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Understanding Options

Optionality (def): the power or right of choosing

Many examples of “Real Options” we face in daily life:

- Call Options: deposit towards an event or purchase, land/assets as options for future projects, etc.
- Put Option: Your homeowner’s insurance policy

Key characteristics: it’s your decision to exercise, there’s a time limit, it’s valuable.

Options in Finance

Financial options are a contracts giving you the right to buy or sell an asset at a set price on or before a future date.

- **Call** Option: gives the right to buy a security at a set price in the future

  e.g. GOOG call option @ $650 maturing June 18, 2011

- **Put** Option: gives the right to sell a security at a set price in the future

  BAC put option @ $12 maturing May 21, 2011

Tools for Modern Finance

Call Options

- Bullish
- Leverage

Put Options

- Bearish
- Downside protection

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Options Key Definitions

- Contract Specifics:

  Underlying Security: the security one can buy or sell

  Strike or Exercise Price: the set price to pay or receive

  Expiration or Maturity: the date until which we can decide

  Settlement: deliver the stock (“Physical”) or Cash?

- There are 2 option types:

  American Option: can be exercised anytime until maturity

  European Option: can only be exercised at maturity

- Underlyings: Equity, Index, ETF, VIX, Commodity and interest rates futures

- Options are examples of “derivatives” instruments

Option Markets

- Two Marketplaces for Equity Options
- Options Exchanges
  - E.g. CBOE, ISE, AMEX, PHLX, ARCA
  - 3.9 billion contracts traded in 2010.
  - Trading increased 8% in 2010, resuming growth after a flat 2009 and 5 years of double digit growth previously
  - Centralized clearing by the Options Clearing Corp (OCC)
  - How to track on Bloomberg: PTCL, G, GV
- "Over The Counter"
  - Individually negotiated contracts with banks as counterparty
  - Mostly custom contracts: "Listed lookalikes", American vs European, Longer dated, Non-standard strikes, "EXOTIC"
  - ISDA: $6.4T notional at Midyear 2010 after peaking at about $12T notional in mid 2008.

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Option Strategies

Type	Buyer (Holder) Long Position	Seller (Writer) Short Position
Call	Right to Buy Bullish on the Underlying	Obligation to Sell Bearish on the Underlying
Put	Right to Sell Bearish on the Underlying	Obligation to Buy Bullish on the Underlying

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Why Trade Options?

- I think Apple can reach $400 by the summer
- I'm afraid the market may go down after the Fed's QE2 ends
- I own MSFT stock and would like to increase my returns as I expect the stock to remains in it's current range
- I think Alcoa will beat earnings and I would like to bet on that
- I'd like to protect my holdings in GE against a 10% down move, but I don't think it can go down more than 15%
- I think the market will rise on Tuesday when the minutes of the FOMC meeting may mention further accomodative policy
- I think a biotech name like AMLN can go to either $5 or $20 depending on trial results later this year.

Reason to Care about the Options Market

"Options traders initiate a greater proportion of long (short) positions immediately before good (bad) earnings news"

Amin and Lee (1997)
Contemporary Accounting Research

"Put-call ratios by newly initiated trades have significant predictability for equity returns, which indicates informed trading in the options markets"

Pan, Poteshman (2006)
Review of Financial Studies

"Option volume…can predict stock returns."

Easley, O'Hara and Srinivas (1998)
Journal of Finance

"The shape of the volatility smirk has significant cross-sectional predictive power for future equity returns."

Xing, Zhang, Zhao (2008)
Journal of Financial and Quantitative Analysis

Underlyings

Breadth: 581 Securities trade > 1000 call option contracts/day
ETF Volume: 9 of to 20 most liquid securities are ETFs

