is the put option on the underlying asset. Sometimes, cash is paid at maturity assuming that the option has not been knocked out.</p> <p>23. B2BarrierUpandInCall
Becomes valuable or knocked in-the-money if the upper barrier is breached, and the payout is the call option on the underlying asset. Sometimes, cash is paid at maturity assuming that the option has not been</p> |
|--|--|

- knocked in.
24. **B2BarrierUpandInPut**
Becomes valuable or knocked in-the-money if the upper barrier is breached, and the payout is the put option on the underlying asset. Sometimes, cash is paid at maturity assuming that the option has not been knocked in.
 25. **B2BarrierUpandOutCall**
Valuable or in-the-money only if the upper barrier is not breached, and the payout is the call option on the underlying asset. Sometimes, cash is paid at maturity assuming that the option has not been knocked out.
 26. **B2BarrierUpandOutPut**
Valuable or in-the-money only if the upper barrier is not breached, and the payout is the put option on the underlying asset. Sometimes, cash is paid at maturity assuming that the option has not been knocked out.
 27. **B2BDTAmericanCallonDebtLattice**
Computes the American Call option on interest-based instruments and debt or bonds, and creates the entire pricing lattice.
 28. **B2BDTAmericanCallonDebtValue**
Computes the American Call option value on interest-based instruments and debt or bonds, and returns only one value instead of the entire lattice.
 29. **B2BDTAmericanPutonDebtLattice**
Computes the American Put option on interest-based instruments and debt or bonds, and creates the entire pricing lattice.
 30. **B2BDTAmericanPutonDebtValue**
Computes the American Put option value on interest-based instruments and debt or bonds, and returns only one value instead of the entire lattice.
 31. **B2BDTCallableDebtPriceLattice**
Computes the revised price lattice of a callable debt such that the options adjusted spread can be imputed. Allows for changing interest and interest volatilities over time.
 32. **B2BDTCallableDebtPriceValue**
Computes the present value of a coupon bond/debt that is callable, to see the differences in value from a non-callable debt. The lattice can be computed using the function call: `B2BDTCallableDebtPriceLattice`.
 33. **B2BDTCallableSpreadValue**
Computes the option adjusted spread, i.e., the additional premium that should be charged on the callable option provision.
 34. **B2BDTEuropeanCallonDebtLattice**
Computes the European Call option on interest-based instruments and debt or bonds, and creates the entire pricing lattice.
 35. **B2BDTEuropeanCallonDebtValue**
Computes the European Call option value on interest-based instruments and debt or bonds, and returns only one value instead of the entire lattice.
 36. **B2BDTEuropeanPutonDebtLattice**
Computes the European Put option on interest-based instruments and debt or bonds, and creates the entire pricing lattice.
 37. **B2BDTEuropeanPutonDebtValue**
Computes the European Put option value on interest-based instruments and debt or bonds, and returns only one value instead of the entire lattice.
 38. **B2BDFloatingCouponPriceLattice**
Value of the floater bond's lattice (coupon rate is floating and can be directly or inversely related to interest rates; e.g., rates drop, coupon increases, the bond appreciates in price and the yield increases).
 39. **B2BDFloatingCouponPriceValue**
Value of the floater bond (coupon rate is floating and can be directly or inversely related to interest rates; e.g., rates drop, coupon increases, the bond appreciates in price and the yield increases).
 40. **B2BDTNoncallableDebtPriceLattice**
Computes the pricing lattice of a coupon bond/debt that is not callable, to see the differences in value from a callable debt.
 41. **B2BDTNoncallableDebtPriceValue**
Computes the present value of a coupon bond/debt that is not callable, to see the differences from a callable debt.
 42. **B2BDTInterestRateLattice**
Computes the short rate interest lattice based on a term structure of interest rates and changing interest volatilities, as a means to compute option values.
 43. **B2BDTNonCallableSpreadValue**
Computes the straight spread on a bond that is non-callable in order to compare it with the option provision of an option adjusted spread model.
 44. **B2BDTZeroPriceLattice**
Computes the straight price lattice of zero bonds based on a term structure of interest rates and changing interest volatilities, as a means to compute interest-based option values.
 45. **B2BDTZeroPriceLattice2**
Computes the straight price lattice of zero bonds based on a term structure of interest rates and changing interest volatilities, as a means to compute interest-based option values. Returns the same results as the `B2BDTZeroPriceLattice` function but requires interest rates and interest volatilities as inputs, rather than the entire interest rate lattice.
 46. **B2BDTZeroPriceValue**
Computes the straight price of zero bonds at time zero, based on a term structure of interest rates and changing interest volatilities, as a means to compute interest-based option values.
 47. **B2BinaryDownAndInAssetAtExpirationOrNothing**
Binary digital instrument receiving the asset at expiration, only if a corresponding asset hits a lower barrier or receives nothing otherwise. DT is monitoring steps: 1/12 monthly, 1/52 weekly, 1/250 daily, 0 continuously
 48. **B2BinaryDownAndInAssetAtExpirationOrNothingCall**
Binary digital call option receiving the asset at expiration if the asset hits a lower barrier or receives nothing otherwise. DT is monitoring steps: 1/12 monthly, 1/52 weekly, 1/250 daily, 0 continuously
 49. **B2BinaryDownAndInAssetAtExpirationOrNothingPut**
Binary digital put option receiving the asset at expiration if the asset hits a lower barrier or receives nothing otherwise. DT is monitoring steps: 1/12 monthly, 1/52 weekly, 1/250 daily, 0 continuously
 50. **B2BinaryDownAndInAssetAtHitOrNothing**
Binary digital instrument receiving the asset when it hits a lower barrier or receives nothing otherwise. DT is

- Binary digital call option receiving a cash amount at expiration, only if a corresponding asset does not hit an upper barrier or receives nothing otherwise. DT is monitoring steps: 1/12 monthly, 1/52 weekly, 1/250 daily, 0 continuously
74. B2BinaryUpAndOutCashAtExpirationOrNothingPut
Binary digital put option receiving a cash amount at expiration, only if a corresponding asset does not hit an upper barrier or receives nothing otherwise. DT is monitoring steps: 1/12 monthly, 1/52 weekly, 1/250 daily, 0 continuously.
75. B2Binomial3DAmericanDualStrikeCallOption
Returns the American option with the payoff $[\text{Max}(Q2S2-X2, Q1S1-X1)]$ and valued using a 3D binomial lattice model.
76. B2Binomial3DAmericanDualStrikePutOption
Returns the American option with the payoff $[\text{Max}(X2-Q2S2, X1-Q1S1)]$ and valued using a 3D binomial lattice model.
77. B2Binomial3DEuropeanDualStrikeCallOption
Returns the European option with the payoff $[\text{Max}(Q2S2-X2, Q1S1-X1)]$ and valued using a 3D binomial lattice model.
78. B2Binomial3DEuropeanDualStrikePutOption
Returns the European option with the payoff $[\text{Max}(X2-Q2S2, X1-Q1S1)]$ and valued using a 3D binomial lattice model.
79. B2Binomial3DAmericanExchangeOption
Returns the American and European call and put option (same values exist for all types) with the payoff $[Q2S2-Q1S1]$ and valued using a 3D binomial lattice model.
80. B2Binomial3DAmericanMaximumTwoAssetsCallOption
Returns the American option with the payoff $[\text{Max}(Q2S2, Q1S1)-X]$ and valued using a 3D binomial lattice model.
81. B2Binomial3DAmericanMaximumTwoAssetsPutOption
Returns the American option with the payoff $[X-\text{Max}(Q2S2, Q1S1)]$ and valued using a 3D binomial lattice model.
82. B2Binomial3DEuropeanMaximumTwoAssetsCallOption
Returns the European option with the payoff $[\text{Max}(Q2S2, Q1S1)-X]$ and valued using a 3D binomial lattice model.
83. B2Binomial3DEuropeanMaximumTwoAssetsPutOption
Returns the European option with the payoff $[X-\text{Max}(Q2S2, Q1S1)]$ and valued using a 3D binomial lattice model.
84. B2Binomial3DAmericanMinimumTwoAssetsCallOption
Returns the American option with the payoff $[\text{Min}(Q2S2, Q1S1)-X]$ and valued using a 3D binomial lattice model.
85. B2Binomial3DAmericanMinimumTwoAssetsPutOption
Returns the American option with the payoff $[X-\text{Min}(Q2S2, Q1S1)]$ and valued using a 3D binomial lattice model.
86. B2Binomial3DEuropeanMinimumTwoAssetsCallOption
Returns the European option with the payoff $[\text{Min}(Q2S2, Q1S1)-X]$ and valued using a 3D binomial lattice model.
87. B2Binomial3DEuropeanMinimumTwoAssetsPutOption
Returns the European option with the payoff $[X-\text{Min}(Q2S2, Q1S1)]$ and valued using a 3D binomial lattice model.
88. B2Binomial3DAmericanPortfolioCallOption
Returns the American option with the payoff $[Q2S2+Q1S1-X]$ and valued using a 3D binomial lattice model.
89. B2Binomial3DAmericanPortfolioPutOption
Returns the American option with the payoff $[X-Q2S2+Q1S1]$ and valued using a 3D binomial lattice model.
90. B2Binomial3DEuropeanPortfolioCallOption
Returns the European option with the payoff $[Q2S2+Q1S1-X]$ and valued using a 3D binomial lattice model.
91. B2Binomial3DEuropeanPortfolioPutOption
Returns the European option with the payoff $[X-Q2S2+Q1S1]$ and valued using a 3D binomial lattice model.
92. B2Binomial3DAmericanReverseDualStrikeCallOption
Returns the American option with the payoff $[\text{Max}(X2-Q2S2, Q1S1-X1)]$ and valued using a 3D binomial lattice model.
93. B2Binomial3DAmericanReverseDualStrikePutOption
Returns the American option with the payoff $[\text{Max}(Q2S2-X2, X1-Q1S1)]$ and valued using a 3D binomial lattice model.
94. B2Binomial3DEuropeanReverseDualStrikeCallOption
Returns the European option with the payoff $[\text{Max}(X2-Q2S2, Q1S1-X1)]$ and valued using a 3D binomial lattice model.
95. B2Binomial3DEuropeanReverseDualStrikePutOption
Returns the American option with the payoff $[\text{Max}(Q2S2-X2, X1-Q1S1)]$ and valued using a 3D binomial lattice model.
96. B2Binomial3DAmericanSpreadCallOption
Returns the American option with the payoff $[Q1S1-Q2S2-X]$ and valued using a 3D binomial lattice model.
97. B2Binomial3DAmericanSpreadPutOption
Returns the American option with the payoff $[X+Q2S2-Q1S1]$ and valued using a 3D binomial lattice model.
98. B2Binomial3DEuropeanSpreadCallOption
Returns the European option with the payoff $[Q1S1-Q2S2-X]$ and valued using a 3D binomial lattice model.
99. B2Binomial3DEuropeanSpreadPutOption
Returns the European option with the payoff $[X+Q2S2-Q1S1]$ and valued using a 3D binomial lattice model.
100. B2BinomialAdjustedBarrierSteps
Computes the correct binomial lattice steps to use for convergence and barrier matching when running a barrier option.
101. B2BinomialAmericanCall
Returns the American call option with a continuous dividend yield using a binomial lattice, where the option can be exercised at any time up to and including maturity.
102. B2BinomialAmericanPut
Returns the American put option with a continuous dividend yield using a binomial lattice, where the option can be exercised at any time up to and including maturity.
103. B2BinomialBermudanCall
Returns the American call option with a continuous dividend yield using a binomial lattice, where the option can be exercised at any time up to and including

- maturity except during the vesting period.
104. B2BinomialBermudanPut
Returns the American put option with a continuous dividend yield using a binomial lattice, where the option can be exercised at any time up to and including maturity except during the vesting period.
 105. B2BinomialEuropeanCall
Returns the European call option with a continuous dividend yield using a binomial lattice, where the option can be exercised only at maturity.
 106. B2BinomialEuropeanPut
Returns the European put option with a continuous dividend yield using a binomial lattice, where the option can be exercised only at maturity.
 107. B2BlackCallOptionModel
Returns the Black model (modified Black-Scholes-Merton) for forward contracts and interest-based call options.
 108. B2BlackPutOptionModel
Returns the Black model (modified Black-Scholes-Merton) for forward contracts and interest-based put options.
 109. B2BlackFuturesCallOption
Computes the value of commodities futures call option given the value of the futures contract.
 110. B2BlackFuturesPutOption
Computes the value of commodities futures put option given the value of the futures contract.
 111. B2BlackScholesCall
European Call Option using Black-Scholes-Merton Model.
 112. B2BlackScholesProbabilityAbove
Computes the expected probability the stock price will rise above the strike price under a Black-Scholes paradigm.
 113. B2BlackScholesPut
European Put Option using Black-Scholes-Merton Model.
 114. B2BondCIRBondDiscountFactor
Returns the discount factor on a bond or risky debt using the Cox-Ingersoll-Ross model, accounting for mean-reverting interest rates.
 115. B2BondCIRBondPrice
Cox-Ross model on Zero Coupon Bond Pricing assuming no arbitrage and mean-reverting interest rates.
 116. B2BondCIRBondYield
Cox-Ross model on Zero Coupon Bond Yield assuming no arbitrage and mean-reverting interest rates.
 117. B2BondConvexityContinuous
Returns the debt's Convexity of second order sensitivity using a series of cash flows and current interest rate, with continuous discounting.
 118. B2BondConvexityDiscrete
Returns the debt's Convexity of second order sensitivity using a series of cash flows and current interest rate, with discrete discounting.
 119. B2BondConvexityYTMContinuous
Returns debt's Convexity or second order sensitivity using an internal Yield to Maturity of the cash flows, with continuous discounting.
 120. B2BondConvexityYTMDiscrete
Returns debt's Convexity or second order sensitivity using an internal Yield to Maturity of the cash flows, with discrete discounting.
 121. B2BondDurationContinuous
Returns the debt's first order sensitivity Duration measure using continuous discounting.
 122. B2BondDurationDiscrete
Returns the debt's first order sensitivity Duration measure using discrete discounting.
 123. B2BondHullWhiteBondCallOption
Values a European call option on a bond where the interest rates are stochastic and mean-reverting. Make sure Bond Maturity > Option Maturity.
 124. B2BondHullWhiteBondPutOption
Values a European put option on a bond where the interest rates are stochastic and mean-reverting. Make sure Bond Maturity > Option Maturity.
 125. B2BondMacaulayDuration
Returns the debt's first order sensitivity Macaulay's Duration measure.
 126. B2BondMertonBondPrice
Bond Price using Merton Stochastic Interest and Stochastic Asset Model.
 127. B2BondModifiedDuration
Returns the debt's first order sensitivity Modified Duration measure.
 128. B2BondPriceContinuous
Returns the Bond Price of a cash flow series given the time and discount rate, using Continuous discounting.
 129. B2BondPriceDiscrete
Returns the Bond Price of a cash flow series given the time and discount rate, using discrete discounting.
 130. B2BondVasicekBondCallOption
Values a European call option on a bond where the interest rates are stochastic and mean-reverting to a long-term rate. Make sure Bond Maturity > Option Maturity.
 131. B2BondVasicekBondPrice
Vasicek Zero Coupon Price assuming no arbitrage and mean-reverting interest rates.
 132. B2BondVasicekBondPutOption
Values a European put option on a bond where the interest rates are stochastic and mean-reverting to a long-term rate. Make sure Bond Maturity > Option Maturity.
 133. B2BondVasicekBondYield
Vasicek Zero Coupon Yield assuming no arbitrage and mean-reverting interest rates.
 134. B2BondYTMContinuous
Returns Bond's Yield to Maturity assuming Continuous discounting.
 135. B2BondYTMDiscrete
Returns Bond's Yield to Maturity assuming discrete discounting.
 136. B2CallDelta
Returns the option valuation sensitivity Delta (a call option value's sensitivity to changes in the asset value).
 137. B2CallGamma
Returns the option valuation sensitivity Gamma (a call option value's sensitivity to changes in the delta value).
 138. B2CallOptionOnTheMax
The maximum values at expiration of both assets are used in option exercise, where the call option payoff at expiration is the maximum price between Asset 1 and Asset 2 against the strike price.

