

The background features a white grid of dotted lines. A large blue area chart is overlaid on the grid, starting from the bottom left and trending upwards towards the top right. The chart has several peaks and valleys, with the highest peak on the right side. The CBOE logo is positioned in the top left corner, and the main title and instructor information are centered in the lower half of the image.

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Introduction to Index Options
Russell Rhoads, CFA
Instructor – The Options Institute

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- Product Overview
- Exchange Traded Fund vs. Index Options
- Option Pricing Factors
 - Introduced
 - Specific to Index Options
- Income Strategy
- Summary / Q&A

What are they?

1. Index Options vs. Stock and ETF Options
2. Cash Settlement vs. Delivery
3. \$100 Multiplier vs. 100 Shares
4. Exercise Style: European vs. American
5. Settlement Method (AM vs. PM)

Stock options and ETF options are similar –

- The underlying is 100 shares
- Exercise/Assignment: Buy/Sell Shares

Index Options are different –

- The underlying is a cash value
- Exercise/Assignment: Receive/Pay Cash

Index Options vs. ETF Options



<u>Index</u>	<u>ETF</u>	<u>Index</u>	<u>Exercise / Settle</u>
DJIA®	DIA®	DJX	PM European
S&P 500®	SPY	SPX	AM European
		XSP®	AM European
		SPXpm	PM European
S&P 100®	OEF	OEX®	PM American
		XEO®	PM European
NASDAQ 100®	QQQ	NDX	AM European
		MNX®	AM European
Russell 2000®	IWM	RUT	AM European

Cash Settlement –

SPXpm Index at 1325.00 at expiration

Value of 1300 Call –

Index Value	1325.00
Less Strike Price	1300.00
Difference	25.00
x Multiplier	x <u>\$100.00</u>
Cash from Seller to Buyer	\$2500.00

American vs. European Style –

American Style –

- Stock and ETF Options
- Some Index Options
- May be exercised any business day

European Style –

- Most Index Options
- Can be exercised only on last day

AM vs. PM Settlement –

PM Settlement –

- Based on closing prices
- Calculated upon market close
- OEX, XEO, SPXpm, SPX-Weeklys

AM Settlement –

- Based on opening prices
- Last trading day typically Thursday
- SPX, XSP, DJX, NDX, RUT

Potential Tax Advantage –

ETF Options –

- Are treated like stock options

Broad Based Index Options –

- Receive 60-40 Tax Treatment*
- 1256 Contracts

* According to Taxes and Investing, published by The Options Industry Council, available from <http://www.cboe.com/LearnCenter/RCGeneral.asp>

Note: IRS regulations may change. Seek professional tax advice.

1256 Contracts –

- Profits treated as 60% long term / 40% short term regardless of holding period
- Reported on Form 6781 and Schedule D
- Positions are 'marked to market' and taxed as if closed out
- Year end prices become cost basis for the new year

	<u>Today</u>	<u>In 2 Weeks</u>	
S&P 500	1290	1340	
Days to Exp.	35	21	
1300 Call	28.00	50.00	+80%
1350 Call	11.00	22.00	+100%