FUNCTIONS

EQS
OVI

95) Output | 96) Actions | 581 securities | Equity Screening: Results

Chile volume | 97) Backtest | As Of 06/20/2013

Add Column | 92) Fields

	Ticker		Sec Type	Short Name	Average Volume:M-6	Avg D Val Traded 6M:M-6	Avg Vol Call 20D	Volume:D-1	Price:D-1
1)	SPY	US	ETF	SPDR S&P 500 ETF	132.85M	20.63B	1.03M	199.59M	163.45
2)	AAPL	US	Common Stock	APPLE INC	17.04M	7.76B	241.31k	11.09M	423.00
3)	IWM	US	ETF	ISHARES-RUS 2000	39.31M	3.63B	141.05k	43.08M	98.29
4)	EEM	US	ETF	ISHARES-EMG MKT	56.80M	2.42B	131.40k	106.51M	38.61
5)	QQQ	US	ETF	POWERSH-QQQ	34.13M	2.36B	179.78k	43.08M	72.76
6)	GOOG	US	Common Stock	GOOGLE INC-CL A	2.30M	1.85B	49.44k	2.91M	900.68
7)	GLD	US	ETF	SPDR GOLD TRUST	12.36M	1.82B	85.23k	12.96M	130.59
8)	BAC	US	Common Stock	BANK OF AMERICA	148.64M	1.81B	204.43k	103.57M	13.19
9)	MSFT	US	Common Stock	MICROSOFT CORP	49.91M	1.49B	71.45k	30.73M	34.59
10)	C	US	Common Stock	CITIGROUP INC	31.57M	1.43B	72.85k	32.49M	49.53
11)	FB	US	Common Stock	FACEBOOK INC-A	47.42M	1.31B	117.76k	31.72M	24.31
12)	XOM	US	Common Stock	EXXON MOBIL CORP	13.01M	1.16B	26.60k	14.19M	91.00
13)	JPM	US	Common Stock	JPMORGAN CHASE	23.58M	1.15B	56.17k	20.83M	53.55
14)	PFE	US	Common Stock	PFIZER INC	40.16M	1.13B	178.14k	121.01M	29.10
15)	EFA	US	ETF	ISHARES-MSCI EAF	18.51M	1.10B	22.46k	32.59M	59.95
16)	VXX	US	ETF	IPATH-S&P S/T FU	47.20M	1.03B	202.69k	86.28M	20.06
17)	INTC	US	Common Stock	INTEL CORP	43.77M	973.84M	83.71k	28.70M	25.00
18)	GE	US	Common Stock	GENERAL ELECTRIC	41.07M	930.37M	37.12k	46.07M	23.98
19)	XLF	US	ETF	SPDR-FINL SELECT	50.20M	916.45M	67.13k	61.27M	19.60
20)	DIA	US	ETF	SPDR DJIA TRUST	6.35M	914.79M	30.11k	9.14M	151.09

Analyze | 94) Stats ... | Grouping None | Zoom 100%

OCC—central counterparty for all listed trades

Jointly owned by all the exchanges

90) Edit Settings | 97) Save View | 98) Export To Excel | Option Volume Increase

Source: Equity Screen (EQS | liquid etf options | Day: Today | Moving Avg: 5 Day
Sector: All Sectors | All Industry Groups | Min Avg Vol: 100 | Min Tot Vol: 100
Security Type: Equity | ETF | Index | Exclude: Ex-Date Stocks
View: Standard | News | Bar | Last Refresh: Thu, Jun 20, 2013 05:48:11

Summary > Top By Calls - Equity / ETF

	Ticker		TotVol	AvgVol	Vol%Chg	P/C	Px	Px%Chg	TotOpInt	AvgOpInt	OI%Chg	TotOptVol
1	SPY	US	1583572	1009886	+56.81	1.29	163.45	-1.38	8737307	8479333	+3.04	3621766
2	VXX	US	202198	208420	-2.99	1.51	20.06	-0.11	1194990	1174773	+1.72	508183
3	QQQ	US	222467	181957	+22.26	1.20	72.76	-1.11	1827903	1796413	+1.75	488982
4	EEM	US	471342	180384	+161.30	1.34	38.61	-3.08	3815049	3560930	+7.14	1104526
5	IWM	US	166224	147456	+12.73	2.40	98.29	-1.23	1763996	1727980	+2.08	564800
6	GLD	US	82560	68491	+20.54	1.34	130.59	-1.17	2362106	2333163	+1.24	193150
7	IYR	US	55230	53911	+2.45	1.15	66.26	-3.00	581166	535059	+8.62	118699
8	FXI	US	52372	47580	+10.07	1.27	33.61	-2.75	862250	746768	+15.46	118636
9	SLV	US	51706	44028	+17.44	0.89	20.60	-1.34	2194042	2183832	+0.47	97565
10	GDX	US	44621	43577	+2.39	0.71	26.51	-3.18	1229075	1192127	+3.10	76415
11	TLT	US	62351	42453	+46.87	0.67	112.11	-1.03	439237	428259	+2.56	104242
12	EWZ	US	53656	40664	+31.95	0.86	45.39	-3.61	944687	899106	+5.07	99918
13	XLF	US	148367	37239	+298.42	0.44	19.60	-1.33	1726013	1739795	-0.79	213460
14	DIA	US	60063	36629	+63.97	0.78	151.09	-1.31	292901	278666	+5.11	106840
15	SDS	US	36620	33924	+7.95	0.30	39.84	+2.68	257740	252760	+1.97	47597
16	DXJ	US	28366	33450	-15.20	0.33	45.13	+0.07	334268	304802	+9.67	37653
17	FAS	US	40296	28956	+39.16	0.85	64.40	-4.12	104828	106819	-1.86	74736
18	USO	US	23563	25117	-6.19	1.73	34.78	-0.51	582375	556705	+4.61	64270
19	TZA	US	31454	24673	+27.48	0.26	30.92	+3.52	203590	199215	+2.20	39724

Analyze | Stats: Min | Max | Avg | Std Dev | More... | Grouping None | Zoom 100%

Diverse range of options on ETFs are traded, from sector focused, to country focused, to leveraged/inverse broad market indices

Volatility as an Asset Class

Multiple Ways to Trade

- OTC: Variance Swaps
- OTC: Forward Start VS
- Listed: VIX Futures
- Listed: VIX Options
- Listed: Volatility Related ETF