139. **B2CallOptionOnTheMin**
The minimum values at expiration of both assets are used in option exercise, where the call option payoff at expiration is the minimum price between Asset 1 and Asset 2 against the strike price.
140. **B2CallRho**
Returns the option valuation sensitivity Rho (a call option value's sensitivity to changes in the interest rate).
141. **B2CallTheta**
Returns the option valuation sensitivity Theta (a call option value's sensitivity to changes in the maturity).
142. **B2CallVega**
Returns the option valuation sensitivity Vega (a call option value's sensitivity to changes in the volatility).
143. **B2CashOrNothingCall**
At expiration, if the option is in the money, the option holder receives a predetermined cash payment. For a call option, as long as the stock or asset price exceeds the strike at expiration, cash is received.
144. **B2CashOrNothingPut**
At expiration, if the option is in the money, the option holder receives a predetermined cash payment. For a put option, cash is received only if the stock or asset value falls below the strike price.
145. **B2ChooserBasicOption**
Holder chooses if the option is a call or a put by the chooser time, with the same strike price and maturity. Typically cheaper than buying a call and a put together while providing the same level of hedge.
146. **B2ChooserComplexOption**
Holder gets to choose if the option is a call or a put within the Chooser Time, with different strike prices and maturities. Typically cheaper than buying a call and a put, while providing the same level of hedge.
147. **B2ClosedFormAmericanCall**
Returns the American option approximation model with a continuous dividend yield call option.
148. **B2ClosedFormAmericanPut**
Returns the American option approximation model with a continuous dividend yield put option.
149. **B2CoefficientofVariationPopulation**
Computes the population coefficient of variation (standard deviation of the sample divided by the mean), to obtain a relative measure of risk and dispersion
150. **B2CoefficientofVariationSample**
Computes the sample coefficient of variation (standard deviation of the sample divided by the mean), to obtain a relative measure of risk and dispersion
151. **B2CommodityCallOptionModel**
Computes the value of a commodity-based call option based on spot and futures market, and accounting for volatility of the forward rate.
152. **B2CommodityPutOptionModel**
Computes the value of a commodity-based put option based on spot and futures market, and accounting for volatility of the forward rate.
153. **B2CompoundOptionsCallonCall**
A compound option allowing the holder to buy (call) a call option with some maturity, in the future within the option maturity period, for a specified strike price on the option.
154. **B2CompoundOptionsCallonPut**
A compound option allowing the holder to buy (call) a put option with some maturity, in the future within the option maturity period, for a specified strike price on the option.
155. **B2CompoundOptionsPutonCall**
A compound option allowing the holder to sell (put) a call option with some maturity, in the future within the option maturity period, for a specified strike price on the option.
156. **B2CompoundOptionsPutonPut**
A compound option allowing the holder to sell (put) a put option with some maturity, in the future within the option maturity period, for a specified strike price on the option.
157. **B2ConvenienceYield**
The convenience yield is simply the rate differential between a non-arbitrage futures and spot price and a real-life fair market value of the futures price.
158. **B2ConvertibleBondAmerican**
Computes the value of a convertible bond using binomial lattices, and accounting for the stock's volatility and dividend yield, as well as the bond's credit spread above risk-free.
159. **B2ConvertibleBondEuropean**
Computes the value of a convertible bond using binomial lattices, and accounting for the stock's volatility and dividend yield, as well as the bond's credit spread above risk-free.
160. **B2CreditAcceptanceCost**
Computes the risk-adjusted cost of accepting a new credit line with a probability of default.
161. **B2CreditAssetSpreadCallOption**
Provides protection from an increase in spread but ceases to exist if the underlying asset defaults and is based on the price of the asset.
162. **B2CreditAssetSpreadPutOption**
Provides protection from a decrease in spread but ceases to exist if the underlying asset defaults and is based on the price of the asset.
163. **B2CreditDefaultSwapSpread**
Returns the valuation of a credit default swap CDS spread, allowing the holder to sell a bond/debt at par value when a credit event occurs.
164. **B2CreditDefaultSwapCorrelatedBondandSwapPrice**
Computes the valuation of a bond with a credit default swap where both parties are correlated and each has a probability of default and possible recovery rates. At default, the holder receives the notional principal or par value of the bond.
165. **B2CreditDefaultSwapCorrelatedBondPrice**
Computes the valuation of a bond without any credit default swap where the bond or debt has a probability of default and possible recovery rate.
166. **B2CreditDefaultSwapCorrelatedSwapPrice**
Computes the price of a credit default swap where both parties are correlated and each has a probability of default and possible recovery rates. At default, the holder receives the notional principal or par value of the bond.
167. **B2CreditRatingWidth**
Computes the credit ratings width to generate the credit ratings table.

<p>168. B2CreditRejectionCost Computes the risk-adjusted cost of rejecting a new credit line with a probability of default.</p> <p>169. B2CreditRiskShortfall Returns the Credit Risk Shortfall given probability of default and recovery rates.</p> <p>170. B2CreditSpreadCallOption Provides protection from an increase in spread but ceases to exist if the underlying asset defaults. Only credit default swaps can cover default events (CSOs are sometimes combined with CDSs).</p> <p>171. B2CreditSpreadPutOption Provides protection from an decrease in spread but ceases to exist if the underlying asset defaults. Only credit default swaps can cover default events (CSOs are sometimes combined with CDSs).</p> <p>172. B2CubicSpline Interpolates and extrapolates the unknown Y values (based on the required X value) given some series of known X and Y values, and can be used to interpolate inside the data sample or extrapolate outside the known sample.</p> <p>173. B2CurrencyCallOption Option to exchange foreign currency into domestic currency by buying domestic currency (selling foreign currency) at a set exchange rate on a specified date. Exchange rate is foreign currency to domestic currency.</p> <p>174. B2CurrencyForwardCallOption Computes the value of a currency forward call option.</p> <p>175. B2CurrencyForwardPutOption Computes the value of a currency forward put option.</p> <p>176. B2CurrencyPutOption Option to exchange domestic currency into foreign currency by selling domestic currency (buying foreign currency) at a set exchange rate on a specified date. Exchange rate is foreign currency to domestic currency.</p> <p>177. B2DeltaGammaHedgeCallBought Computes the total amount of call values that has to be bought to perform a Delta-Gamma neutral hedge. Returns a negative value indicating cash outflow.</p> <p>178. B2DeltaGammaHedgeCallSold Computes the single unit of call value that has to be sold to perform a Delta-Gamma neutral hedge. Returns a positive value indicating cash inflow.</p> <p>179. B2DeltaGammaHedgeMoneyBorrowed Computes the amount of money that has to be borrowed to perform a Delta-Gamma neutral hedge. Returns a positive value indicating cash inflow.</p> <p>180. B2DeltaGammaHedgeSharesBought Computes the total value of stocks that has to be bought to perform a Delta-Gamma neutral hedge. Returns a negative value indicating cash outflow.</p> <p>181. B2DeltaHedgeCallSold Computes the single unit of call value that has to be sold to perform a Delta-neutral hedge. Returns a positive value indicating cash inflow.</p> <p>182. B2DeltaHedgeMoneyBorrowed Computes the amount of money that has to be borrowed to perform a Delta-neutral hedge. Returns a positive value indicating cash inflow.</p> <p>183. B2DeltaHedgeSharesBought Computes the total value of stocks that has to be bought to perform a Delta-neutral hedge. Returns a</p>	<p>negative value indicating cash outflow.</p> <p>184. B2DistributionBernoulliKurtosis Returns the Bernoulli distribution's theoretical excess kurtosis (fourth moment), measuring the peakedness of the distribution and its extreme tail events. An excess kurtosis of 0 implies a normal tail.</p> <p>185. B2DistributionBernoulliMean Returns the Bernoulli distribution's theoretical mean or expected value (first moment), measuring the central tendency of the distribution.</p> <p>186. B2DistributionBernoulliSkew Returns the Bernoulli distribution's theoretical skew (third moment), measuring the direction of the distribution's tail. Positive (negative) skew means mean exceeds (is less than) median and the tail points to the right (left).</p> <p>187. B2DistributionBernoulliStdev Returns the Bernoulli distribution's theoretical standard deviation (second moment), measuring the width and average dispersion of all points around the mean.</p> <p>188. B2DistributionBetaKurtosis Returns the Beta distribution's theoretical excess kurtosis (fourth moment), measuring the peakedness of the distribution and its extreme tail events. An excess kurtosis of 0 implies a normal tail.</p> <p>189. B2DistributionBetaMean Returns the Beta distribution's theoretical mean or expected value (first moment), measuring the central tendency of the distribution.</p> <p>190. B2DistributionBetaSkew Returns the Beta distribution's theoretical skew (third moment), measuring the direction of the distribution's tail. Positive (negative) skew means mean exceeds (is less than) median and the tail points to the right (left).</p> <p>191. B2DistributionBetaStdev Returns the Beta distribution's theoretical standard deviation (second moment), measuring the width and average dispersion of all points around the mean.</p> <p>192. B2DistributionBinomialKurtosis Returns the Binomial distribution's theoretical excess kurtosis (fourth moment), measuring the peakedness of the distribution and its extreme tail events. An excess kurtosis of 0 implies a normal tail.</p> <p>193. B2DistributionBinomialMean Returns the Binomial distribution's theoretical mean or expected value (first moment), measuring the central tendency of the distribution.</p> <p>194. B2DistributionBinomialSkew Returns the Binomial distribution's theoretical skew (third moment), measuring the direction of the distribution's tail. Positive (negative) skew means mean exceeds (is less than) median and the tail points to the right (left).</p> <p>195. B2DistributionBinomialStdev Returns the Binomial distribution's theoretical standard deviation (second moment), measuring the width and average dispersion of all points around the mean.</p> <p>196. B2DistributionCauchyKurtosis Returns the Cauchy distribution's theoretical excess kurtosis (fourth moment), measuring the peakedness of the distribution and its extreme tail events. An excess kurtosis of 0 implies a normal tail.</p>
---	---

197. `B2DistributionCauchyMean`
Returns the Cauchy distribution's theoretical mean or expected value (first moment), measuring the central tendency of the distribution.
198. `B2DistributionCauchySkew`
Returns the Cauchy distribution's theoretical skew (third moment), measuring the direction of the distribution's tail. Positive (negative) skew means mean exceeds (is less than) median and the tail points to the right (left).
199. `B2DistributionCauchyStdev`
Returns the Cauchy distribution's theoretical standard deviation (second moment), measuring the width and average dispersion of all points around the mean.
200. `B2DistributionChiSquareKurtosis`
Returns the Chi-Square distribution's theoretical excess kurtosis (fourth moment), measuring the peakedness of the distribution and its extreme tail events. An excess kurtosis of 0 implies a normal tail.
201. `B2DistributionChiSquareMean`
Returns the Chi-Square distribution's theoretical mean or expected value (first moment), measuring the central tendency of the distribution.
202. `B2DistributionChiSquareSkew`
Returns the Chi-Square distribution's theoretical skew (third moment), measuring the direction of the distribution's tail. Positive (negative) skew means mean exceeds (is less than) median and the tail points to the right (left).
203. `B2DistributionChiSquareStdev`
Returns the Chi-Square distribution's theoretical standard deviation (second moment), measuring the width and average dispersion of all points around the mean.
204. `B2DistributionDiscreteUniformKurtosis`
Returns the Discrete Uniform distribution's theoretical excess kurtosis (fourth moment), measuring the peakedness of the distribution and its extreme tail events. An excess kurtosis of 0 implies a normal tail.
205. `B2DistributionDiscreteUniformMean`
Returns the Discrete Uniform distribution's theoretical mean or expected value (first moment), measuring the central tendency of the distribution.
206. `B2DistributionDiscreteUniformSkew`
Returns the Discrete Uniform distribution's theoretical skew (third moment), measuring the direction of the distribution's tail. Positive (negative) skew means mean exceeds (is less than) median and the tail points to the right (left).
207. `B2DistributionDiscreteUniformStdev`
Returns the Discrete Uniform distribution's theoretical standard deviation (second moment), measuring the width and average dispersion of all points around the mean.
208. `B2DistributionExponentialKurtosis`
Returns the Exponential distribution's theoretical excess kurtosis (fourth moment), measuring the peakedness of the distribution and its extreme tail events. An excess kurtosis of 0 implies a normal tail.
209. `B2DistributionExponentialMean`
Returns the Exponential distribution's theoretical mean or expected value (first moment), measuring the central tendency of the distribution.
210. `B2DistributionExponentialSkew`
Returns the Exponential distribution's theoretical skew (third moment), measuring the direction of the distribution's tail. Positive (negative) skew means mean exceeds (is less than) median and the tail points to the right (left).
211. `B2DistributionExponentialStdev`
Returns the Exponential distribution's theoretical standard deviation (second moment), measuring the width and average dispersion of all points around the mean.
212. `B2DistributionFKurtosis`
Returns the F distribution's theoretical excess kurtosis (fourth moment), measuring the peakedness of the distribution and its extreme tail events. An excess kurtosis of 0 implies a normal tail.
213. `B2DistributionFMean`
Returns the F distribution's theoretical mean or expected value (first moment), measuring the central tendency of the distribution.
214. `B2DistributionFSkew`
Returns the F distribution's theoretical skew (third moment), measuring the direction of the distribution's tail. Positive (negative) skew means mean exceeds (is less than) median and the tail points to the right (left).
215. `B2DistributionFStdev`
Returns the F distribution's theoretical standard deviation (second moment), measuring the width and average dispersion of all points around the mean.
216. `B2DistributionGammaKurtosis`
Returns the Gamma distribution's theoretical excess kurtosis (fourth moment), measuring the peakedness of the distribution and its extreme tail events. An excess kurtosis of 0 implies a normal tail.
217. `B2DistributionGammaMean`
Returns the Gamma distribution's theoretical mean or expected value (first moment), measuring the central tendency of the distribution.
218. `B2DistributionGammaSkew`
Returns the Gamma distribution's theoretical skew (third moment), measuring the direction of the distribution's tail. Positive (negative) skew means mean exceeds (is less than) median and the tail points to the right (left).
219. `B2DistributionGammaStdev`
Returns the Gamma distribution's theoretical standard deviation (second moment), measuring the width and average dispersion of all points around the mean.
220. `B2DistributionGeometricKurtosis`
Returns the Geometric distribution's theoretical excess kurtosis (fourth moment), measuring the peakedness of the distribution and its extreme tail events. An excess kurtosis of 0 implies a normal tail.
221. `B2DistributionGeometricMean`
Returns the Geometric distribution's theoretical mean or expected value (first moment), measuring the central tendency of the distribution.
222. `B2DistributionGeometricSkew`
Returns the Geometric distribution's theoretical skew (third moment), measuring the direction of the distribution's tail. Positive (negative) skew means mean exceeds (is less than) median and the tail points to the right (left).