Starting Assumptions –

S&P 500 up 50 points
14 days for move

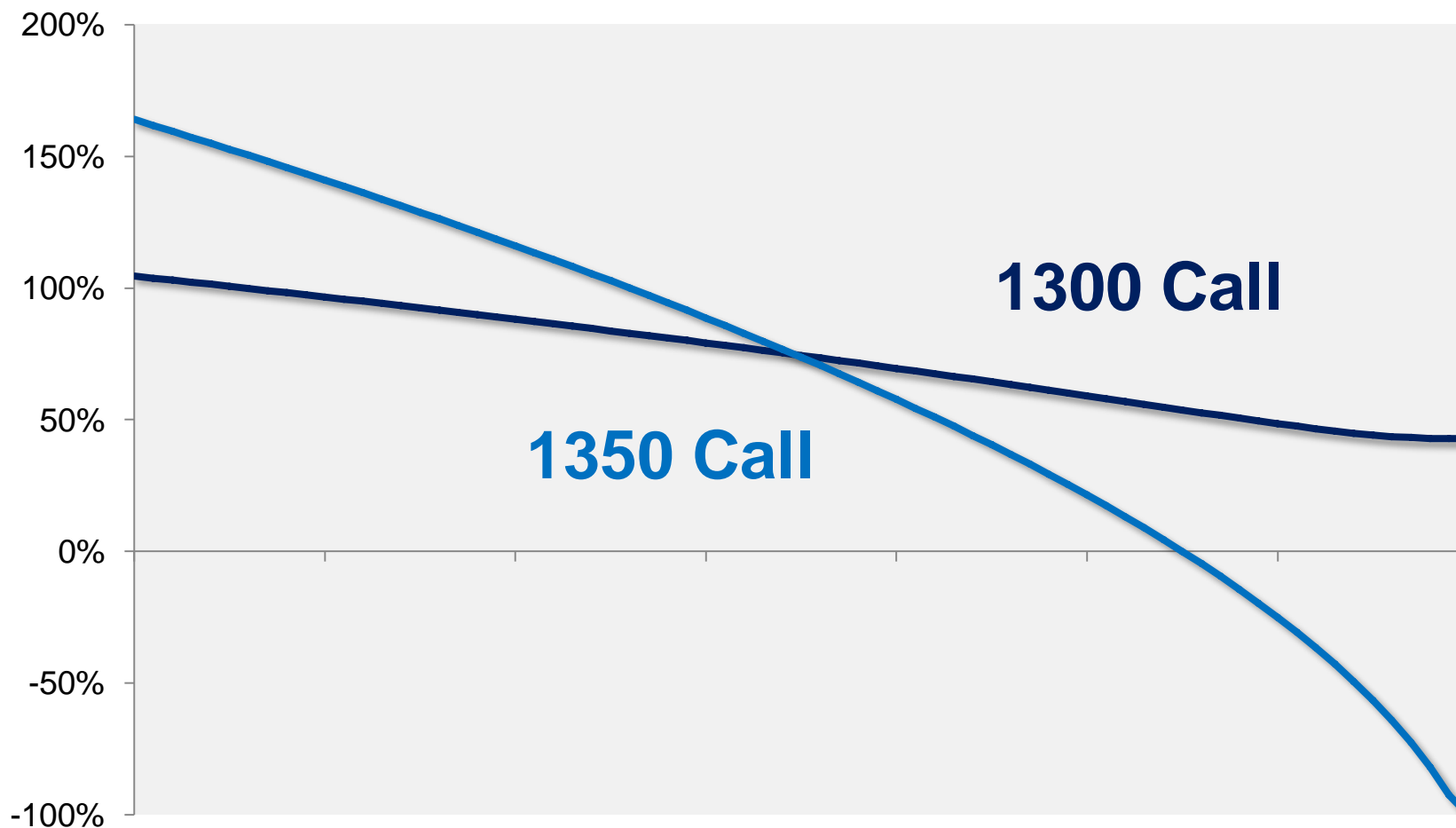
	<u>Today</u>	<u>In 3 Weeks</u>	
S&P 500	1290	1340	
Days to Exp.	35	14	
1300 Call	28.00	47.00	+67%
1350 Call	11.00	16.00	+45%

Starting Assumptions –

S&P 500 up 50 points

21 days for move

Time Decay (S&P 500 @ 1340) –



	<u>Today</u>	<u>In 2 Weeks</u>	
S&P 500	1360	1310	
Days to Exp.	35	21	
1300 Put	11.00	32.00	+190%
1350 Put	28.00	60.00	+114%