VIX Index | 1) Settings | 2) Actions | 3) Feedback | Contract Table

4) Futures | Sort By Expiration | As of 06/19/13

CBOE VIX FUTURE | 7) CBF (CEM)

Contracts 10 | Aggr Vol 214201 | Aggr Open Int 329469

Intraday | Daily | 8) Curve (CCRV)

Description	Last	Change	Time	Bid	Ask	Open Int	Volume	Previous
21) Spot	16.64 s	+.03	Close					16.61
22) Jul13	17.55 s	-.10	Close	17.50	17.55	150805	116639	17.65
23) Aug13	18.35 s	--	Close	18.30	18.35	61749	49415	18.35
24) Sep13	19.05 s	+.05	Close	19.00	19.05	35887	19408	19.00
25) Oct13	19.55 s	--	Close	19.50	19.55	24732	12717	19.55
26) Nov13	20.00 s	+.10	Close	19.95	20.00	28815	7784	19.90
27) Dec13	20.15 s	-.05	Close	20.10	20.20	21429	5554	20.20
28) Jan14	21.00 s	+.05	Close	20.95	21.00	3878	2314	20.95
29) Feb14	21.35 s	+.05	Close	21.30	21.35	2174	370	21.30
30) Mar14		--	Close					

FUNCTIONS

VIX <index> CT

VSV

OVME VS

(Shared Monitor) | Vol indices & ETFs [105] | Options

Monitor | View | Alerts | News | Link To

Ticker	Short Name	Curr Px	Pct Chg on Day	Chg on Day	Ret YTD Pct	Volume	Avg Vol 30D	Avg Vol Call 5D	Avg Vol Put 5D
ETNs									
VXX	IPATH-S&P S/T FU	20.058	-.11%	-.022	-36.9444%	35,701	51,094,752	188444.2	211606.80
XIV	VELOCITYSH INV V	21.05	+.10%	+.02	+26.8645%	1,950	17,823,966	.00	.00
TVIX	VELOCITYSH 2X VX	3.00	-.99%	-.03	-99.061%	2,100	8,688,513	.00	.00
UVXY	PRO ULTRA VIX ST	68.48	-.15%	-.10	-67.2344%	3,200	3,437,430	9204.60	8207.40
SVXY	PRO SHORT VIX ST	82.53	-.28%	-.23	+26.0963%	1,949,855	1,075,370	748.60	722.20
VIIX	VELOCITY VIX	10.84	-.09%	-.01	-37.0134%	4,200	694,936	28.20	7.00
VIXY US	PRO VIX ST FUT	54.11	--	--	-36.3786%	1,095,177	586,044	408.40	817.20
VXZ	IPATH-S&P M/T FU	22.07	-.36%	-.08	-21.0376%	832,433	577,745	21.20	110.80
VIXM US	PRO VIX MT FUT	27.11	--	--	-20.7773%	56,071	116,109	14.00	6.00
ZIV	VELOCITYSH INV V	28.75	+.10%	+.03	+20.9508%	174,305	102,168	.00	.00
XVZ US	IPATH-S&P500 DYN	41.28	-.29%	-.12	-10.3388%	51,278	92,973	.00	.00
HVI CN	d HORIZONS BETAPRO	16.57	+.12%	+.02	+25.3404%	46,635	33,863	.00	.00
VQT	BARCLAYS VEQTORT	140.62	-1.12%	-1.59	+8.7801%	32,661	23,828	.00	.00

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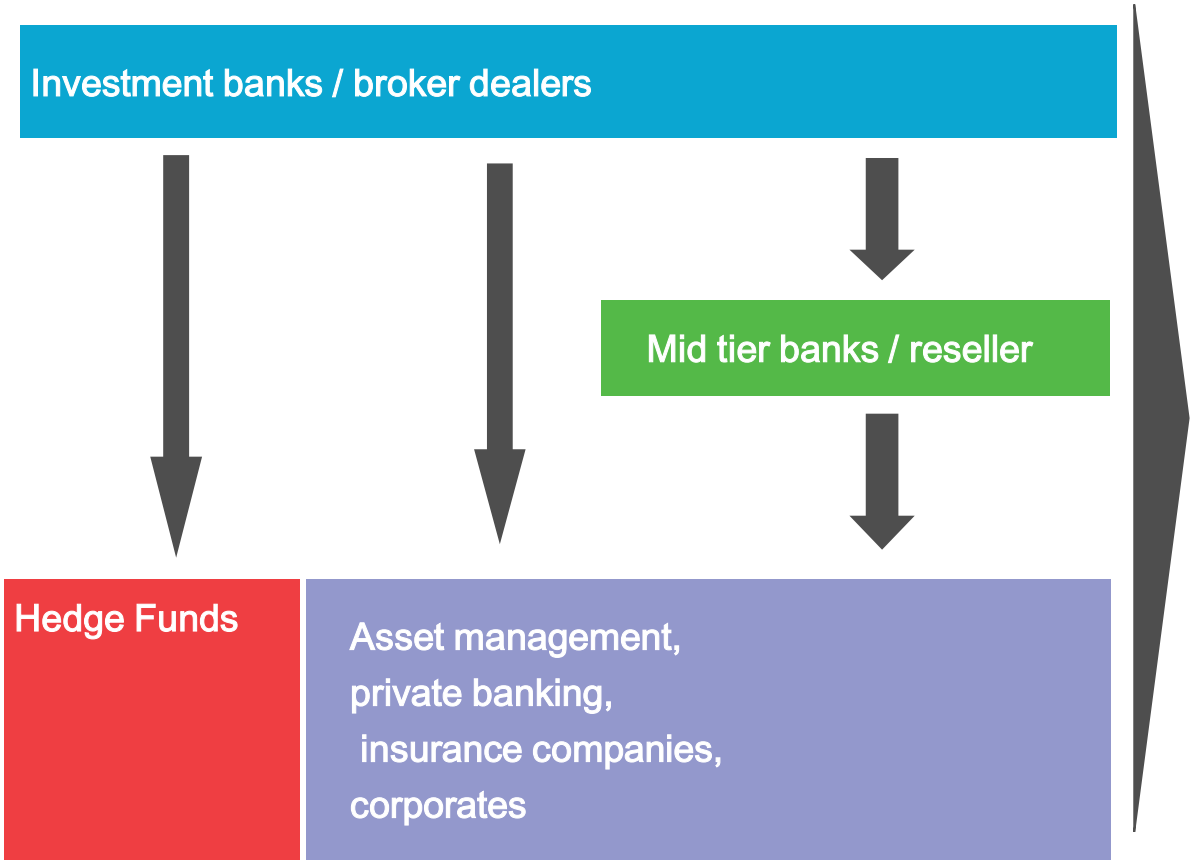
Players