223. `B2DistributionGeometricStdev`
Returns the Geometric distribution's theoretical standard deviation (second moment), measuring the width and average dispersion of all points around the mean.
224. `B2DistributionGumbelMaxKurtosis`
Returns the Gumbel Max distribution's theoretical excess kurtosis (fourth moment), measuring the peakedness of the distribution and its extreme tail events. An excess kurtosis of 0 implies a normal tail.
225. `B2DistributionGumbelMaxMean`
Returns the Gumbel Max distribution's theoretical mean or expected value (first moment), measuring the central tendency of the distribution.
226. `B2DistributionGumbelMaxSkew`
Returns the Gumbel Max distribution's theoretical skew (third moment), measuring the direction of the distribution's tail. Positive (negative) skew means mean exceeds (is less than) median and the tail points to the right (left).
227. `B2DistributionGumbelMaxStdev`
Returns the Gumbel Max distribution's theoretical standard deviation (second moment), measuring the width and average dispersion of all points around the mean.
228. `B2DistributionGumbelMinKurtosis`
Returns the Gumbel Min distribution's theoretical excess kurtosis (fourth moment), measuring the peakedness of the distribution and its extreme tail events. An excess kurtosis of 0 implies a normal tail.
229. `B2DistributionGumbelMinMean`
Returns the Gumbel Min distribution's theoretical mean or expected value (first moment), measuring the central tendency of the distribution.
230. `B2DistributionGumbelMinSkew`
Returns the Gumbel Min distribution's theoretical skew (third moment), measuring the direction of the distribution's tail. Positive (negative) skew means mean exceeds (is less than) median and the tail points to the right (left).
231. `B2DistributionGumbelMinStdev`
Returns the Gumbel Min distribution's theoretical standard deviation (second moment), measuring the width and average dispersion of all points around the mean.
232. `B2DistributionHypergeometricKurtosis`
Returns the Hypergeometric distribution's theoretical excess kurtosis (fourth moment), measuring the peakedness of the distribution and its extreme tail events. An excess kurtosis of 0 implies a normal tail.
233. `B2DistributionHypergeometricMean`
Returns the Hypergeometric distribution's theoretical mean or expected value (first moment), measuring the central tendency of the distribution.
234. `B2DistributionHypergeometricSkew`
Returns the Hypergeometric distribution's theoretical skew (third moment), measuring the direction of the distribution's tail. Positive (negative) skew means mean exceeds (is less than) median and the tail points to the right (left).
235. `B2DistributionHypergeometricStdev`
Returns the Hypergeometric distribution's theoretical standard deviation (second moment), measuring the width and average dispersion of all points around the mean.
236. `B2DistributionLogisticKurtosis`
Returns the Logistic distribution's theoretical excess kurtosis (fourth moment), measuring the peakedness of the distribution and its extreme tail events. An excess kurtosis of 0 implies a normal tail.
237. `B2DistributionLogisticMean`
Returns the Logistic distribution's theoretical mean or expected value (first moment), measuring the central tendency of the distribution.
238. `B2DistributionLogisticSkew`
Returns the Logistic distribution's theoretical skew (third moment), measuring the direction of the distribution's tail. Positive (negative) skew means mean exceeds (is less than) median and the tail points to the right (left).
239. `B2DistributionLogisticStdev`
Returns the Logistic distribution's theoretical standard deviation (second moment), measuring the width and average dispersion of all points around the mean.
240. `B2DistributionLognormalKurtosis`
Returns the Lognormal distribution's theoretical excess kurtosis (fourth moment), measuring the peakedness of the distribution and its extreme tail events. An excess kurtosis of 0 implies a normal tail.
241. `B2DistributionLognormalMean`
Returns the Lognormal distribution's theoretical mean or expected value (first moment), measuring the central tendency of the distribution.
242. `B2DistributionLognormalSkew`
Returns the Lognormal distribution's theoretical skew (third moment), measuring the direction of the distribution's tail. Positive (negative) skew means mean exceeds (is less than) median and the tail points to the right (left).
243. `B2DistributionLognormalStdev`
Returns the Lognormal distribution's theoretical standard deviation (second moment), measuring the width and average dispersion of all points around the mean.
244. `B2DistributionNegativeBinomialKurtosis`
Returns the Negative Binomial distribution's theoretical excess kurtosis (fourth moment), measuring the peakedness of the distribution and its extreme tail events. An excess kurtosis of 0 implies a normal tail.
245. `B2DistributionNegativeBinomialMean`
Returns the Negative Binomial distribution's theoretical mean or expected value (first moment), measuring the central tendency of the distribution.
246. `B2DistributionNegativeBinomialSkew`
Returns the Negative Binomial distribution's theoretical skew (third moment), measuring the direction of the distribution's tail. Positive (negative) skew means mean exceeds (is less than) median and the tail points to the right (left).
247. `B2DistributionNegativeBinomialStdev`
Returns the Negative Binomial distribution's theoretical standard deviation (second moment), measuring the width and average dispersion of all points around the mean.
248. `B2DistributionNormalKurtosis`
Returns the Normal distribution's theoretical excess

- kurtosis (fourth moment), measuring the peakedness of the distribution and its extreme tail events. An excess kurtosis of 0 implies a normal tail.
249. B2DistributionNormalMean
Returns the Normal distribution's theoretical mean or expected value (first moment), measuring the central tendency of the distribution.
250. B2DistributionNormalSkew
Returns the Normal distribution's theoretical skew (third moment), measuring the direction of the distribution's tail. Positive (negative) skew means mean exceeds (is less than) median and the tail points to the right (left).
251. B2DistributionNormalStdev
Returns the Normal distribution's theoretical standard deviation (second moment), measuring the width and average dispersion of all points around the mean.
252. B2DistributionParetoKurtosis
Returns the Pareto distribution's theoretical excess kurtosis (fourth moment), measuring the peakedness of the distribution and its extreme tail events. An excess kurtosis of 0 implies a normal tail.
253. B2DistributionParetoMean
Returns the Pareto distribution's theoretical mean or expected value (first moment), measuring the central tendency of the distribution.
254. B2DistributionParetoSkew
Returns the Pareto distribution's theoretical skew (third moment), measuring the direction of the distribution's tail. Positive (negative) skew means mean exceeds (is less than) median and the tail points to the right (left).
255. B2DistributionParetoStdev
Returns the Pareto distribution's theoretical standard deviation (second moment), measuring the width and average dispersion of all points around the mean.
256. B2DistributionPoissonKurtosis
Returns the Poisson distribution's theoretical excess kurtosis (fourth moment), measuring the peakedness of the distribution and its extreme tail events. An excess kurtosis of 0 implies a normal tail.
257. B2DistributionPoissonMean
Returns the Poisson distribution's theoretical mean or expected value (first moment), measuring the central tendency of the distribution.
258. B2DistributionPoissonSkew
Returns the Poisson distribution's theoretical skew (third moment), measuring the direction of the distribution's tail. Positive (negative) skew means mean exceeds (is less than) median and the tail points to the right (left).
259. B2DistributionPoissonStdev
Returns the Poisson distribution's theoretical standard deviation (second moment), measuring the width and average dispersion of all points around the mean.
260. B2DistributionRayleighKurtosis
Returns the Rayleigh distribution's theoretical excess kurtosis (fourth moment), measuring the peakedness of the distribution and its extreme tail events. An excess kurtosis of 0 implies a normal tail.
261. B2DistributionRayleighMean
Returns the Rayleigh distribution's theoretical mean or expected value (first moment), measuring the central tendency of the distribution.
262. B2DistributionRayleighSkew
Returns the Rayleigh distribution's theoretical skew (third moment), measuring the direction of the distribution's tail. Positive (negative) skew means mean exceeds (is less than) median and the tail points to the right (left).
263. B2DistributionRayleighStdev
Returns the Rayleigh distribution's theoretical standard deviation (second moment), measuring the width and average dispersion of all points around the mean.
264. B2DistributionTKurtosis
Returns the Student's T distribution's theoretical excess kurtosis (fourth moment), measuring the peakedness of the distribution and its extreme tail events. An excess kurtosis of 0 implies a normal tail.
265. B2DistributionTMean
Returns the Student's T distribution's theoretical mean or expected value (first moment), measuring the central tendency of the distribution.
266. B2DistributionTSkew
Returns the Student's T distribution's theoretical skew (third moment), measuring the direction of the distribution's tail. Positive (negative) skew means mean exceeds (is less than) median and the tail points to the right (left).
267. B2DistributionTStdev
Returns the Student's T distribution's theoretical standard deviation (second moment), measuring the width and average dispersion of all points around the mean.
268. B2DistributionTriangularKurtosis
Returns the Triangular distribution's theoretical excess kurtosis (fourth moment), measuring the peakedness of the distribution and its extreme tail events. An excess kurtosis of 0 implies a normal tail.
269. B2DistributionTriangularMean
Returns the Triangular distribution's theoretical mean or expected value (first moment), measuring the central tendency of the distribution.
270. B2DistributionTriangularSkew
Returns the Triangular distribution's theoretical skew (third moment), measuring the direction of the distribution's tail. Positive (negative) skew means mean exceeds (is less than) median and the tail points to the right (left).
271. B2DistributionTriangularStdev
Returns the Triangular distribution's theoretical standard deviation (second moment), measuring the width and average dispersion of all points around the mean.
272. B2DistributionUniformKurtosis
Returns the Uniform distribution's theoretical excess kurtosis (fourth moment), measuring the peakedness of the distribution and its extreme tail events. An excess kurtosis of 0 implies a normal tail.
273. B2DistributionUniformMean
Returns the Uniform distribution's theoretical mean or expected value (first moment), measuring the central tendency of the distribution.
274. B2DistributionUniformSkew
Returns the Uniform distribution's theoretical skew (third moment), measuring the direction of the distribution's tail. Positive (negative) skew means mean

- exceeds (is less than) median and the tail points to the right (left).
275. B2DistributionUniformStdev
Returns the Uniform distribution's theoretical standard deviation (second moment), measuring the width and average dispersion of all points around the mean.
276. B2DistributionWeibullKurtosis
Returns the Weibull distribution's theoretical excess kurtosis (fourth moment), measuring the peakedness of the distribution and its extreme tail events. An excess kurtosis of 0 implies a normal tail.
277. B2DistributionWeibullMean
Returns the Weibull distribution's theoretical mean or expected value (first moment), measuring the central tendency of the distribution.
278. B2DistributionWeibullSkew
Returns the Weibull distribution's theoretical skew (third moment), measuring the direction of the distribution's tail. Positive (negative) skew means mean exceeds (is less than) median and the tail points to the right (left).
279. B2DistributionWeibullStdev
Returns the Weibull distribution's theoretical standard deviation (second moment), measuring the width and average dispersion of all points around the mean.
280. B2DistributionCDFBernoulli
Computes the Bernoulli distribution's theoretical Cumulative Distribution Function (CDF), that is, the cumulative probability of the distribution less than or equal to X.
281. B2DistributionCDFBeta
Computes the Beta distribution's theoretical Cumulative Distribution Function (CDF), that is, the cumulative probability of the distribution at all points less than or equal to X.
282. B2DistributionCDFBinomial
Computes the Binomial distribution's theoretical Cumulative Distribution Function (CDF), that is, the cumulative probability of the distribution at all points less than or equal to X.
283. B2DistributionCDFChiSquare
Computes the Chi-Square distribution's theoretical Cumulative Distribution Function (CDF), that is, the cumulative probability of the distribution at all points less than or equal to X.
284. B2DistributionCDFDiscreteUniform
Computes the Discrete Uniform distribution's theoretical Cumulative Distribution Function (CDF), that is, the cumulative probability of the distribution at all points less than or equal to X.
285. B2DistributionCDFExponential
Computes the Exponential distribution's theoretical Cumulative Distribution Function (CDF), that is, the cumulative probability of the distribution at all points less than or equal to X.
286. B2DistributionCDFFDist
Computes the F distribution's theoretical Cumulative Distribution Function (CDF), that is, the cumulative probability of the distribution at all points less than or equal to X.
287. B2DistributionCDFGamma
Computes the Gamma distribution's theoretical Cumulative Distribution Function (CDF), that is, the
288. B2DistributionCDFGeometric
Computes the Geometric distribution's theoretical Cumulative Distribution Function (CDF), that is, the cumulative probability of the distribution at all points less than or equal to X.
289. B2DistributionCDFGumbelMax
Computes the Gumbel Max distribution's theoretical Cumulative Distribution Function (CDF), that is, the cumulative probability of the distribution at all points less than or equal to X.
290. B2DistributionCDFGumbelMin
Computes the Gumbel Min distribution's theoretical Cumulative Distribution Function (CDF), that is, the cumulative probability of the distribution at all points less than or equal to X.
291. B2DistributionCDFLogistic
Computes the Logistic distribution's theoretical Cumulative Distribution Function (CDF), that is, the cumulative probability of the distribution at all points less than or equal to X.
292. B2DistributionCDFLognormal
Computes the Lognormal distribution's theoretical Cumulative Distribution Function (CDF), that is, the cumulative probability of the distribution at all points less than or equal to X.
293. B2DistributionCDFNormal
Computes the Normal distribution's theoretical Cumulative Distribution Function (CDF), that is, the cumulative probability of the distribution at all points less than or equal to X.
294. B2DistributionCDFPareto
Computes the Pareto distribution's theoretical Cumulative Distribution Function (CDF), that is, the cumulative probability of the distribution at all points less than or equal to X.
295. B2DistributionCDFPoisson
Computes the Poisson distribution's theoretical Cumulative Distribution Function (CDF), that is, the cumulative probability of the distribution at all points less than or equal to X.
296. B2DistributionCDFRayleigh
Computes the Rayleigh distribution's theoretical Cumulative Distribution Function (CDF), that is, the cumulative probability of the distribution at all points less than or equal to X.
297. B2DistributionCDFStandardNormal
Computes the Standard Normal distribution's theoretical Cumulative Distribution Function (CDF), that is, the cumulative probability of the distribution at all points less than or equal to X.
298. B2DistributionCDFTDist
Computes the Student's T distribution's theoretical Cumulative Distribution Function (CDF), that is, the cumulative probability of the distribution at all points less than or equal to X.
299. B2DistributionCDFTriangular
Computes the Triangular distribution's theoretical Cumulative Distribution Function (CDF), that is, the cumulative probability of the distribution at all points less than or equal to X.
300. B2DistributionCDFUniform
Computes the Uniform distribution's theoretical Cumulative Distribution Function (CDF), that is, the cumulative probability of the distribution at all points less than or equal to X.