Starting Assumptions –

S&P 500 down 50 points

14 days for move

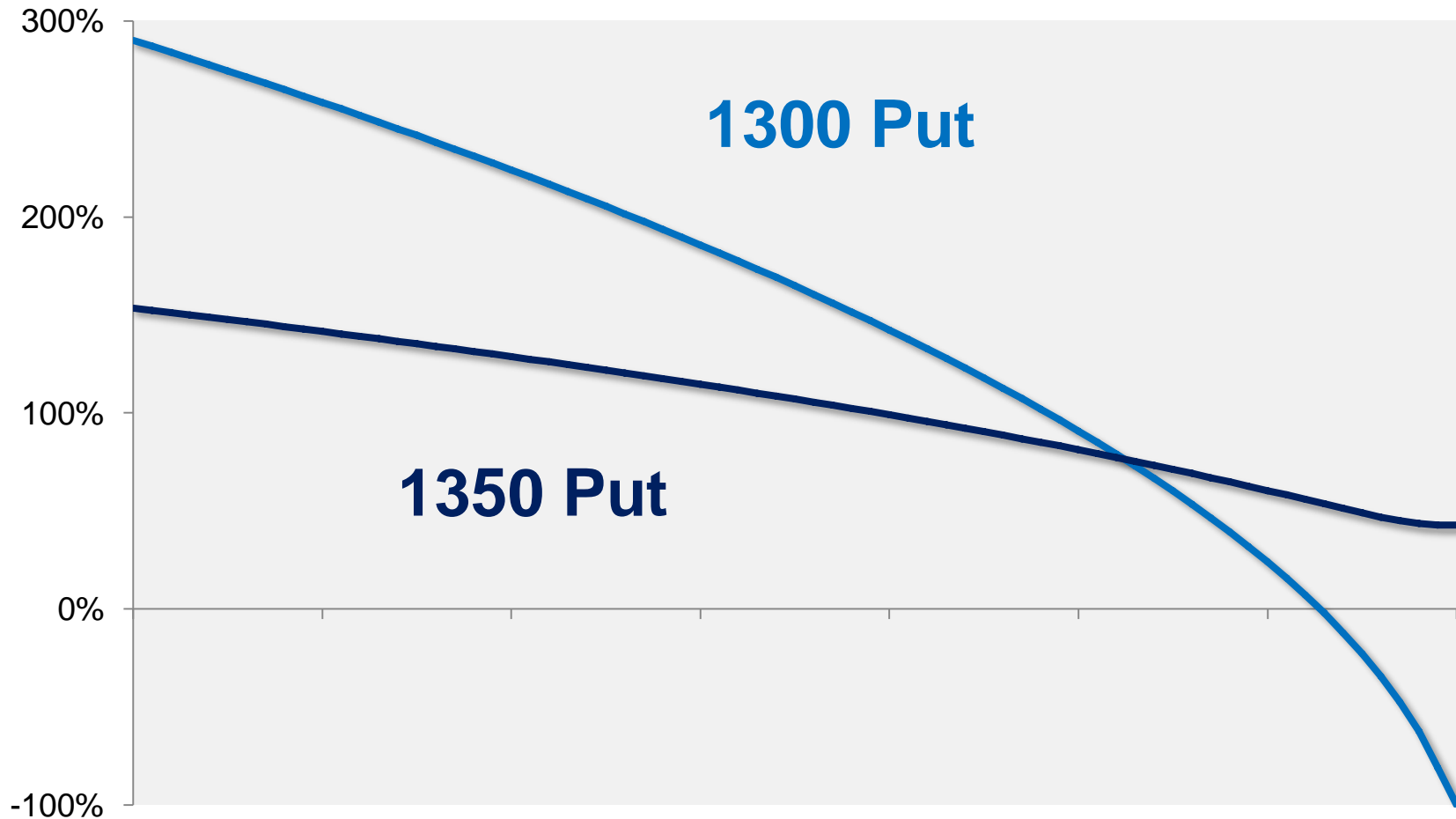
	<u>Today</u>	<u>In 3 Weeks</u>	
S&P 500	1360	1310	
Days to Exp.	35	21	
1300 Put	11.00	26.00	+136%
1350 Put	28.00	54.00	+92%