Buy-Side and Sell-Side

OPTIONS AND STRUCTURED NOTES: PLAYERS AND FLOWS



- Banks sell OTC derivatives and are issuers and underwriters of structured notes due to the ability to manage internally derivatives risks
- Mid tier banks act as primary intermediaries distributing derivatives and structured note to smaller players
- Final buyers can be targeted by both market makers and mid tier banks

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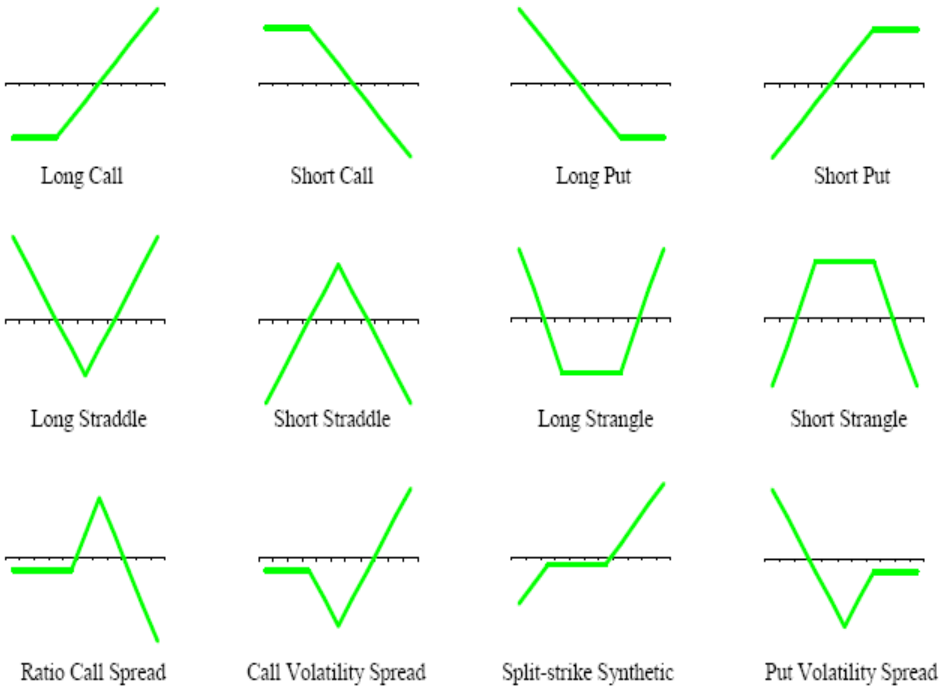
Options Trading Strategies

Equity Derivatives Strategy

Guide to Basic Options Strategies — September 1995

	Price Up	Price Neutral	Price Down
Volatility Up	Long Call Call Backspread	Long Straddle Long Strangle Short Butterfly	Long Put Put Backspread
Volatility Neutral	Bullish Call or Put Spread	Arbitrage Spreads	Bearish Call or Put Spread
Volatility Down	Short Put	Short Straddle Short Strangle Long Butterfly	Short Call