- Computes the Uniform distribution's theoretical Cumulative Distribution Function (CDF), that is, the cumulative probability of the distribution at all points less than or equal to X.
301. B2DistributionCDFWeibull
Computes the Weibull distribution's theoretical Cumulative Distribution Function (CDF), that is, the cumulative probability of the distribution at all points less than or equal to X.
302. B2DistributionCDFBernoulli
Computes the Bernoulli distribution's theoretical Inverse Cumulative Distribution Function (ICDF), that is, given the cumulative probability between 0 and 1, and the distribution's parameters, the function returns the relevant X value.
303. B2DistributionCDFBeta
Computes the Beta distribution's theoretical Inverse Cumulative Distribution Function (ICDF), that is, given the cumulative probability between 0 and 1, and the distribution's parameters, the function returns the relevant X value.
304. B2DistributionCDFBinomial
Computes the Binomial distribution's theoretical Inverse Cumulative Distribution Function (ICDF), that is, given the cumulative probability between 0 and 1, and the distribution's parameters, the function returns the relevant X value.
305. B2DistributionCDFChiSquare
Computes the Chi-Square distribution's theoretical Inverse Cumulative Distribution Function (ICDF), that is, given the cumulative probability between 0 and 1, and the distribution's parameters, the function returns the relevant X value.
306. B2DistributionCDFDiscreteUniform
Computes the Discrete Uniform distribution's theoretical Inverse Cumulative Distribution Function (ICDF), that is, given the cumulative probability between 0 and 1, and the distribution's parameters, the function returns the relevant X value.
307. B2DistributionCDFExponential
Computes the Exponential distribution's theoretical Inverse Cumulative Distribution Function (ICDF), that is, given the cumulative probability between 0 and 1, and the distribution's parameters, the function returns the relevant X value.
308. B2DistributionCDFFDist
Computes the F distribution's theoretical Inverse Cumulative Distribution Function (ICDF), that is, given the cumulative probability between 0 and 1, and the distribution's parameters, the function returns the relevant X value.
309. B2DistributionCDFGamma
Computes the Gamma distribution's theoretical Inverse Cumulative Distribution Function (ICDF), that is, given the cumulative probability between 0 and 1, and the distribution's parameters, the function returns the relevant X value.
310. B2DistributionCDFGeometric
Computes the Geometric distribution's theoretical Inverse Cumulative Distribution Function (ICDF), that is, given the cumulative probability between 0 and 1, and the distribution's parameters, the function returns the relevant X value.
311. B2DistributionCDFGumbelMax
Computes the Gumbel Max distribution's theoretical Inverse Cumulative Distribution Function (ICDF), that is, given the cumulative probability between 0 and 1, and the distribution's parameters, the function returns the relevant X value.
312. B2DistributionCDFGumbelMin
Computes the Gumbel Min distribution's theoretical Inverse Cumulative Distribution Function (ICDF), that is, given the cumulative probability between 0 and 1, and the distribution's parameters, the function returns the relevant X value.
313. B2DistributionCDFLogistic
Computes the Logistic distribution's theoretical Inverse Cumulative Distribution Function (ICDF), that is, given the cumulative probability between 0 and 1, and the distribution's parameters, the function returns the relevant X value.
314. B2DistributionCDFLognormal
Computes the Lognormal distribution's theoretical Inverse Cumulative Distribution Function (ICDF), that is, given the cumulative probability between 0 and 1, and the distribution's parameters, the function returns the relevant X value.
315. B2DistributionCDFNormal
Computes the Normal distribution's theoretical Inverse Cumulative Distribution Function (ICDF), that is, given the cumulative probability between 0 and 1, and the distribution's parameters, the function returns the relevant X value.
316. B2DistributionCDFPareto
Computes the Pareto distribution's theoretical Inverse Cumulative Distribution Function (ICDF), that is, given the cumulative probability between 0 and 1, and the distribution's parameters, the function returns the relevant X value.
317. B2DistributionCDFPoisson
Computes the Poisson distribution's theoretical Inverse Cumulative Distribution Function (ICDF), that is, given the cumulative probability between 0 and 1, and the distribution's parameters, the function returns the relevant X value.
318. B2DistributionCDFRayleigh
Computes the Rayleigh distribution's theoretical Inverse Cumulative Distribution Function (ICDF), that is, given the cumulative probability between 0 and 1, and the distribution's parameters, the function returns the relevant X value.
319. B2DistributionCDFStandardNormal
Computes the Standard Normal distribution's theoretical Inverse Cumulative Distribution Function (ICDF), that is, given the cumulative probability between 0 and 1, and the distribution's parameters, the function returns the relevant X value.
320. B2DistributionCDFTDist
Computes the Student's T distribution's theoretical Inverse Cumulative Distribution Function (ICDF), that is, given the cumulative probability between 0 and 1, and the distribution's parameters, the function returns the relevant X value.
321. B2DistributionCDFTriangular
Computes the Triangular distribution's theoretical Inverse Cumulative Distribution Function (ICDF), that is,

- given the cumulative probability between 0 and 1, and the distribution's parameters, the function returns the relevant X value.
322. B2DistributionCDFUniform
Computes the Uniform distribution's theoretical Inverse Cumulative Distribution Function (ICDF), that is, given the cumulative probability between 0 and 1, and the distribution's parameters, the function returns the relevant X value.
323. B2DistributionCDFWeibull
Computes the Weibull distribution's theoretical Inverse Cumulative Distribution Function (ICDF), that is, given the cumulative probability between 0 and 1, and the distribution's parameters, the function returns the relevant X value.
324. B2DistributionPDFBernoulli
Computes the Bernoulli distribution's theoretical Inverse Cumulative Distribution Function (ICDF), that is, given the cumulative probability between 0 and 1, and the distribution's parameters, the function returns the relevant X value.
325. B2DistributionPDFBeta
Computes the Beta distribution's theoretical Probability Density Function (PDF). The PDF of a discrete distribution returns the exact probability mass function or probability of occurrence but the PDF of continuous distributions are only theoretical values and not exact probabilities.
326. B2DistributionPDFBinomial
Computes the Binomial distribution's theoretical Probability Density Function (PDF). The PDF of a discrete distribution returns the exact probability mass function or probability of occurrence but the PDF of continuous distributions are only theoretical values and not exact probabilities.
327. B2DistributionPDFChiSquare
Computes the Chi-Square distribution's theoretical Probability Density Function (PDF). The PDF of a discrete distribution returns the exact probability mass function or probability of occurrence but the PDF of continuous distributions are only theoretical values and not exact probabilities.
328. B2DistributionPDFDiscreteUniform
Computes the Discrete Uniform distribution's theoretical Probability Density Function (PDF). The PDF of a discrete distribution returns the exact probability mass function or probability of occurrence but the PDF of continuous distributions are only theoretical values and not exact probabilities.
329. B2DistributionPDFExponential
Computes the Exponential distribution's theoretical Probability Density Function (PDF). The PDF of a discrete distribution returns the exact probability mass function or probability of occurrence but the PDF of continuous distributions are only theoretical values and not exact probabilities.
330. B2DistributionPDFFDist
Computes the F distribution's theoretical Probability Density Function (PDF). The PDF of a discrete distribution returns the exact probability mass function or probability of occurrence but the PDF of continuous distributions are only theoretical values and not exact probabilities.
331. B2DistributionPDFGamma
Computes the Gamma distribution's theoretical Probability Density Function (PDF). The PDF of a discrete distribution returns the exact probability mass function or probability of occurrence but the PDF of continuous distributions are only theoretical values and not exact probabilities.
332. B2DistributionPDFGeometric
Computes the Geometric distribution's theoretical Probability Density Function (PDF). The PDF of a discrete distribution returns the exact probability mass function or probability of occurrence but the PDF of continuous distributions are only theoretical values and not exact probabilities.
333. B2DistributionPDFGumbelMax
Computes the Gumbel Max distribution's theoretical Probability Density Function (PDF). The PDF of a discrete distribution returns the exact probability mass function or probability of occurrence but the PDF of continuous distributions are only theoretical values and not exact probabilities.
334. B2DistributionPDFGumbelMin
Computes the Gumbel Min distribution's theoretical Probability Density Function (PDF). The PDF of a discrete distribution returns the exact probability mass function or probability of occurrence but the PDF of continuous distributions are only theoretical values and not exact probabilities.
335. B2DistributionPDFLogistic
Computes the Logistic distribution's theoretical Probability Density Function (PDF). The PDF of a discrete distribution returns the exact probability mass function or probability of occurrence but the PDF of continuous distributions are only theoretical values and not exact probabilities.
336. B2DistributionPDFLognormal
Computes the Lognormal distribution's theoretical Probability Density Function (PDF). The PDF of a discrete distribution returns the exact probability mass function or probability of occurrence but the PDF of continuous distributions are only theoretical and not exact probabilities.
337. B2DistributionPDFNormal
Computes the Normal distribution's theoretical Probability Density Function (PDF). The PDF of a discrete distribution returns the exact probability mass function or probability of occurrence but the PDF of continuous distributions are only theoretical values and not exact probabilities.
338. B2DistributionPDFPareto
Computes the Pareto distribution's theoretical Probability Density Function (PDF). The PDF of a discrete distribution returns the exact probability mass function or probability of occurrence but the PDF of continuous distributions are only theoretical values and not exact probabilities.
339. B2DistributionPDFPoisson
Computes the Poisson distribution's theoretical Probability Density Function (PDF). The PDF of a discrete distribution returns the exact probability mass function or probability of occurrence but the PDF of continuous distributions are only theoretical values and not exact probabilities.

340. B2DistributionPDFRayleigh
Computes the Rayleigh distribution's theoretical Probability Density Function (PDF). The PDF of a discrete distribution returns the exact probability mass function or probability of occurrence but the PDF of continuous distributions are only theoretical values and not exact probabilities.
341. B2DistributionPDFStandardNormal
Computes the Standard Normal distribution's theoretical Probability Density Function (PDF). The PDF of a discrete distribution returns the exact probability mass function or probability of occurrence but the PDF of continuous distributions are only theoretical values and not exact probabilities.
342. B2DistributionPDFTDist
Computes the Student's T distribution's theoretical Probability Density Function (PDF). The PDF of a discrete distribution returns the exact probability mass function or probability of occurrence but the PDF of continuous distributions are only theoretical values and not exact probabilities.
343. B2DistributionPDFTriangular
Computes the Triangular distribution's theoretical Probability Density Function (PDF). The PDF of a discrete distribution returns the exact probability mass function or probability of occurrence but the PDF of continuous distributions are only theoretical values and not exact probabilities.
344. B2DistributionPDFUniform
Computes the Uniform distribution's theoretical Probability Density Function (PDF). The PDF of a discrete distribution returns the exact probability mass function or probability of occurrence but the PDF of continuous distributions are only theoretical values and not exact probabilities.
345. B2DistributionPDFWeibull
Computes the Weibull distribution's theoretical Probability Density Function (PDF). The PDF of a discrete distribution returns the exact probability mass function or probability of occurrence but the PDF of continuous distributions are only theoretical values and not exact probabilities.
346. B2EquityLinkedFXCallOptionDomesticValue
Call options whose underlying asset is in a foreign equity market, and the fluctuations of the foreign exchange risk is hedged by having a strike price on the foreign exchange rate. Resulting valuation is in the domestic currency.
347. B2EquityLinkedFXPutOptionDomesticValue
Put options whose underlying asset is in a foreign equity market, and the fluctuations of the foreign exchange risk is hedged by having a strike price on the foreign exchange rate. Resulting valuation is in the domestic currency.
348. B2EWMAVolatilityForecastGivenPastPrices
Computes the annualized volatility forecast of the next period given a series of historical prices and the corresponding weights placed on the previous volatility estimate.
349. B2EWMAVolatilityForecastGivenPastVolatility
Computes the annualized volatility forecast of the next period given the previous period's volatility and changes in stock returns in the previous period.
350. B2ExtremeSpreadCallOption
Maturities are divided into two segments, and the call option pays the difference between the max assets from segment two and max of segment one.
351. B2ExtremeSpreadPutOption
Maturities are divided into two segments, and the put option pays the difference between the min of segment two's asset value and the min of segment one's asset value.
352. B2ExtremeSpreadReverseCallOption
Maturities are divided into two segments, and a reverse call pays the min from segment one less the min of segment two.
353. B2ExtremeSpreadReversePutOption
Maturities are divided into two segments, and a reverse put pays the max of segment one less the max of the segment two.
354. B2FiniteDifferenceAmericanCall
Computes the American call option using finite differencing methods, as an alternative to simulation, closed-form approximation models, and lattices.
355. B2FiniteDifferenceAmericanPut
Computes the American put option using finite differencing methods, as an alternative to simulation, closed-form approximation models, and lattices.
356. B2FiniteDifferenceEuropeanCall
Computes the European call option using finite differencing methods, as an alternative to simulation, closed-form approximation models, and lattices.
357. B2FiniteDifferenceEuropeanPut
Computes the European put option using finite differencing methods, as an alternative to simulation, closed-form approximation models, and lattices.
358. B2FixedStrikeLookbackCall
Strike price is fixed, while at expiration, the payoff is the difference between the maximum asset price less the strike price, during the lifetime of the option.
359. B2FixedStrikeLookbackPut
Strike price is fixed, while at expiration, the payoff is the maximum difference between the lowest observed asset price less the strike price, during the lifetime of the option.
360. B2FixedStrikePartialLookbackCall
Strike price is fixed, while at expiration, the payoff is the difference between the maximum asset price less the strike, during the starting period of the lookback to the maturity of the option.
361. B2FixedStrikePartialLookbackPut
Strike price is fixed, while at expiration, the payoff is the maximum difference between the lowest observed asset price less the strike, during the starting period of the lookback to the maturity of the option.
362. B2FloatingStrikeLookbackCallonMin
Strike price is floating, while at expiration, the payoff on the call option is being able to purchase the underlying asset at the minimum observed price during the life of the option.
363. B2FloatingStrikeLookbackPutonMax
Strike price is floating, while at expiration, the payoff on the put option is being able to sell the underlying asset at the maximum observed asset price during the life of the option.
364. B2FloatingStrikePartialLookbackCallonMin