Starting Assumptions –

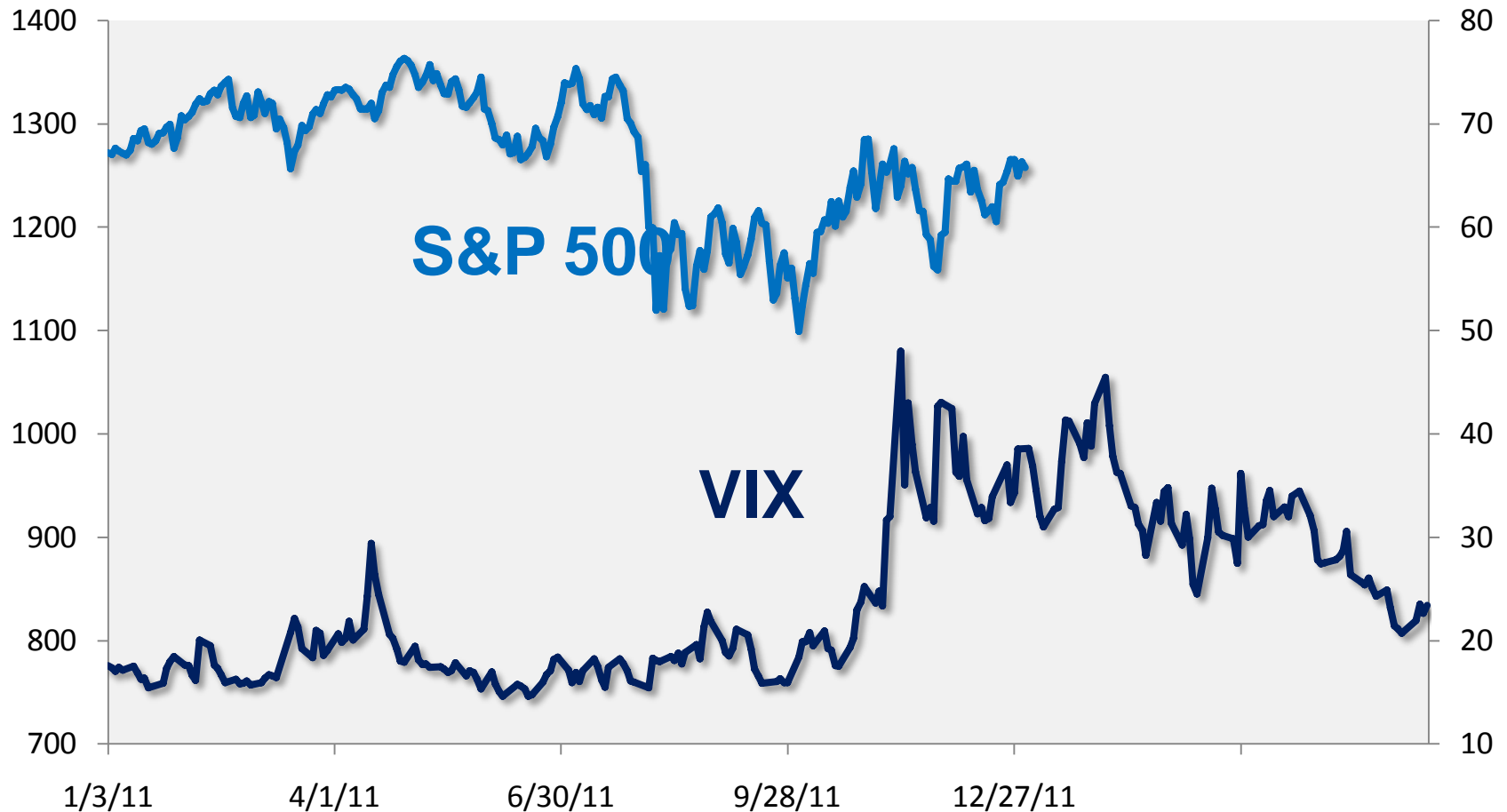
S&P 500 down 50 points

21 days for move

Time Decay + IV Change (S&P 500 @ 1310) –



SPX vs. VIX 2011 –



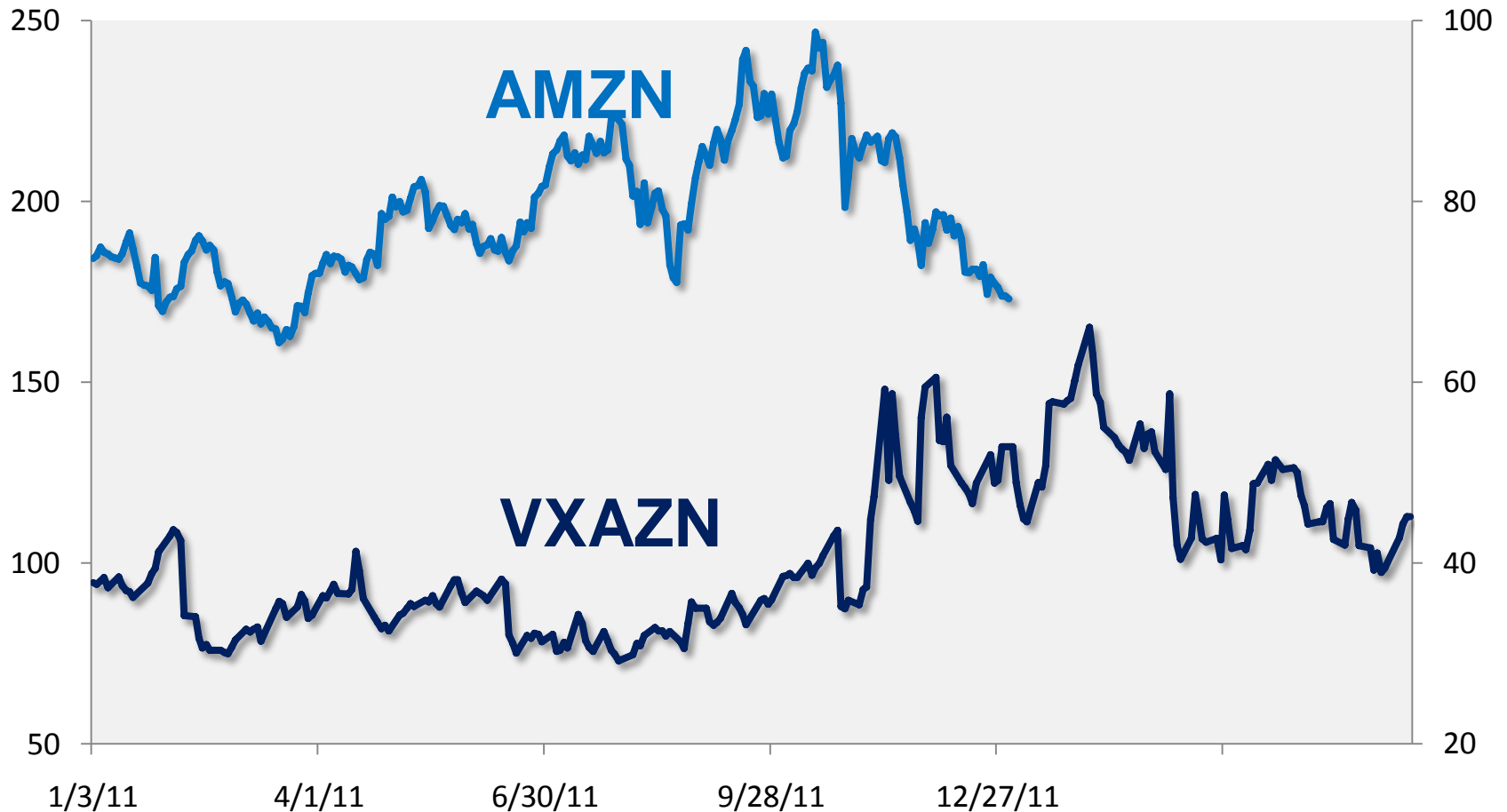
Source: Bloomberg

Implied Volatility –

- For stocks – changes based on outlook for underlying security
- Market related – inverse correlation with market movements

Pricing Factors

VXAZN vs. AMZN 2011 –



Source: Bloomberg

Short Term Trading Assumptions –

- Bullish outlook – implied volatility is going to move down
- Bearish outlook – implied volatility is going to move up
- Bullish end of big down move – short volatility as well
- Bearish after big up move – long volatility as well

Pricing Factors



August 8, 2011 –
S&P 500 at 1119.46
VIX at 48.00

ATM 30 Day Call = 61.84
ATM 30 Day Put = 60.92

Pricing Factors

August 15, 2011 –

S&P 500 at 1204.49 (+89.03)

VIX at 31.87 (-16.13)

Same Call = 94.67 (+32.73)

Same Put = 8.94 (-51.98)

Pricing Factors

March 9, 2011 –

S&P 500 at 1320.02

VIX at 20.22

ATM 30 Day Call = 31.05

ATM 30 Day Put = 29.97

Pricing Factors

March 16, 2011 –

S&P 500 at 1256.88 (-63.14)

VIX at 29.40 (+9.18)

Same Call = 14.63 (-16.32)

Same Put = 76.94 (+46.97)

Summary –

- All option trades have a two part outlook (price and time)
- Short term trades may also be impacted by changes in implied volatility
- There is usually an inverse relationship between market direction and the implied volatility of index options