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Options Trading Strategies

Examples of Option Combinations

Position	Diagram #	Construction by Component
Long Call	1	+ Call
Short Call	2	- Call
Long Put	3	+ Put
Short Put	4	- Put
Long Synthetic	5	+ Call – Put + Bond
Long Split Strike Combo	6	+ Call $_{\text{High Strike}}$ – Put $_{\text{Low Strike}}$
Short Synthetic	7	+ Put – Call – Bond
Short Split Strike Combo	8	- Call $_{\text{High Strike}}$ + Put $_{\text{Low Strike}}$
Protective Put	9	Stock + Put
Collar Hedge	10	Stock + Put $_{\text{Low Strike}}$ – Call $_{\text{High Strike}}$
Covered Call	11	Stock – Call
Covered Call Spread	12	Stock – Call $_{\text{Low Strike}}$ + Call $_{\text{High Strike}}$
Long Call Spread	13	Call $_{\text{Low Strike}}$ – Call $_{\text{High Strike}}$
Short Call Spread	14	- Call $_{\text{Low Strike}}$ + Call $_{\text{High Strike}}$
Long Put Spread	15	+ Put $_{\text{High Strike}}$ – Put $_{\text{Low Strike}}$
Short Put Spread	16	- Put $_{\text{High Strike}}$ + Put $_{\text{Low Strike}}$
Long Bullish Backspread	17	- Call $_{\text{Lower Strike}}$ + 2 x Call $_{\text{Higher Strike}}$
Short Bullish Backspread	18	+ Call $_{\text{Lower Strike}}$ – 2 x Call $_{\text{Higher Strike}}$
Long Bearish Backspread	19	+ 2 x Put $_{\text{Lower Strike}}$ – Put $_{\text{Higher Strike}}$
Short Bearish Backspread	20	- 2 x Put $_{\text{Lower Strike}}$ + Put $_{\text{Higher Strike}}$
Long Straddle	21	+ Call + Put
Short Straddle	22	- Call – Put
Long Strangle	23	+ Call $_{\text{Higher Strike}}$ + Put $_{\text{Lower Strike}}$
Short Strangle	24	- Call $_{\text{Higher Strike}}$ – Put $_{\text{Lower Strike}}$
Long Butterfly (using calls)	25	+ Call $_{\text{Low Strike}}$ – 2 x Call $_{\text{Middle Strike}}$ + Call $_{\text{High Strike}}$
Long Butterfly (using puts)	26	+ Put $_{\text{High Strike}}$ – 2 x Put $_{\text{Middle Strike}}$ + Put $_{\text{Low Strike}}$
Long Iron Butterfly		+ Put $_{\text{Low Strike}}$ – Put $_{\text{Middle Strike}}$ – Call $_{\text{Middle Strike}}$ + Call $_{\text{High Strike}}$
Short Butterfly (using calls)	27	- Call $_{\text{Low Strike}}$ + 2 x Call $_{\text{Middle Strike}}$ – Call $_{\text{High Strike}}$
Short Butterfly (using puts)	28	- Put $_{\text{High Strike}}$ + 2 x Put $_{\text{Middle Strike}}$ – Put $_{\text{Low Strike}}$
Short Iron Butterfly		- Put $_{\text{Low Strike}}$ + Put $_{\text{Middle Strike}}$ + Call $_{\text{Middle Strike}}$ – Call $_{\text{High Strike}}$
Long Condor (using calls)		+ Call $_{\text{Low Strike}}$ – Call $_{\text{Lower Middle Strike}}$ – Call $_{\text{Higher Middle Strike}}$ + Call $_{\text{High Strike}}$
Long Condor (using puts)		+ Put $_{\text{Low Strike}}$ – Put $_{\text{Lower Middle Strike}}$ – Put $_{\text{Higher Middle Strike}}$ + Put $_{\text{High Strike}}$
Long Iron Condor	29	+ Put $_{\text{Low Strike}}$ – Put $_{\text{Lower Middle Strike}}$ – Call $_{\text{Higher Middle Strike}}$ + Call $_{\text{High Strike}}$
Short Condor (using calls)		- Call $_{\text{Low Strike}}$ + Call $_{\text{Lower Middle Strike}}$ + Call $_{\text{Higher Middle Strike}}$ – Call $_{\text{High Strike}}$
Short Condor (using puts)		- Put $_{\text{Low Strike}}$ + Put $_{\text{Lower Middle Strike}}$ + Put $_{\text{Higher Middle Strike}}$ – Put $_{\text{High Strike}}$
Short Iron Condor	30	- Put $_{\text{Low Strike}}$ + Put $_{\text{Lower Middle Strike}}$ + Call $_{\text{Higher Middle Strike}}$ – Call $_{\text{High Strike}}$

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Popular Option Combinations

- Buy a call (close to ATM) and sell a higher strike one
- Profit from stock price rise up to the upper strike
- Cheaper than a straight call
- Put spread for bearing bet in a range

- Buy a call and a put usually close the ATM level
- Profit from a stock price move either direction
- Also viewed as long volatility strategy (also delta hedged)
- Variations: strangle (different strikes), butterfly

- Buy a put and sell a call to cap long stock exposure
- A hedging strategy if you own the stock
- Call is funding the put purchase, can be near costless

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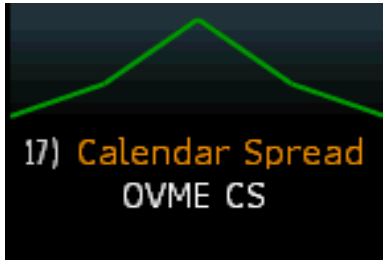
Popular Option Combinations