	Strike price is floating, while at expiration, the payoff on the call option is being able to purchase the underlying at the minimum observed asset price from inception to the end of the lookback time.				or contracting protection coverage of the foreign exchange rates.
365.	B2FloatingStrikePartialLookbackPutonMax	Strike price is floating, while at expiration, the payoff on the put option is being able to sell the underlying at the maximum observed asset price from inception to the end of the lookback time.		379.	B2ForwardRate Computes the Forward Interest Rate given two Spot Rates
366.	B2ForecastBrownianMotionSimulatedSeries	Computes the entire time-series of Brownian motion stochastic process forecast values.		380.	B2ForwardStartCallOption Starts proportionally in or out of the money in the future. Alpha<1: call starts (1-A)% in the money, put starts (1-A)% out of the money. Alpha>1: call (A-1) % out of the money, puts (A-1)% in the money.
367.	B2ForecastDistributionValue	Computes the forecast price of an asset in the future, assuming the asset follows a Brownian motion random walk and returns the forecast price given the cumulative probability level.		381.	B2ForwardStartPutOption Starts proportionally in or out of the money in the future. Alpha<1: call starts (1-A)% in the money, put starts (1-A)% out of the money. Alpha>1: call (A-1) % out of the money, puts (A-1)% in the money.
368.	B2ForecastDistributionValuePercentile	Computes the cumulative probability or percentile of an asset in the future, assuming the asset follows a Brownian motion random walk and returns the forecast cumulative percentile given the future price.		382.	B2FuturesForwardsCallOption Similar to a regular option but the underlying asset is a futures of forward contract. A call option is the option to buy a futures contract, with the specified futures strike price at which the futures is traded if the option is exercised.
369.	B2ForecastDistributionReturns	Computes the forecast return of an asset in the future, assuming the asset follows a Brownian motion random walk and returns the forecast percent return given the cumulative probability level.		383.	B2FuturesForwardsPutOption Similar to a regular option but the underlying asset is a futures of forward contract. A put option is the option to sell a futures contract, with the specified futures strike price at which the futures is traded if the option is exercised.
370.	B2ForecastDistributionReturnsPercentile	Computes the cumulative probability or percentile of an asset's returns in the future, assuming the asset follows a Brownian motion random walk and returns the forecast cumulative percentile given the return.		384.	B2FuturesSpreadCall The payoff of a spread option is the difference between the two futures' values at expiration. The spread is Futures 1 - Futures 2, and the call payoff is Spread - Strike value.
371.	B2ForecastJumpDiffusionSimulatedSeries	Computes the entire time-series of a jump-diffusion stochastic process forecast values.		385.	B2FuturesSpreadPut The payoff of a spread option is the difference between the two futures' values at expiration. The spread is Futures 1 - Futures 2, and the put payoff is Strike - Spread.
372.	B2ForecastMeanReversionSimulatedSeries	Computes the entire time-series of a mean-reverting stochastic process forecast values.		386.	B2GARCH Computes the forward-looking volatility forecast using the generalized autoregressive conditional heteroskedasticity (p, q) model where future volatilities are forecast based on historical price levels and information.
373.	B2ForecastIncrementalFinancialNeeds	Computes the incremental funds required to cover the projected organic sales growth of the company based on the projected year's financials.		387.	B2GapCallOption The call option is knocked in if the asset exceeds the reference Strike 1, and the option payoff is the asset price less Strike 2 for the underlying.
374.	B2ForecastIncrementalPercentSalesGrowthFinancedExternal	Computes the incremental funds as a percent of sales growth that is required from external funding to cover the projected organic sales growth of the company.		388.	B2GapPutOption The put option is knocked in only if the underlying asset is less than the reference Strike 1, providing a payoff of Strike Price 2 less the underlying asset value.
375.	B2ForeignEquityDomesticCurrencyCall	Computes the value of a foreign-based equity call option struck in a domestic currency and accounting for the exchange rate volatility.		389.	B2GeneralizedBlackScholesCall Returns the Black-Scholes Model with a continuous dividend yield call option.
376.	B2ForeignEquityDomesticCurrencyPut	Computes the value of a foreign-based equity put option struck in a domestic currency and accounting for the exchange rate volatility.		390.	B2GeneralizedBlackScholesCallCashDividends Modification of the Generalized Black-Scholes model to solve European call options assuming a series of dividend cash flows that may be even or uneven. A series of dividend payments and time are required.
377.	B2ForeignEquityFixedFXRateDomesticValueQuantoCall	Quanto call options are denominated in another currency than the underlying asset, with expanding or contracting protection coverage of the foreign exchange rates.		391.	B2GeneralizedBlackScholesPut Returns the Black-Scholes Model with a continuous dividend yield put option.
378.	B2ForeignEquityFixedFXRateDomesticValueQuantoPut	Quanto put options are denominated in another currency than the underlying asset, with an expanding		392.	B2GeneralizedBlackScholesPutCashDividends

- Modification of the Generalized Black-Scholes model to solve European put options assuming a series of dividend cash flows that may be even or uneven. A series of dividend payments and time are required.
393. B2GraduatedBarrierDownandInCall
Barriers are graduated ranges between lower and upper values. The option is knocked in the money proportionally depending on how low the asset value is in the range.
394. B2GraduatedBarrierDownandOutCall
Barriers are graduated ranges between lower and upper values. The option is knocked out of the money proportionally depending on how low the asset value is in the range.
395. B2GraduatedBarrierUpandInPut
Barriers are graduated ranges between lower and upper values. The option is knocked in the money proportionally depending on how high the asset value is in the range.
396. B2GraduatedBarrierUpandOutPut
Barriers are graduated ranges between lower and upper values. The option is knocked out of the money proportionally depending on how high the asset value is in the range.
397. B2ImpliedVolatilityBestCase
Computes the implied volatility given an expected value of an asset, and an alternative best case scenario value and its corresponding percentile (must be above 50%).
398. B2ImpliedVolatilityCall
Computes the implied volatility in a European call option given all the inputs parameters and option value.
399. B2ImpliedVolatilityPut
Computes the implied volatility in a European put option given all the inputs parameters and option value.
400. B2ImpliedVolatilityWorstCase
Computes the implied volatility given an expected value of an asset, and an alternative worst case scenario value and its corresponding percentile (must be below 50%).
401. B2InterestAnnualtoPeriodic
Computes the periodic compounding rate based on the annualized compounding interest rate per year.
402. B2InterestCaplet
Computes the interest rate caplet (sum all the caplets into the total value of the interest rate cap) and acts like an interest rate call option.
403. B2InterestContinuousToDiscrete
Returns the corresponding discrete compounding interest rate given the continuous compounding rate.
404. B2InterestContinuousToPeriodic
Computes the periodic compounding interest rate based on a continuous compounding rate.
405. B2InterestDiscreteToContinuous
Returns the corresponding continuous compounding interest rate given the discrete compounding rate.
406. B2InterestFloorlet
Computes the interest rate floorlet (sum all the floorlets into the total value of the interest rate floor) and acts like an interest rate put option.
407. B2InterestPeriodictoAnnual
Computes the annualized compounding interest rate per year based on a periodic compounding rate.
408. B2InterestPeriodictoContinuous
Computes the continuous compounding rate based on the periodic compounding interest rate.
409. B2InverseGammaCallOption
Computes the European Call option assuming an inverse Gamma distribution, rather than a normal distribution, and is important for deep out-of-the-money options.
410. B2InverseGammaPutOption
Computes the European Put option assuming an inverse Gamma distribution, rather than a normal distribution, and is important for deep out-of-the-money options.
411. B2IRRContinuous
Returns the continuously discounted Internal Rate of Return for a cash flow series with its respective cash flow times in years.
412. B2IRRDiscrete
Returns the discretely discounted Internal Rate of Return for a cash flow series with its respective cash flow times in years.
413. B2LinearInterpolation
Interpolates and fills in the missing values of a time series.
414. B2MarketPriceRisk
Computes the market price of risk used in a variety of options analysis, using market return, risk-free return, volatility of the market and correlation between the market and the asset.
415. B2MathIncompleteGammaQ
Returns the result from an incomplete Gamma Q function.
416. B2MathIncompleteGammaP
Returns the result from an incomplete Gamma P function.
417. B2MathIncompleteBeta
Returns the result from an incomplete Beta function.
418. B2MathGammaLog
Returns the result from a log gamma function.
419. B2MatrixMultiplyAxB
Multiplies two compatible matrices, such as MxN with NxM to create an MxM matrix. Copy and paste function and use Ctrl+Shift Enter to obtain the matrix.
420. B2MatrixMultiplyAxTransposeB
Multiplies the first matrix with the transpose of the second matrix (multiplies MxN with MxN matrix by transposing the second matrix to NxM, generating an MxM matrix). Copy and paste function and use Ctrl+Shift Enter to obtain the matrix.
421. B2MatrixMultiplyTransposeAxB
Multiplies the transpose of the first matrix with the second matrix (multiplies MxN with MxN matrix by transposing the first matrix to NxM, generating an NxN matrix). Copy and paste function and use Ctrl+Shift Enter to obtain the matrix.
422. B2MatrixTranspose
Transposes a matrix, from MxN to NxM. Copy and paste function and use Ctrl+Shift Enter to obtain the matrix.
423. B2MertonJumpDiffusionCall
Call value of an underlying whose asset returns are

- assumed to follow a Poisson Jump Diffusion process, i.e., prices jump several times a year, and cumulatively, these jumps explain a percentage of the total asset volatility.
424. B2MertonJumpDiffusionPut
Put value of an underlying whose asset returns are assumed to follow a Poisson Jump Diffusion process, i.e., prices jump several times a year, and cumulatively, these jumps explain a percentage of the total asset volatility.
425. B2NormalTransform
Converts values into a normalized distribution.
426. B2NPVContinuous
Returns the Net Present Value of a cash flow series given the time and discount rate, using Continuous discounting.
427. B2NPVDiscrete
Returns the Net Present Value of a cash flow series given the time and discount rate, using discrete discounting.
428. B2OptionStrategyLongBearCreditSpread
Returns the matrix [stock price, buy put, sell put, profit] of a long bearish credit spread (buying a higher strike put with a high price and selling a lower strike put with a low price).
429. B2OptionStrategyLongBullCreditSpread
Returns the matrix [stock price, buy put, sell put, profit] of a bullish credit spread (buying a low strike put at low price and selling a high strike put at high price).
430. B2OptionStrategyLongBearDebitSpread
Returns the matrix [stock price, buy call, sell call, profit] of a long bearish debit spread (buying a high strike call with a low price and selling a lower strike call with a high price).
431. B2OptionStrategyLongBullDebitSpread
Returns the matrix [stock price, buy call, sell call, profit] of a bullish debit spread (buying a low strike call at high price and selling a further out-of-the-money high strike call at low price).
432. B2OptionStrategyLongCoveredCall
Returns the matrix [stock price, buy stock, sell call, profit] of a long covered call position (buying the stock and selling a call of the same asset).
433. B2OptionStrategyLongProtectivePut
Returns the matrix [stock price, buy stock, buy put, profit] of a long protective put position (buying the stock and buying a put of the same asset).
434. B2OptionStrategyLongStraddle
Returns the matrix [stock price, buy call, buy put, profit] of a long straddle position (buy an equal number of puts and calls with identical strike price and expiration) to profit from high volatility.
435. B2OptionStrategyLongStrangle
Returns the matrix [stock price, buy call, buy put, profit] of a long strangle (buy high strike call at low price and buy low strike put at low price (close expirations), profits from high volatility).
436. B2OptionStrategyWriteCoveredCall
Returns the matrix [stock price, sell stock, buy call, profit] of writing a covered call (selling the stock and buying a call of the same asset).
437. B2OptionStrategyWriteProtectivePut
Returns the matrix [stock price, sell stock, sell put, profit] of a long protective put position (buying the stock and buying a put of the same asset).
438. B2OptionStrategyWriteStraddle
Returns the matrix [stock price, sell call, sell put, profit] of writing a straddle position (sell an equal number of puts and calls with identical strike price and expiration) to profit from low volatility.
439. B2OptionStrategyWriteStrangle
Returns the matrix [stock price, sell call, sell put, profit] of writing a strangle (sell high strike call at low price and sell low strike put at low price (close expirations), profits from low volatility).
440. B2Payback
Computes the payback in years given some initial investment and subsequent cash flows.
441. B2PerpetualCallOption
Computes the American perpetual call option. Note that it returns an error if dividend is 0% (this is because the American option reverts to European and a perpetual European has no value).
442. B2PerpetualPutOption
Computes the American perpetual put option. Note that it returns an error if dividend is 0% (this is because the American option reverts to European and a perpetual European has no value).
443. B2PortfolioReturns
Computes the portfolio weighted average expected returns given individual asset returns and allocations.
444. B2PortfolioRisk
Computes the portfolio risk given individual asset allocations and variance-covariance matrix.
445. B2PortfolioVariance
Computes the portfolio variance given individual asset allocations and variance-covariance matrix. Take the square root of the result to obtain the portfolio risk.
446. B2ProbabilityDefaultAdjustedBondYield
Computes the required risk-adjusted yield (premium spread plus risk-free) to charge given the cumulative probability of default.
447. B2ProbabilityDefaultAverageDefaults
Credit Risk Plus' average number of credit defaults per period using total portfolio credit exposures, average cum probability of default, and percentile Value at Risk for the portfolio.
448. B2ProbabilityDefaultCorrelation
Computes the correlations of default probabilities given the probabilities of default of each asset and the correlation between their equity prices. The result is typically much smaller than the equity correlation.
449. B2ProbabilityDefaultCumulativeBondYieldApproach
Computes the cumulative probability of default from Year 0 to Maturity using a comparable zero bond yield versus a zero risk-free yield and accounting for a recovery rate.
450. B2ProbabilityDefaultCumulativeSpreadApproach
Computes the cumulative probability of default from Year 0 to Maturity using a comparable risky debt's spread (premium) versus the risk-free rate and accounting for a recovery rate.
451. B2ProbabilityDefaultHazardRate
Computes the hazard rate for a specific year (in survival analysis) using a comparable zero bond yield versus a zero risk-free yield and accounting for a recovery rate.

452.	B2ProbabilityDefaultMertonDefaultDistance Distance to Default (does not require market returns and correlations but requires the internal growth rates).		identical input assumptions.
453.	B2ProbabilityDefaultMertonI Probability of Default (without regard to Equity Value or Equity Volatility, but requires Asset, Debt, and market values).	467.	B2PutCallParityPuttoCall Computes the European call option value given the value of a corresponding European put option with identical input assumptions.
454.	B2ProbabilityDefaultMertonII Probability of Default (does not require market returns and correlations but requires the internal growth rates).	468.	B2PutCallParityPuttoCallCurrencyOptions Computes the European currency call option value given the value of a corresponding European currency put option on futures and forwards with identical input assumptions.
455.	B2ProbabilityDefaultMertonImputedAssetValue Returns the imputed market value of asset given external equity value, equity volatility, and other option inputs. Used in the Merton probability of default model.	469.	B2PutCallParityPuttoCallFutures Computes the European call option on futures and forwards value given the value of a corresponding European put option on futures and forwards with identical input assumptions.
456.	B2ProbabilityDefaultMertonImputedAssetVolatility Returns the imputed volatility of asset given external equity value, equity volatility, and other option inputs. Used in the Merton probability of default model.	470.	B2PutDelta Returns the option valuation sensitivity Delta (a put option value's sensitivity to changes in the asset value).
457.	B2ProbabilityDefaultMertonMVDebt Computes the market value of debt (for risky debt) in the Merton-based simultaneous options model.	471.	B2PutGamma Returns the option valuation sensitivity Gamma (a put option value's sensitivity to changes in the delta value).
458.	B2ProbabilityDefaultMertonRecoveryRate Computes the rate of recovery in percent, for risky debt in the Merton-based simultaneous options model.	472.	B2PutOptionOnTheMax The maximum values at expiration of both assets are used in option exercise, where the call option payoff at expiration is the strike price against the maximum price between Asset 1 and Asset 2.
459.	B2ProbabilityDefaultPercentileDefaults Credit Risk Plus method to compute the percentile given some estimated average number of defaults per period.	473.	B2PutOptionOnTheMin The minimum values at expiration of both assets are used in option exercise, where the call option payoff at expiration is the strike price against the minimum price between Asset 1 and Asset 2.
460.	B2PropertyDepreciation Value of the periodic depreciation allowed on a commercial real estate project given the percent of price going to improvement and the allowed recovery period.	474.	B2PutRho Returns the option valuation sensitivity Rho (a put option value's sensitivity to changes in the interest rate).
461.	B2PropertyEquityRequired Value of the required equity down payment on a commercial real estate project given the valuation of the project.	475.	B2PutTheta Returns the option valuation sensitivity Theta (a put option value's sensitivity to changes in the maturity).
462.	B2PropertyLoanAmount Value of the required mortgage amount on a commercial real estate project given the value of the project and the loan required (loan to value ratio or the percentage of the value a loan is required).	476.	B2PutVega Returns the option valuation sensitivity Vega (a put option value's sensitivity to changes in the volatility).
463.	B2PropertyValuation Value of a commercial real estate property assuming Gross Rent, Vacancy, Operating Expenses, and the Cap Rate at Purchase Date (Net Operating Income/Sale Price).	477.	B2QueuingMCAveCustomersinSystem Average number of customers in the system using a multiple channel queuing model assuming a Poisson arrival rate with Exponential distribution of service times.
464.	B2PutCallParityCalltoPut Computes the European put option value given the value of a corresponding European call option with identical input assumptions.	478.	B2QueuingMCAveCustomersWaiting Average number of customers in the waiting line using a multiple channel queuing model assuming a Poisson arrival rate with Exponential distribution of service times.
465.	B2PutCallParityCalltoPutCurrencyOptions Computes the European currency put option value given the value of a corresponding European currency call option on futures and forwards with identical input assumptions.	479.	B2QueuingMCAveTimeinSystem Average time a customer spends in the system using a multiple channel queuing model assuming a Poisson arrival rate with Exponential distribution of service times.
466.	B2PutCallParityCalltoPutFutures Computes the European put option on futures and forwards value given the value of a corresponding European call option on futures and forwards with	480.	B2QueuingMCAveTimeWaiting Average time a customer spends in the waiting line using a multiple channel queuing model assuming a Poisson arrival rate with Exponential distribution of service times.
		481.	B2QueuingMCProbHaveToWait Probability an arriving customer has to wait using a