Index Option – Monthly Income Strategy

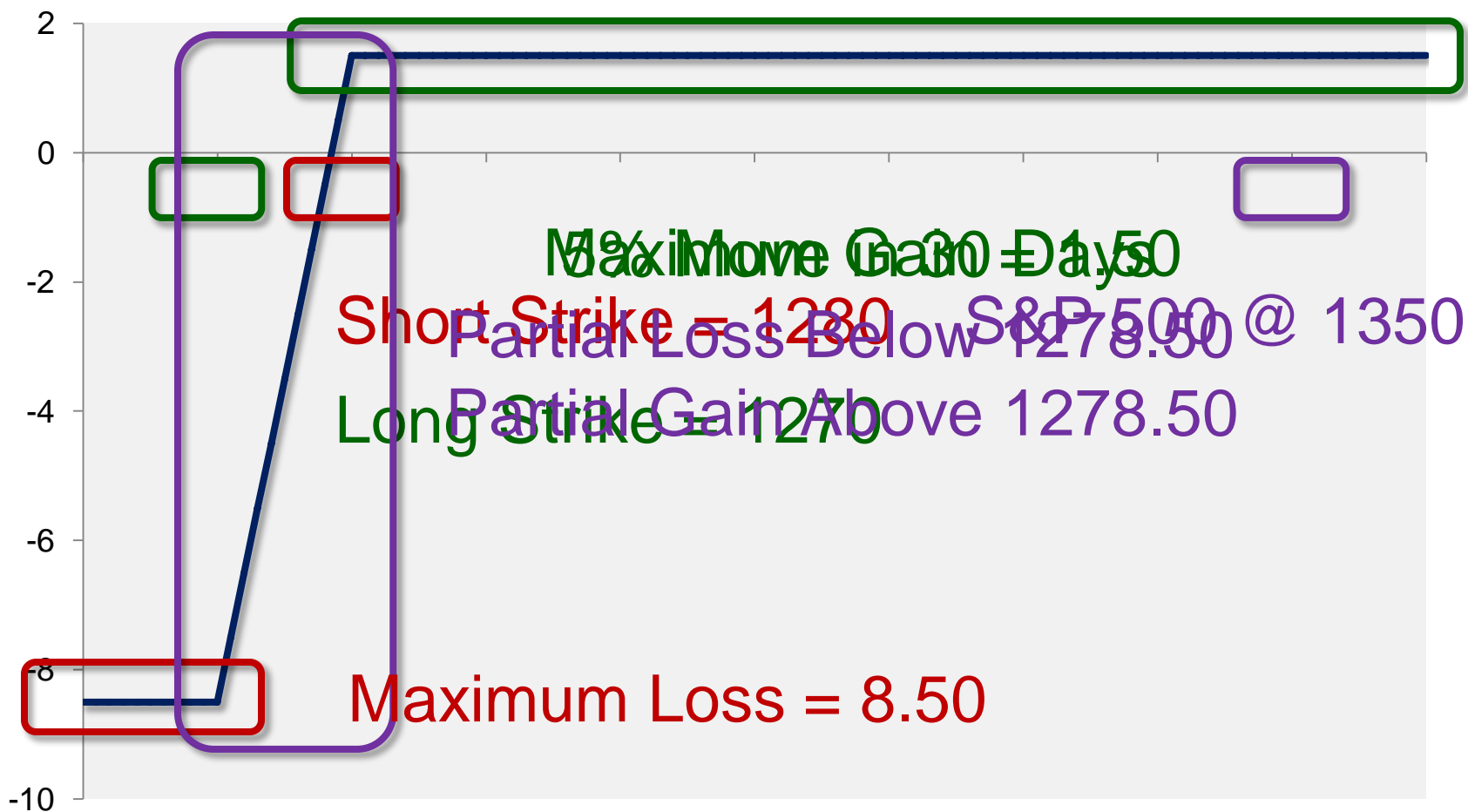
- Credit spread using out of the money options
- Low dollar reward relative to potential risk
- High probability of payout

Example –

- S&P 500[®] is at 1350
- November expiration is 30 days out
- Sell 1 SPX Nov 1280 Put at 7.00
- Buy 1 SPX Nov 1270 Put at 5.50

Credit = 1.50

SPX 1270 – 1280 Put Credit Spread –



Summary –

- SPX credit spread used to generate portfolio income
- Risk is 8.50 for a reward of 1.50 (17.6%)
- 5% move needed to the downside before credit spread works against us

- Index options allow traders and investors an efficient method to gain exposure to the overall market
- There are potential advantages to trading index options as opposed to ETF options
- Index options may be traded with a directional outlook or neutral outlook

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www.cboe.com/index

rhoads@cboe.com