- Buy an OTM call and sell an OTM put
- Exposure is similar to long stock
- Cheap strategy for directional bets

- Sell a call on a stock you already own (long)
- Generate yield if stock price is flat/down, safe otherwise
- Select strike price for highest standstill return
- Sell calls regularly for higher annual return

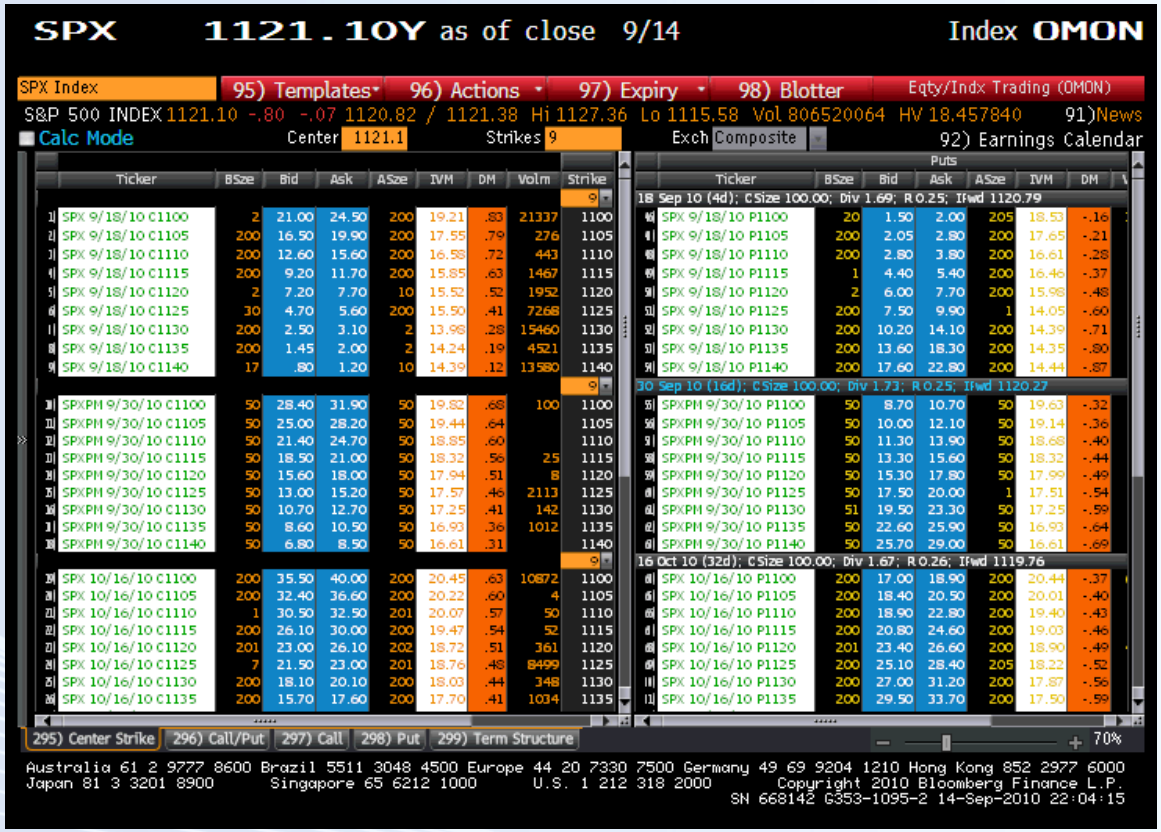


- Trade one maturity against another, same strike
- Arbitrage the term structure
- Diagonal spread is different maturity and different strike

OVME GO

Realtime Option Price Data

- Weeklies added: Filter Expirations via “Edit Settings”
- Calc Mode
- Colors!