	multiple channel queuing model assuming a Poisson arrival rate with Exponential distribution of service times.		Probability an arriving customer has to wait using a single channel queuing model.
482.	B2QueuingMCProbNoCustomer Probability that no customers are in the system using a multiple channel queuing model assuming a Poisson arrival rate with Exponential distribution of service times.	497.	B2QueuingSCProbNoCustomer Returns the probability that no customers are in the system using a single channel queuing model.
483.	B2QueuingMGKAveCustomersinSystem Average number of customers in the system using a multiple channel queuing model assuming a Poisson arrival rate with unknown distribution of service times.	498.	B2RatiosBasicEarningPower Computes the basic earning power (BEP) by accounting for earnings before interest and taxes (EBIT) and the amount of total assets employed.
484.	B2QueuingMGKCostPerPeriod Total cost per time period using a multiple channel queuing model assuming a Poisson arrival rate with unknown distribution of service times.	499.	B2RatiosBetaLevered Computes the levered beta from an unlevered beta level after accounting for the tax rate, total debt and equity values.
485.	B2QueuingMGKProbBusy Probability a channel will be busy using a multiple channel queuing model assuming a Poisson arrival rate with unknown distribution of service times.	500.	B2RatiosBetaUnlevered Computes the unlevered beta from a levered beta level after accounting for the tax rate, total debt and equity values.
486.	B2QueuingSCAAveCustomersinSystem Average number of customers in the system using an MG1 single channel arbitrary queuing model assuming a Poisson arrival rate with unknown distribution of service times.	501.	B2RatiosBookValuePerShare Computes the book value per share (BV) by accounting for the total common equity amount and number of shares outstanding.
487.	B2QueuingSCAAveCustomersWaiting Average number of customers in the waiting line using an MG1 single channel arbitrary queuing model assuming a Poisson arrival rate with unknown distribution of service times.	502.	B2RatiosCapitalCharge Computes the capital charge value (typically used to compute the economic profit of a project).
488.	B2QueuingSCAAveTimeinSystem Average time a customer spends in the system using an MG1 single channel arbitrary queuing model assuming a Poisson arrival rate with unknown distribution of service times.	503.	B2RatiosCAPM Computes the capital asset pricing model's required rate of return in percent, given some benchmark market return, beta risk coefficient, and risk-free rate.
489.	B2QueuingSCAAveTimeWaiting Average time a customer spends in the waiting line using an MG1 single channel arbitrary queuing model assuming a Poisson arrival rate with unknown distribution of service times.	504.	B2RatiosCashFlowtoEquityLeveredFirm Cash flow to equity for a levered firm (accounting for operating expenses, taxes, depreciation, amortization, capital expenditures, change in working capital, preferred dividends, principal repaid and new debt issues).
490.	B2QueuingSCAProbHaveToWait Probability an arriving customer has to wait using an MG1 single channel arbitrary queuing model assuming a Poisson arrival rate with unknown distribution of service times.	505.	B2RatiosCashFlowtoEquityUnleveredFirm Cash flow to equity for an unlevered firm (accounting for operating expenses, taxes, depreciation, amortization, capital expenditures, change in working capital and taxes).
491.	B2QueuingSCAProbNoCustomer Probability that no customers are in the system using an MG1 single channel arbitrary queuing model assuming a Poisson arrival rate with unknown distribution of service times.	506.	B2RatiosCashFlowtoFirm Cash flow to the firm (accounting for earnings before interest and taxes EBIT, tax rate, depreciation, capital expenditures and change in working capital).
492.	B2QueuingSCAveCustomersinSystem Average number of customers in the system using a single channel queuing model.	507.	B2RatiosCashFlowtoFirm2 Cash flow to the firm (accounting for net operating profit after taxes (NOPAT), depreciation, capital expenditures and change in working capital).
493.	B2QueuingSCAveCustomersWaiting Returns the average number of customers in the waiting line using a single channel queuing model.	508.	B2RatiosContinuingValue1 Computes the continuing value based on a constant growth rate of free cash flows to perpetuity using a Gordon Growth Model.
494.	B2QueuingSCAveTimeinSystem Average time a customer spends in the system using a single channel queuing model.	509.	B2RatiosContinuingValue2 Computes the continuing value based on a constant growth rate of free cash flows to perpetuity using net operating profit after taxes (NOPAT), return on invested capital (ROIC), growth rate and current free cash flow.
495.	B2QueuingSCAveTimeWaiting Average time a customer spends in the waiting line using a single channel queuing model.	510.	B2RatiosCostEquity Computes the cost of equity (as used in a CAPM model) using the dividend rate, growth rate of dividends, and current equity price.
496.	B2QueuingSCProbHaveToWait	511.	B2RatiosCurrentRatio Computes the current ratio by accounting for the individual asset and liabilities.

512. B2RatiosDaysSalesOutstanding
Computes the days sales outstanding by looking at the accounts receivables value, total annual sales, and number of days per year.
513. B2RatiosDebtAssetRatio
Computes the debt to asset ratio by accounting for the total debt and total asset values.
514. B2RatiosDebtEquityRatio
Computes the debt to equity ratio by accounting for the total debt and total common equity levels.
515. B2RatiosDebtRatio1
Computes the debt ratio by accounting for the total debt and total asset values.
516. B2RatiosDebtRatio2
Computes the debt ratio by accounting for the total equity and total asset values.
517. B2RatiosDividendsPerShare
Computes the dividends per share (DPS) by accounting for the dividend payment amount and number of shares outstanding.
518. B2RatiosEarningsPerShare
Computes the earnings per share (EPS) by accounting for the net income amount and number of shares outstanding.
519. B2RatiosEconomicProfit1
Computes the economic profit using invested capital, return on invested capital (ROIC) and weighted average cost of capital (WACC).
520. B2RatiosEconomicProfit2
Computes the economic profit using net operating profit after tax (NOPAT), return on invested capital (ROIC) and weighted average cost of capital (WACC).
521. B2RatiosEconomicProfit3
Computes the economic profit using net operating profit after tax (NOPAT) and capital charge.
522. B2RatiosEconomicValueAdded
Computes the economic value added using earnings before interest and taxes (EBIT), total capital employed, tax rate, and weighted average cost of capital (WACC).
523. B2RatiosEquityMultiplier
Computes the equity multiplier (the ratio of total assets to total equity).
524. B2RatiosFixedAssetTurnover
Computes the fixed asset turnover by accounting for the annual sales levels and net fixed assets.
525. B2RatiosInventoryTurnover
Computes the inventory turnover using sales and inventory levels.
526. B2RatiosMarketBookRatio1
Computes the market to book value per share by accounting for the share price and the book value (BV) per share.
527. B2RatiosMarketBookRatio2
Computes the market to book value per share by accounting for the share price, total common equity value, and the number of shares outstanding.
528. B2RatiosMarketValueAdded
Computes the market value added by accounting for the stock price, total common equity, and number of shares outstanding.
529. B2RatiosNominalCashFlow
Computes the nominal cash flow amount assuming some inflation rate, real cash flow, and the number of years in the future.
530. B2RatiosNominalDiscountRate
Computes the nominal discount rate assuming some inflation rate and real discount rate.
531. B2RatiosPERatio1
Computes the price to earnings ratio (PE) using stock price and earnings per share (EPS).
532. B2RatiosPERatio2
Computes the price to earnings ratio (PE) using stock price, net income, and number of shares outstanding.
533. B2RatiosPERatio3
Computes the price to earnings ratio (PE) using growth rates, rate of return, and discount rate.
534. B2RatiosProfitMargin
Computes the profit margin by taking the ratio of net income to annual sales.
535. B2RatiosQuickRatio
Computes the quick ratio by accounting for the individual asset and liabilities.
536. B2RatiosRealCashFlow
Computes the real cash flow amount assuming some inflation rate, nominal cash flow (Nominal CF), and the number of years in the future.
537. B2RatiosRealDiscountRate
Computes the real discount rate assuming some inflation rate and nominal discount rate.
538. B2RatiosReturnonAsset1
Computes the return in asset using net income amount and total assets employed.
539. B2RatiosReturnonAsset2
Computes the return in asset using net profit margin percentage and total asset turnover ratio.
540. B2RatiosReturnonEquity1
Computes return on equity using net income and total common equity values.
541. B2RatiosReturnonEquity2
Computes return on equity using return on asset (ROA), total asset, and total equity values.
542. B2RatiosReturnonEquity3
Computes return on equity using net income, total sales, total asset, and total common equity values.
543. B2RatiosReturnonEquity4
Computes return on equity using net profit margin, total asset turnover, and equity multiplier values.
544. B2RatiosROIC
Computes the return on invested capital (typically used for computing economic profit) accounting for change in working capital, property, plant equipment (PPE).
545. B2RatiosShareholderEquity
Computes the common shareholder's equity after accounting for total assets, total liabilities and preferred stocks.
546. B2SimulatedEuropeanCall
Returns the Monte Carlo simulated European call option (only European options can be approximated well with simulation). This function is volatile.
547. B2SimulatedEuropeanPut
Returns the Monte Carlo simulated European put option (only European options can be approximated well with simulation). This function is volatile.
548. B2RatiosTimesInterestEarned
Computes the times interest earned ratio by accounting for earnings before interest and taxes (EBIT)

- and the amount of interest payment.
549. B2RatiosTotalAssetTurnover
Computes the total asset turnover by accounting for the annual sales levels and total assets.
550. B2RatiosWACC1
Computes the weighted average cost of capital (WACC) using market values of debt, preferred equity, and common equity, as well as their respective costs.
551. B2RatiosWACC2
Computes the weighted average cost of capital (WACC) using market values of debt, market values of common equity, as well as their respective costs.
552. B2ROBinomialAmericanAbandonContract
Returns the American option to abandon and contract using a binomial lattice model.
553. B2ROBinomialAmericanAbandonContractExpand
Returns the American option to abandon, contract and expand using a binomial lattice model.
554. B2ROBinomialAmericanAbandonExpand
Returns the American option to abandon and expand using a binomial lattice model.
555. B2ROBinomialAmericanAbandonment
Returns the American option to abandon using a binomial lattice model.
556. B2ROBinomialAmericanCall
Returns the American call option with dividends using a binomial lattice model.
557. B2ROBinomialAmericanChangingRiskFree
Returns the American call option with dividends and assuming the risk-free rate changes over time, using a binomial lattice model.
558. B2ROBinomialAmericanChangingVolatility
Returns the American call option with dividends and assuming the volatility changes over time, using a binomial lattice model. Use small number of steps or it will take a long time to compute!
559. B2ROBinomialAmericanContractExpand
Returns the American option to contract and expand using a binomial lattice model.
560. B2ROBinomialAmericanContraction
Returns the American option to contract using a binomial lattice model.
561. B2ROBinomialAmericanCustomCall
Returns the American option call option with changing inputs, vesting periods, and suboptimal exercise multiple using a binomial lattice model.
562. B2ROBinomialAmericanExpansion
Returns the American option to expand using a binomial lattice model.
563. B2ROBinomialAmericanPut
Returns the American put option with dividends using a binomial lattice model.
564. B2ROBinomialBermudanAbandonContract
Returns the Bermudan option to abandon and contract using a binomial lattice model, where there is a vesting/blackout period where the option cannot be executed.
565. B2ROBinomialBermudanAbandonContractExpand
Returns the Bermudan option to abandon, contract and expand, using a binomial lattice model, where there is a vesting/blackout period the option cannot be executed.
566. B2ROBinomialBermudanAbandonExpand
- Returns the Bermudan option to abandon and expand using a binomial lattice model, where there is a vesting/blackout period where the option cannot be executed.
567. B2ROBinomialBermudanAbandonment
Returns the Bermudan option to abandon using a binomial lattice model, where there is a vesting/blackout period where the option cannot be executed.
568. B2ROBinomialBermudanCall
Returns the Bermudan call option with dividends, where there is a vesting/blackout period where the option cannot be executed.
569. B2ROBinomialBermudanContractExpand
Returns the Bermudan option to contract and expand, using a binomial lattice model, where there is a vesting/blackout period where the option cannot be executed.
570. B2ROBinomialBermudanContraction
Returns the Bermudan option to contract using a binomial lattice model, where there is a vesting/blackout period where the option cannot be executed.
571. B2ROBinomialBermudanExpansion
Returns the Bermudan option to expand using a binomial lattice model, where there is a vesting/blackout period where the option cannot be executed.
572. B2ROBinomialBermudanPut
Returns the Bermudan put option with dividends, where there is a vesting/blackout period where the option cannot be executed.
573. B2ROBinomialEuropeanAbandonContract
Returns the European option to abandon and contract, using a binomial lattice model, where the option can only be executed at expiration.
574. B2ROBinomialEuropeanAbandonContractExpand
Returns the European option to abandon, contract and expand, using a binomial lattice model, where the option can only be executed at expiration.
575. B2ROBinomialEuropeanAbandonExpand
Returns the European option to abandon and expand, using a binomial lattice model, where the option can only be executed at expiration.
576. B2ROBinomialEuropeanAbandonment
Returns the European option to abandon using a binomial lattice model, where the option can only be executed at expiration.
577. B2ROBinomialEuropeanCall
Returns the European call option with dividends, where the option can only be executed at expiration.
578. B2ROBinomialEuropeanContractExpand
Returns the European option to contract and expand, using a binomial lattice model, where the option can only be executed at expiration.
579. B2ROBinomialEuropeanContraction
Returns the European option to contract using a binomial lattice model, where the option can only be executed at expiration.
580. B2ROBinomialEuropeanExpansion
Returns the European option to expand using a binomial lattice model, where the option can only be executed at expiration.

581. `B2ROBinomialEuropeanPut`
Returns the European put option with dividends, where the option can only be executed at expiration.
582. `B2ROJumpDiffusionCall`
Returns the closed-form model for a European call option whose underlying asset follows a Poisson jump-diffusion process.
583. `B2ROJumpDiffusionPut`
Returns the closed-form model for a European put option whose underlying asset follows a Poisson jump-diffusion process.
584. `B2ROMeanRevertingCall`
Returns the closed-form model for a European call option whose underlying asset follows a mean-reversion process.
585. `B2ROMeanRevertingPut`
Returns the closed-form model for a European put option whose underlying asset follows a mean-reversion process.
586. `B2ROPentanomialAmericanCall`
Returns the Rainbow American call option with two underlying assets (these are typically price and quantity, and are multiplied together to form a new combinatorial pentanomial lattice).
587. `B2ROPentanomialAmericanPut`
Returns the Rainbow American put option with two underlying assets (these are typically price and quantity, and are multiplied together to form a new combinatorial pentanomial lattice).
588. `B2ROPentanomialEuropeanCall`
Returns the Rainbow European call option with two underlying assets (these are typically price and quantity, and are multiplied together to form a new combinatorial pentanomial lattice).
589. `B2ROPentanomialEuropeanPut`
Returns the Rainbow European put option with two underlying assets (these are typically price and quantity, and are multiplied together to form a new combinatorial pentanomial lattice).
590. `B2ROQuadrnomialJumpDiffusionAmericanCall`
Returns the American call option whose underlying asset follows a Poisson jump-diffusion process, using a combinatorial quadrnomial lattice.
591. `B2ROQuadrnomialJumpDiffusionAmericanPut`
Returns the American put option whose underlying asset follows a Poisson jump-diffusion process, using a combinatorial quadrnomial lattice.
592. `B2ROQuadrnomialJumpDiffusionEuropeanCall`
Returns the European call option whose underlying asset follows a Poisson jump-diffusion process, using a combinatorial quadrnomial lattice.
593. `B2ROQuadrnomialJumpDiffusionEuropeanPut`
Returns the European put option whose underlying asset follows a Poisson jump-diffusion process, using a combinatorial quadrnomial lattice.
594. `B2ROStateAmericanCall`
Returns the American call option using a state jump function, where the up and down states can be asymmetrical, solved in a lattice model.
595. `B2ROStateAmericanPut`
Returns the American put option using a state jump function, where the up and down states can be asymmetrical, solved in a lattice model.
596. `B2ROStateBermudanCall`
Returns the Bermudan call option using a state jump function, where the up and down states can be asymmetrical, solved in a lattice model, and where the option cannot be exercised at certain vesting/blackout periods.
597. `B2ROStateBermudanPut`
Returns the Bermudan put option using a state jump function, where the up and down states can be asymmetrical, solved in a lattice model, and where the option cannot be exercised at certain vesting/blackout periods.
598. `B2ROStateEuropeanCall`
Returns the Bermudan call option using a state jump function, where the up and down states can be asymmetrical, solved in a lattice model, and where the option can only be exercised at maturity.
599. `B2ROStateEuropeanPut`
Returns the Bermudan put option using a state jump function, where the up and down states can be asymmetrical, solved in a lattice model, and where the option can only be exercised at maturity.
600. `B2ROTrinomialAmericanCall`
Returns the American call option with dividend, solved using a trinomial lattice.
601. `B2ROTrinomialAmericanMeanRevertingCall`
Returns the American call option with dividend, assuming the underlying asset is mean-reverting, and solved using a trinomial lattice.
602. `B2ROTrinomialAmericanMeanRevertingPut`
Returns the American call option with dividend, assuming the underlying asset is mean-reverting, and solved using a trinomial lattice.
603. `B2ROTrinomialAmericanPut`
Returns the American put option with dividend, solved using a trinomial lattice.
604. `B2ROTrinomialBermudanCall`
Returns the Bermudan call option with dividend, solved using a trinomial lattice, where during certain vesting/blackout periods, the option cannot be exercised.
605. `B2ROTrinomialBermudanPut`
Returns the Bermudan put option with dividend, solved using a trinomial lattice, where during certain vesting/blackout periods, the option cannot be exercised.
606. `B2ROTrinomialEuropeanCall`
Returns the European call option with dividend, solved using a trinomial lattice, where the option can only be exercised at maturity.
607. `B2ROTrinomialEuropeanMeanRevertingCall`
Returns the European call option with dividend, solved using a trinomial lattice, assuming the underlying asset is mean-reverting, and where the option can only be exercised at maturity.
608. `B2ROTrinomialEuropeanMeanRevertingPut`
Returns the European put option with dividend, solved using a trinomial lattice, assuming the underlying asset is mean-reverting, and where the option can only be exercised at maturity.
609. `B2ROTrinomialEuropeanPut`
Returns the European put option with dividend, solved using a trinomial lattice, where the option can only be

- exercised at maturity.
610. B2TrinomialImpliedArrowDebreuLattice
Computes the complete set of implied Arrow-Debreu prices in an implied trinomial lattice using actual observed data. Copy and paste the function and use Ctrl+Shift+Enter to obtain the matrix.
611. B2TrinomialImpliedArrowDebreuValue
Computes the single value of implied Arrow-Debreu price (for a specific step/column and up-down event/row) in an implied trinomial lattice using actual observed data.
612. B2TrinomialImpliedCallOptionValue
Computes the European Call Option using an implied trinomial lattice approach, taking into account actual observed inputs.
613. B2TrinomialImpliedDownProbabilityLattice
Computes the complete set of implied DOWN probabilities in an implied trinomial lattice using actual observed data. Copy and paste the function and use Ctrl+Shift+Enter to obtain the matrix.
614. B2TrinomialImpliedDownProbabilityValue
Computes the single value of implied DOWN probability (for a specific step/column and up-down event/row) in an implied trinomial lattice using actual observed data.
615. B2TrinomialImpliedLocalVolatilityLattice
Computes the complete set of implied local probabilities in an implied trinomial lattice using actual observed data. Copy and paste the function and use Ctrl+Shift+Enter to obtain the matrix.
616. B2TrinomialImpliedLocalVolatilityValue
Computes the single value of localized volatility (for a specific step/column and up-down event/row) in an implied trinomial lattice using actual observed data.
617. B2TrinomialImpliedUpProbabilityLattice
Computes the complete set of implied UP probabilities in an implied trinomial lattice using actual observed data. Copy and paste the function and use Ctrl+Shift+Enter to obtain the matrix.
618. B2TrinomialImpliedUpProbabilityValue
Computes the single value of implied UP probability (for a specific step/column and up-down event/row) in an implied trinomial lattice using actual observed data.
619. B2TrinomialImpliedPutOptionValue
Computes the European Put Option using an implied trinomial lattice approach, taking into account actual observed inputs.
620. B2SharpeRatio
Computes the Sharpe Ratio (returns to risk ratio) based on a series of stock prices of an asset and a market benchmark series of prices.
621. B2SCurveValue
Computes the S-Curve extrapolation's next forecast value based on previous value, growth rate and maximum capacity levels.
622. B2SCurveValueSaturation
Computes the S-Curve extrapolation's saturation level based on previous value, growth rate and maximum capacity levels.
623. B2SemiStandardDeviationPopulation
Computes the semi-standard deviation of the population, that is, only the values below the mean are used to compute an adjusted population standard deviation, a more appropriate measure of downside risk.
624. B2SemiStandardDeviationSample
Computes the semi-standard deviation of the sample, that is, only the values below the mean are used to compute an adjusted sample standard deviation, a more appropriate measure of downside risk.
625. B2SimulateBernoulli
Returns simulated random numbers from the Bernoulli distribution. Type in RAND() as the random input parameter to generate volatile random values from this distribution.
626. B2SimulateBeta
Returns simulated random numbers from the Beta distribution. Type in RAND() as the random input parameter to generate volatile random values from this distribution.
627. B2SimulateBinomial
Returns simulated random numbers from the Binomial distribution. Type in RAND() as the random input parameter to generate volatile random values from this distribution.
628. B2SimulateChiSquare
Returns simulated random numbers from the Chi-Square distribution. Type in RAND() as the random input parameter to generate volatile random values from this distribution.
629. B2SimulateDiscreteUniform
Returns simulated random numbers from the Discrete Uniform distribution. Type in RAND() as the random input parameter to generate volatile random values from this distribution.
630. B2SimulateExponential
Returns simulated random numbers from the Exponential distribution. Type in RAND() as the random input parameter to generate volatile random values from this distribution.
631. B2SimulateFDist
Returns simulated random numbers from the F distribution. Type in RAND() as the random input parameter to generate volatile random values from this distribution.
632. B2SimulateGamma
Returns simulated random numbers from the Gamma distribution. Type in RAND() as the random input parameter to generate volatile random values from this distribution.
633. B2SimulateGeometric
Returns simulated random numbers from the Geometric distribution. Type in RAND() as the random input parameter to generate volatile random values from this distribution.
634. B2SimulateGumbelMax
Returns simulated random numbers from the Gumbel Max distribution. Type in RAND() as the random input parameter to generate volatile random values from this distribution.
635. B2SimulateGumbelMin
Returns simulated random numbers from the Gumbel Min distribution. Type in RAND() as the random input parameter to generate volatile random values from this distribution.
636. B2SimulateLogistic

- Returns simulated random numbers from the Logistic distribution. Type in RAND() as the random input parameter to generate volatile random values from this distribution.
637. B2SimulateLognormal
Returns simulated random numbers from the Lognormal distribution. Type in RAND() as the random input parameter to generate volatile random values from this distribution.
638. B2SimulateNormal
Returns simulated random numbers from the Normal distribution. Type in RAND() as the random input parameter to generate volatile random values from this distribution.
639. B2SimulatePareto
Returns simulated random numbers from the Pareto distribution. Type in RAND() as the random input parameter to generate volatile random values from this distribution.
640. B2SimulatePoisson
Returns simulated random numbers from the Poisson distribution. Type in RAND() as the random input parameter to generate volatile random values from this distribution.
641. B2SimulateRayleigh
Returns simulated random numbers from the Rayleigh distribution. Type in RAND() as the random input parameter to generate volatile random values from this distribution.
642. B2SimulateStandardNormal
Returns simulated random numbers from the Standard Normal distribution. Type in RAND() as the random input parameter to generate volatile random values from this distribution.
643. B2SimulateTDist
Returns simulated random numbers from the Student's T distribution. Type in RAND() as the random input parameter to generate volatile random values from this distribution.
644. B2SimulateTriangular
Returns simulated random numbers from the Triangular distribution. Type in RAND() as the random input parameter to generate volatile random values from this distribution.
645. B2SimulateUniform
Returns simulated random numbers from the Uniform distribution. Type in RAND() as the random input parameter to generate volatile random values from this distribution.
646. B2SimulateWeibull
Returns simulated random numbers from the Weibull distribution. Type in RAND() as the random input parameter to generate volatile random values from this distribution.
647. B2SixSigmaControlCChartCL
Computes the center line in a control c-chart. C-charts are applicable when only the number of defects are important.
648. B2SixSigmaControlCChartDown1Sigma
Computes the lower 1 sigma limit in a control c-chart. C-charts are applicable when only the number of defects are important.
649. B2SixSigmaControlCChartDown2Sigma
Computes the lower 2 sigma limit in a control c-chart. C-charts are applicable when only the number of defects are important.
650. B2SixSigmaControlCChartUCL
Computes the upper control limit in a control c-chart. C-charts are applicable when only the number of defects are important.
651. B2SixSigmaControlCChartUCL
Computes the upper control limit in a control c-chart. C-charts are applicable when only the number of defects are important.
652. B2SixSigmaControlCChartUp1Sigma
Computes the upper 1 sigma limit in a control c-chart. C-charts are applicable when only the number of defects are important.
653. B2SixSigmaControlCChartUp2Sigma
Computes the upper 2 sigma limit in a control c-chart. C-charts are applicable when only the number of defects are important.
654. B2SixSigmaControlNPChartCL
Computes the center line in a control np-chart. NP-charts are applicable when proportions of defects are important, and where in each experimental subgroup, the number of sample size is constant.
655. B2SixSigmaControlNPChartDown1Sigma
Computes the lower 1 sigma limit in a control np-chart. NP-charts are applicable when proportions of defects are important, and where in each experimental subgroup, the number of sample size is constant.
656. B2SixSigmaControlNPChartDown2Sigma
Computes the lower 2 sigma limit in a control np-chart. NP-charts are applicable when proportions of defects are important, and where in each experimental subgroup, the number of sample size is constant.
657. B2SixSigmaControlNPChartLCL
Computes the lower control limit in a control np-chart. NP-charts are applicable when proportions of defects are important, and where in each experimental subgroup, the number of sample size is constant.
658. B2SixSigmaControlNPChartUCL
Computes the upper control limit in a control np-chart. NP-charts are applicable when proportions of defects are important, and where in each experimental subgroup, the number of sample size is constant.
659. B2SixSigmaControlNPChartUp1Sigma
Computes the upper 1 sigma limit in a control np-chart. NP-charts are applicable when proportions of defects are important, and where in each experimental subgroup, the number of sample size is constant.
660. B2SixSigmaControlNPChartUp2Sigma
Computes the upper 2 sigma limit in a control np-chart. NP-charts are applicable when proportions of defects are important, and where in each experimental subgroup, the number of sample size is constant.
661. B2SixSigmaControlPChartCL
Computes the center line in a control p-chart. P-charts are applicable when proportions of defects are important, and where in each experimental subgroup, the number of sample size might be different.
662. B2SixSigmaControlPChartDown1Sigma
Computes the lower 1 sigma limit in a control p-chart. P-charts are applicable when proportions of defects are important, and where in each experimental subgroup,

- the number of sample size might be different.
663. B2SixSigmaControlPChartDown2Sigma
Computes the lower 2 sigma limit in a control p-chart. P-charts are applicable when proportions of defects are important, and where in each experimental subgroup, the number of sample size might be different.
664. B2SixSigmaControlPChartLCL
Computes the lower control limit in a control p-chart. P-charts are applicable when proportions of defects are important, and where in each experimental subgroup, the number of sample size might be different.
665. B2SixSigmaControlPChartUCL
Computes the upper control limit in a control p-chart. P-charts are applicable when proportions of defects are important, and where in each experimental subgroup, the number of sample size might be different.
666. B2SixSigmaControlPChartUp1Sigma
Computes the upper 1 sigma limit in a control p-chart. P-charts are applicable when proportions of defects are important, and where in each experimental subgroup, the number of sample size might be different.
667. B2SixSigmaControlPChartUp2Sigma
Computes the upper 2 sigma limit in a control p-chart. P-charts are applicable when proportions of defects are important, and where in each experimental subgroup, the number of sample size might be different.
668. B2SixSigmaControlRChartCL
Computes the center line in a control R-chart. X-charts are used when the number of defects are important, in each subgroup experiment multiple measurements are taken, and the range of the measurements is the variable plotted.
669. B2SixSigmaControlRChartLCL
Computes the lower control limit in a control R-chart. X-charts are used when the number of defects are important, in each subgroup experiment multiple measurements are taken, and the range of the measurements is the variable plotted.
670. B2SixSigmaControlRChartUCL
Computes the upper control limit in a control R-chart. X-charts are used when the number of defects are important, in each subgroup experiment multiple measurements are taken, and the range of the measurements is the variable plotted.
671. B2SixSigmaControlUChartCL
Computes the center line in a control u-chart. U-charts are applicable when number of defects are important, and where in each experimental subgroup, the number of sample sizes are the same.
672. B2SixSigmaControlUChartDown1Sigma
Computes the lower 1 sigma limit in a control u-chart. U-charts are applicable when number of defects are important, and where in each experimental subgroup, the number of sample sizes are the same.
673. B2SixSigmaControlUChartDown2Sigma
Computes the lower 2 sigma limit in a control u-chart. U-charts are applicable when number of defects are important, and where in each experimental subgroup, the number of sample sizes are the same.
674. B2SixSigmaControlUChartLCL
Computes the lower control limit in a control u-chart. U-charts are applicable when number of defects are important, and where in each experimental subgroup,
- the number of sample sizes are the same.
675. B2SixSigmaControlUChartUCL
Computes the upper control limit in a control u-chart. U-charts are applicable when number of defects are important, and where in each experimental subgroup, the number of sample sizes are the same.
676. B2SixSigmaControlUChartUp1Sigma
Computes the upper 1 sigma limit in a control u-chart. U-charts are applicable when number of defects are important, and where in each experimental subgroup, the number of sample sizes are the same.
677. B2SixSigmaControlUChartUp2Sigma
Computes the upper 2 sigma limit in a control u-chart. U-charts are applicable when number of defects are important, and where in each experimental subgroup, the number of sample sizes are the same.
678. B2SixSigmaControlXChartCL
Computes the center line in a control X-chart. X-charts are used when the number of defects are important, in each subgroup experiment multiple measurements are taken, and the average of the measurements is the variable plotted.
679. B2SixSigmaControlXChartLCL
Computes the lower control limit in a control X-chart. X-charts are used when the number of defects are important, in each subgroup experiment multiple measurements are taken, and the average of the measurements is the variable plotted.
680. B2SixSigmaControlXChartUCL
Computes the upper control limit in a control X-chart. X-charts are used when the number of defects are important, in each subgroup experiment multiple measurements are taken, and the average of the measurements is the variable plotted.
681. B2SixSigmaControlXMRChartCL
Computes the center line in a control XmR-chart. XmR-are used when the number of defects are important with only a single measurement for each sample and a time-series of moving ranges is the variable plotted.
682. B2SixSigmaControlXMRChartLCL
Computes the lower control limit in a control XmR-chart. XmR-are used when the number of defects are important with only a single measurement for each sample and a time-series of moving ranges is the variable plotted.
683. B2SixSigmaControlXMRChartUCL
Computes the upper control limit in a control XmR-chart. XmR-are used when the number of defects are important with only a single measurement for each sample and a time-series of moving ranges is the variable plotted.
684. B2SixSigmaDeltaPrecision
Computes the error precision given specific levels of Type I and Type II errors, as well as the sample size and variance.
685. B2SixSigmaSampleSize
Computes the required minimum sample size given Type I and Type II errors, as well as the required precision of the mean and the error tolerances.
686. B2SixSigmaSampleSizeDPU
Computes the required minimum sample size given Type I and Type II errors, as well as the required precision of the defects per unit and the error