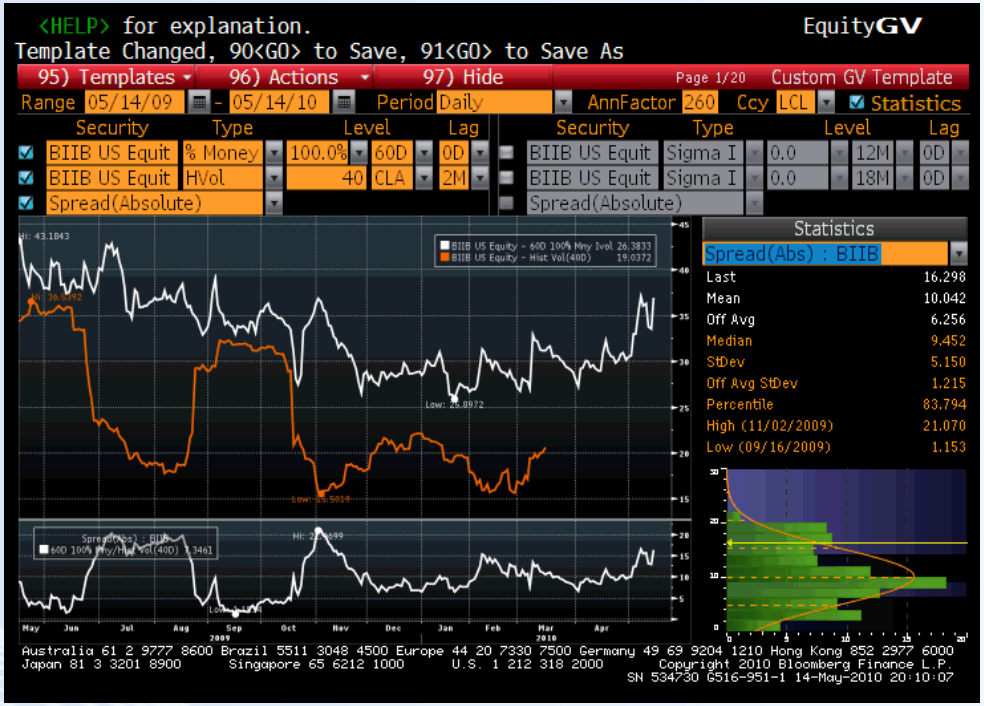


Option Price Calculator

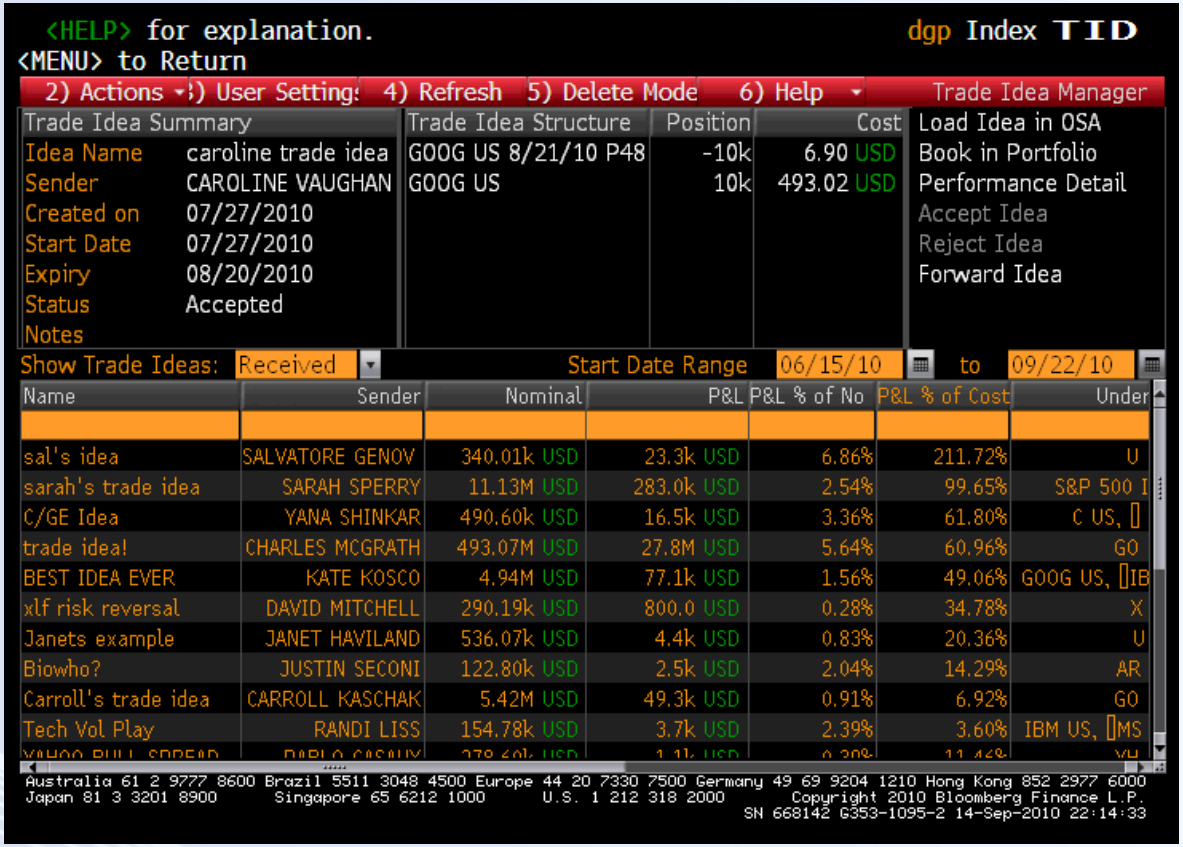
- Black-Scholes Model and Beyond
- Use “OVL” instead of “OVME” for listed option analysis
- Shortcut keys (OVL CP, OVL CS, OVL 3L)

Charting Volatility Related Data

- Implied Volatility at various strikes and maturities
- Historical Volatility, CDS, Underlying Price Information
- Statistical Summary and Spread Analysis