- tolerances.
687. B2SixSigmaSampleSizeProportion
Computes the required minimum sample size given Type I and Type II errors, as well as the required precision of the proportion of defects and the error tolerances.
688. B2SixSigmaSampleSizeStdev
Computes the required minimum sample size given Type I and Type II errors, as well as the required precision of the standard deviation and the error tolerances.
689. B2SixSigmaSampleSizeZeroCorrelTest
Computes the required minimum sample size to test if a correlation is statistically significant at an alpha of 0.05 and beta of 0.10.
690. B2SixSigmaStatCP
Computes the potential process capability index Cp given the actual mean and sigma of the process, including the upper and lower specification limits.
691. B2SixSigmaStatCPK
Computes the process capability index Cpk given the actual mean and sigma of the process, including the upper and lower specification limits.
692. B2SixSigmaStatDPMO
Computes the defects per million opportunities (DPMO) given the actual mean and sigma of the process, including the upper and lower specification limits.
693. B2SixSigmaStatDPU
Computes the proportion of defective units (DPU) given the actual mean and sigma of the process, including the upper and lower specification limits.
694. B2SixSigmaStatProcessSigma
Computes the process sigma level given the actual mean and sigma of the process, including the upper and lower specification limits.
695. B2SixSigmaStatYield
Computes the nondefective parts or the yield of the process given the actual mean and sigma of the process, including the upper and lower specification limits.
696. B2SixSigmaUnitCPK
Computes the process capability index Cpk given the actual counts of defective parts and the total opportunities in the population.
697. B2SixSigmaUnitDPMO
Computes the defects per million opportunities (DPMO) given the actual counts of defective parts and the total opportunities in the population.
698. B2SixSigmaUnitDPU
Computes the proportion of defective units (DPU) given the actual counts of defective parts and the total opportunities in the population.
699. B2SixSigmaUnitProcessSigma
Computes the process sigma level given the actual counts of defective parts and the total opportunities in the population.
700. B2SixSigmaUnitYield
Computes the nondefective parts or the yield of the process given the actual counts of defective parts and the total opportunities in the population.
701. B2StandardNormalBivariateCDF
Given the two Z-scores and correlation, returns the value of the bivariate standard normal (means of zero, variances of 1) cumulative distribution function.
702. B2StandardNormalCDF
Given the Z-score, returns the value of the standard normal (mean of zero, variance of 1) cumulative distribution function.
703. B2StandardNormalInverseCDF
Computes the inverse cumulative distribution function of a standard normal distribution (mean of 0 and variance of 1)
704. B2StandardNormalPDF
Given the Z-score, returns the value of the standard normal (mean of zero, variance of 1) probability density function.
705. B2StockIndexCallOption
Similar to a regular call option but the underlying asset is a reference stock index such as the Standard and Poors 500. The analysis can be solved using a Generalized Black-Scholes-Merton Model as well.
706. B2StockIndexPutOption
Similar to a regular put option but the underlying asset is a reference stock index such as the Standard and Poors 500. The analysis can be solved using a Generalized Black-Scholes-Merton Model as well.
707. B2SuperShareOptions
The option has value only if the stock or asset price is between the upper and lower barriers, and at expiration, provides a payoff equivalent to the stock or asset price divided by the lower strike price (S/X Lower).
708. B2SwaptionEuropeanPayer
European Call Interest Swaption.
709. B2SwaptionEuropeanReceiver
European Put Interest Swaption.
710. B2TakeoverFXOption
At a successful takeover (foreign firm value in foreign currency is less than the foreign currency units), option holder can purchase the foreign units at a predetermined strike price (in exchange rates of the domestic to foreign currency).
711. B2TimeSwitchOptionCall
Holder gets AccumAmount x TimeSteps each time asset > strike for a call. TimeSteps is frequency asset price is checked if strike is breached (e.g., for 252 trading days, set DT as 1/252).
712. B2TimeSwitchOptionPut
Holder gets AccumAmount x TimeSteps each time asset < strike for a put. TimeSteps is frequency asset price is checked if strike is breached (e.g., for 252 trading days, set DT as 1/252).
713. B2TradingDayAdjustedCall
Call option corrected for varying volatilities (higher on trading days than on non-trading days). Trading Days Ratio is the number of trading days left until maturity divided by total trading days per year (between 250 and 252).
714. B2TradingDayAdjustedPut
Put option corrected for varying volatilities (higher on trading days than on non-trading days). Trading Days Ratio is the number of trading days left until maturity divided by total trading days per year (between 250 and 252).
715. B2TwoAssetBarrierDownandInCall

	Valuable or knocked in-the-money only if the lower barrier is breached (reference Asset 2 goes below the barrier), and the payout is in the option on Asset 1 less the strike price.		expiration Asset 1's value is below Strike 1's value, then the put option is knocked in the money, and the payoff on the option is Strike 2 - Asset 2, otherwise the option becomes worthless.
716.	B2TwoAssetBarrierDownandInPut Valuable or knocked in-the-money only if the lower barrier is breached (reference Asset 2 goes below the barrier), and the payout is in the option on the strike price less the Asset 1 value.	729.	B2VaRCorrelationMethod Computes the Value at Risk using the Variance-Covariance and Correlation method, accounting for a specific VaR percentile and holding period.
717.	B2TwoAssetBarrierDownandOutCall Valuable or stays in-the-money only if the lower barrier is not breached (reference Asset 2 does not go below the barrier), and the payout is in the option on Asset 1 less the strike price.	730.	B2VarOptions Computes the Value at Risk of a portfolio of correlated options.
718.	B2TwoAssetBarrierDownandOutPut Valuable or stays in-the-money only if the lower barrier is not breached (reference Asset 2 does not go below the barrier), and the payout is in the option on the strike price less the Asset 1 value.	731.	B2Volatility Returns the Annualized Volatility of time-series cash flows. Enter in the number of periods in a cycle to annualize the volatility (1=annual, 4=quarter, 12=monthly data).
719.	B2TwoAssetBarrierUpandInCall Valuable or knocked in-the-money only if the upper barrier is breached (reference Asset 2 goes above the barrier), and the payout is in the option on Asset 1 less the strike price.	732.	B2VolatilityImpliedforDefaultRisk Only used when computing the implied volatility required for optimizing an option model to compute the probability of default.
720.	B2TwoAssetBarrierUpandInPut Valuable or knocked in-the-money only if the upper barrier is breached (reference Asset 2 goes above the barrier), and the payout is in the option on the strike price less the Asset 1 value.	733.	B2WarrantsDilutedValue Returns the value of a warrant (like an option) that is convertible to stock while accounting for dilution effects based on the number of shares and warrants outstanding.
721.	B2TwoAssetBarrierUpandOutCall Valuable or stays in-the-money only if the upper barrier is not breached (reference Asset 2 does not go above the barrier), and the payout is in the option on Asset 1 less the strike price.	734.	B2WriterExtendibleCallOption The call option is extended beyond the initial maturity to an extended date with a new extended strike if at maturity the option is out of the money, providing a safety net of time for the option holder.
722.	B2TwoAssetBarrierUpandOutPut Valuable or stays in-the-money only if the upper barrier is not breached (reference Asset 2 does not go above the barrier), and the payout is in the option on the strike price less the Asset 1 value.	735.	B2WriterExtendiblePutOption The put option is extended beyond the initial maturity to an extended date with a new extended strike if at maturity the option is out of the money, providing a safety net of time for the option holder.
723.	B2TwoAssetCashOrNothingCall Pays cash at expiration as long as both assets are in the money. For call options, both asset values must be above their respective strike prices.	736.	B2YieldCurveBIM Returns the Yield Curve at various points in time using the Bliss model.
724.	B2TwoAssetCashOrNothingDownUp Cash will only be paid if at expiration, the first asset is below the first strike, and the second asset is above the second strike.	737.	B2YieldCurveNS Returns the Yield Curve at various points in time using the Nelson-Siegel approach.
725.	B2TwoAssetCashOrNothingPut Pays cash at expiration as long as both assets are in the money. For put options, both assets must be below their respective strike prices).	738.	B2ZEOB Returns the Economic Order Batch or the optimal quantity to be manufactured on each production batch.
726.	B2TwoAssetCashOrNothingUpDown Cash will only be paid if the first asset is above the first strike price, and the second asset is below the second strike price at maturity.	739.	B2ZEOBBatch Returns the Economic Order Batch analysis' optimal number of batches to be manufactured per year.
727.	B2TwoAssetCorrelationCall Asset 1 is the benchmark asset, whereby if at expiration Asset 1's values exceed Strike 1's value, then the option is knocked in the money, and the payoff on the option is Asset 2 - Strike 2, otherwise the option becomes worthless.	740.	B2ZEOB HoldingCost Returns the Economic Order Batch analysis' cost of holding excess units per year if manufactured at the optimal level.
728.	B2TwoAssetCorrelationPut Asset 1 is the benchmark asset, whereby if at	741.	B2ZEOB ProductionCost Returns the Economic Order Batch analysis' total cost of setting up production per year if manufactured at the optimal level.
		742.	B2ZEOB TotalCost Returns the Economic Order Batch analysis' total cost of production and holding costs per year if manufactured at the optimal level.
		743.	B2ZEOQ Economic Order Quantity's order size on each order.
		744.	B2ZEOQ Excess

- 745. Economic Order Quantity's excess safety stock level
B2ZEOQOrders
- 746. Economic Order Quantity's number of orders per year
B2ZEOQProbability
- 747. Economic Order Quantity's probability of out of stock
B2ZEOQReorderPoint

The following lists the statistical and analytical tools in the

Modeling Toolkit:

- 748. Statistical Tool: Chi-Square Goodness of Fit Test
- 749. Statistical Tool: Chi-Square Independence Test
- 750. Statistical Tool: Chi-Square Population Variance Test
- 751. Statistical Tool: Dependent Means (T)
- 752. Statistical Tool: Friedman's Test
- 753. Statistical Tool: Independent and Equal Variances (T)
- 754. Statistical Tool: Independent and Unequal Variances (T)
- 755. Statistical Tool: Independent Means (Z)
- 756. Statistical Tool: Independent Proportions (Z)
- 757. Statistical Tool: Independent Variances (F)
- 758. Statistical Tool: Kruskal-Wallis Test
- 759. Statistical Tool: Lilliefors Test
- 760. Statistical Tool: Principal Component Analysis
- 761. Statistical Tool: Randomized Block Multiple Treatments
- 762. Statistical Tool: Runs Test
- 763. Statistical Tool: Single Factor Multiple Treatments
- 764. Statistical Tool: Testing Means (T)
- 765. Statistical Tool: Testing Means (Z)
- 766. Statistical Tool: Testing Proportions (Z)
- 767. Statistical Tool: Two-Way ANOVA
- 768. Statistical Tool: variance-Covariance Matrix
- 769. Statistical Tool: Wilcoxon Signed-Rank Test (One Variable)
- 770. Statistical Tool: Wilcoxon Signed-Rank Test (Two Variables)
- 771. Valuation Tool: Lattice Maker for Debt
- 772. Valuation Tool: Lattice Maker for Yield

The following lists Risk Simulator tools/applications that are used in the Modeling Toolkit:

- 773. Monte Carlo Simulation using 25 statistical distributions
- 774. Monte Carlo Simulation: Simulations with Correlations
- 775. Monte Carlo Simulation: Simulations with Precision Control
- 776. Monte Carlo Simulation: Simulations with Truncation
- 777. Stochastic Forecasting: Box-Jenkins ARIMA
- 778. Stochastic Forecasting: Maximum Likelihood
- 779. Stochastic Forecasting: Nonlinear Extrapolation
- 780. Stochastic Forecasting: Regression Analysis
- 781. Stochastic Forecasting: Stochastic Processes
- 782. Stochastic Forecasting: Time-Series Analysis
- 783. Portfolio Optimization: Discrete Binary Decision Variables
- 784. Portfolio Optimization: Discrete Decision Variables
- 785. Portfolio Optimization: Discrete Continuous Decision Variables
- 786. Portfolio Optimization: Static Optimization
- 787. Portfolio Optimization: Dynamic Optimization
- 788. Portfolio Optimization: Stochastic Optimization

- 789. Simulation Tools: Bootstrap Simulation
- 790. Simulation Tools: Custom Historical Simulation
- 791. Simulation Tools: Data Diagnostics
- 792. Simulation Tools: Distributional Analysis
- 793. Simulation Tools: Multiple Correlated Data Fitting
- 794. Simulation Tools: Scenario Analysis
- 795. Simulation Tools: Sensitivity Analysis
- 796. Simulation Tools: Single Data Fitting
- 797. Simulation Tools: Statistical Analysis
- 798. Simulation Tools: Tornado Analysis

The following lists Real Options SLS tools/applications used in the Modeling Toolkit:

- 799. Audit Sheet Functions
- 800. Changing Volatility and Risk-free Rates Model
- 801. Lattice Maker
- 802. SLS Single Asset and Single Phase: American Options
- 803. SLS Single Asset and Single Phase: Bermudan Options
- 804. SLS Single Asset and Single Phase: Customized Options
- 805. SLS Single Asset and Single Phase: European Options
- 806. SLS Multiple Asset and Multiple Phases
- 807. SLS Multinomial Lattices: Trinomials
- 808. SLS Multinomial Lattices: Trinomial Mean-Reversion
- 809. SLS Multinomial Lattices: Quadrinomials
- 810. SLS Multinomial Lattices: Pentanomials