Portfolio Management



- Share and Track P/L on individual trade ideas
- Hedging options

Multi-Security Option Analysis

RV /VOL EquityRV

STI US Equity | 95) Customize | 96) Output | 97) Actions | Relative Valuation

Peers Bloomberg Peers | Region Global | Closest | 50 By Mkt Cap

Show Volatility Statistics | Add Column | 93) Fields

	Name	Last Px	3M 100% IVOL	1Y 100% IVOL	3M 90% IVOL	3M 110% IVOL	90/110 Skew Sprd	25 Dlt Skew Sprd	3M/12M 100% Trm	1Y Vol Pctl Rank	Vol StdDev	Vol Av StdD
	SUNTRUST BANKS INC	23.72	49.79	52.24	54.06	46.32	7.74	12.02	-2.45	45.63	8.73	-
2)	FIRST CITIZENS BCSHS	185.09	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	
3)	GOLDMAN SACHS GROUP	133.66	39.75	40.41	43.68	36.88	6.80	8.56	-0.66	80.56	5.50	
4)	M & T BANK CORP	87.01	42.88	38.57	46.75	39.76	6.99	9.57	4.31	69.44	6.32	
5)	PNC FINANCIAL SERVICES	58.54	40.69	39.76	44.99	37.19	7.79	10.14	0.93	44.05	7.94	-
6)	CITY NATIONAL CORP	51.57	38.40	N.A.	41.70	36.12	5.57	6.89	N.A.	52.78	6.62	-
7)	NORTHERN TRUST CORP	48.09	34.37	34.95	37.84	31.70	6.14	6.83	-0.58	79.37	4.65	
8)	CAPITAL ONE FINANCIAL	41.14	48.02	49.80	53.06	44.08	8.98	13.45	-1.78	50.40	8.83	-
9)	AMERICAN EXPRESS CO	40.03	44.86	45.69	49.96	40.56	9.40	13.27	-0.83	65.87	7.86	
10)	JPMORGAN CHASE & CO	37.12	39.94	42.94	44.76	36.22	8.54	10.82	-3.00	71.03	5.80	

Signals Embedded in Implied Volatility Surface

"The shape of the volatility smirk has significant cross-sectional predictive power for future equity returns."

FUNCTIONS

- **VCA**
- **GV**
- **OVDV**

91) Actions | 92) Feedback | Volatility and Correlation Analysis

Equity | Sector | Health Care | United States | Term 1 Month | Range 1 Year

5) Impl Vol | 6) Impl/Realized Vol | 7) Skew | 8) Term

	90% Implied		110% Implied		1M 90% - 110% Spread					
Underlying	Vol	Chg	Vol	Chg	Spread	Low	Range (Now / Avg)	High	Avg	PCTL↑
101) PharMerica Corp	67.74	13.74	40.02	3.30	27.72	-16.14		27.72	8.88	99.39
102) Exelixis Inc	83.74	28.48	59.34	5.67	24.40	-27.87		24.98	1.56	99.00
103) Synageva BioPharma Corp	73.71	27.28	58.50	15.97	15.21	-1.94		15.21	6.51	98.90
104) Idenix Pharmaceuticals Inc	88.32	23.98	77.80	14.57	10.53	-25.39		13.55	-3.45	97.81
105) InterMune Inc	64.85	9.90	51.03	-2.92	13.82	-17.89		15.61	4.24	97.41
106) Hospira Inc	37.14	.98	25.31	-1.40	11.83	.62		14.10	7.84	97.01
107) Nanosphere Inc	168.17	-4.49	127.26	-2.17	40.91	-18.08		43.23	.37	96.53
108) ABIOMED Inc	65.61	3.64	55.38	2.78	10.23	-6.13		14.42	4.84	95.80
109) HeartWare International Inc	44.17	10.50	29.58	.56	14.59	.43		19.89	8.31	95.00
110) Amedisys Inc	62.79	1.24	54.22	-.78	8.57	-2.65		12.49	5.27	94.22
111) Genomic Health Inc	55.21	4.27	41.20	.64	14.01	-5.16		18.69	7.47	93.43
112) Perrigo Co	24.19	.09	15.14	-.15	9.05	-1.21		14.72	5.70	93.43
113) Cynosure Inc	63.01	-3.90	36.92	.73	26.09	-20.10		32.18	7.19	92.97
114) CryoLife Inc	53.96	5.20	50.45	-.44	3.51	-10.88		3.51	-5.46	92.86
115) Merrimack Pharmaceuticals Inc	191.87	-6.62	141.36	9.27	50.50	-8.12		66.40	32.76	91.86
116) CR Bard Inc	24.47	.64	12.69	-.50	11.78	1.53		14.39	8.11	91.83
117) Techne Corp	34.71	.14	20.64	-.44	14.07	-22.12		21.79	.71	91.71
118) PhotoMedex Inc	68.21	2.10	51.05	.50	17.16	-2.90		32.42	10.16	91.47
119) Ampio Pharmaceuticals Inc	137.60	3.16	113.68	1.98	23.92	-12.36		38.94	6.42	91.18
120) Eli Lilly & Co	22.85	-.51	15.25	.78	7.61	-8.24		9.63	2.82	91.04
121) Orexigen Therapeutics Inc	82.40	12.87	73.97	12.23	8.43	-20.51		15.25	2.09	91.04

Additional Functions

OSCH <GO> BTM <GO> ALRT <GO>