CBOE OPTIONS INSTITUTE

Interactive Brokers Webcast

Index Options and Credit Spreads

December 14, 2016

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Index Options and Credit Spreads

Outline

- S&P 500® Index Options
- Russell 2000® Index Options
- Questions / Contact

S&P 500 Index Options

Contracts

Summary of Available SPX Options

SPX Options Traditional	Ticker	Root Ticker	AM / PM Settlement	Settlement Date	Settlement Type	Exercise Style	ETH Available
SPX	SPX	SPX	AM	3rd Fridays	Cash	European	Yes
SPX Options Non Traditional	**Ticker**	**Root Ticker**	**AM / PM Settlement**	**Settlement Date**	**Settlement Type**	**Exercise Style**	**ETH Available**
SPX Weeklys	SPX	SPXW	PM	Non 3rd Fridays	Cash	European	Yes
SPX End of Month	SPX	SPXW	PM	Last Trading Day of Month	Cash	European	Yes
SPX Monday Weeklys	SPX	SPXW	PM	Mondays	Cash	European	Yes
SPX Wednesday Weeklys	SPX	SPXW	PM	Wednesdays	Cash	European	Yes
SPX PM	SPXPM	SPXPM	PM	3rd Fridays	Cash	European	Yes

Source: www.cboe.com/spx

S&P 500 Index Options

Extended Trading Hours

- **In March 2015 SPX option trading hours were expanded to open at 2:00 am Chicago time**
- **There is a 15 minute break between the ETH and regular session from 8:15 am to 8:30 am Chicago time**

Chicago Time –

ETH – 2:00 am – 8:15 am

Regular Session – 8:30 am to 3:15 pm

All times are Central (Chicago) time

S&P 500 Index Options

Extended Trading Hours

SPX Options Settlement Day Hours –

PM Settlement
close at 3:00 pm on their
last day of trading

AM Settlement
Do not trade during the extended hours session
These options cease trading at
3:15 pm the day before settlement

S&P 500 Index Options

SPY Comparison

	Notional Size (SPX at 2000) (SPY at 200)	Exercise-Style	Settlement Type	AM / PM Settlement
SPX	$200,000	European	Cash	Both
SPY	$20,000	American	Physical	PM Settled

S&P 500 Index Options

Fed Trade

- You can also reduce your option cost by selling another option
- Tuesday September 20th – day before fed announcement
- Bullish on the reaction (because when Janet speaks the market rallies)

S&P 500 at 2139.75

Buy 1 SPX Sep 21st 2100 Call at 41.00

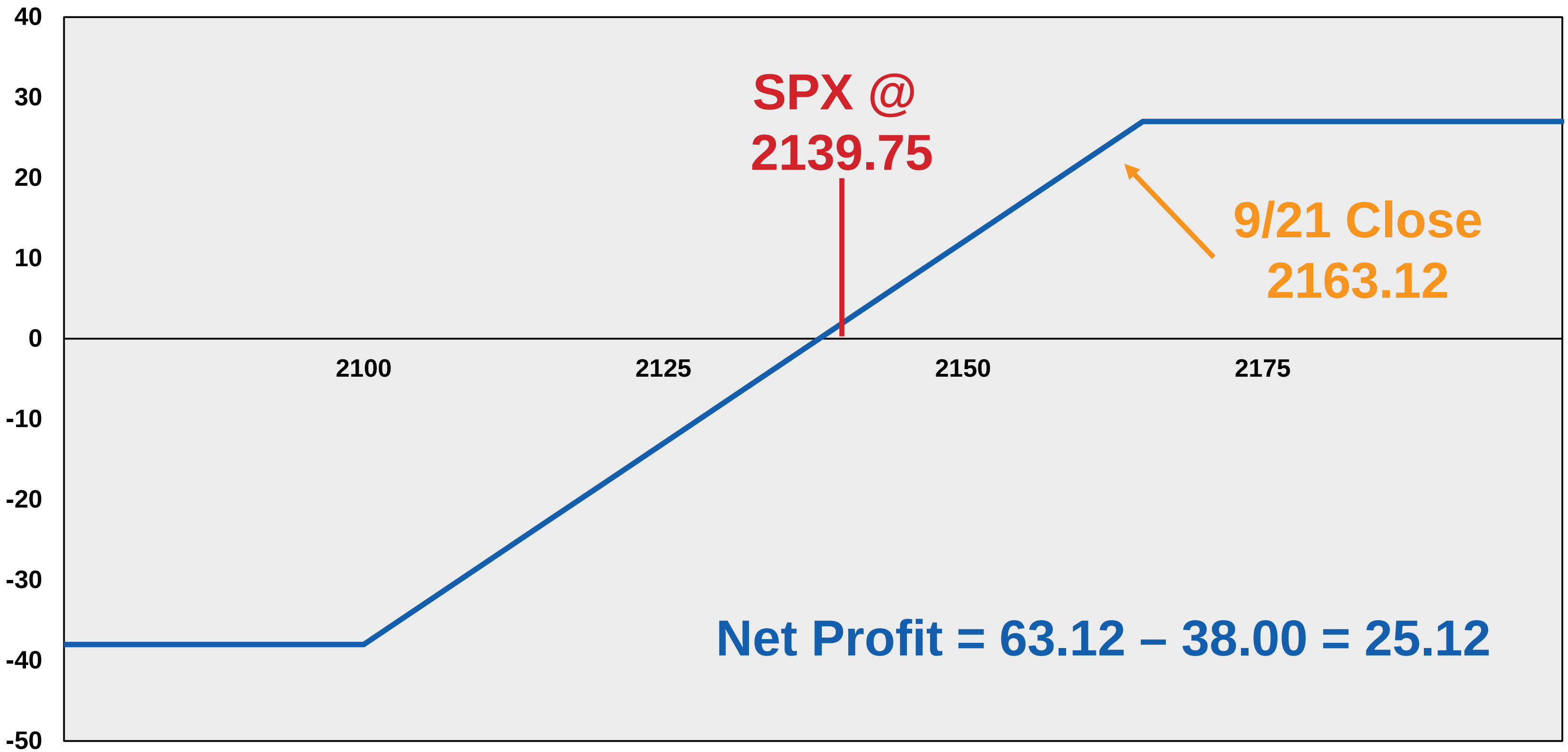
Sell 1 SPX Sep 21st 2165 Call at 3.00

Net Cost = 38.00

S&P 500 Index Options

Fed Trade

Long 1 SPX Sep 21st 2100 Call at 41.00 + Short 2165 Call at 3.00



SPX Options

Fed Trade Number 2

Tuesday March 15th

SPX @ 2015

Bullish on SPX into FOMC

Buy 1 SPX Mar 16th 2015 Call at 9.00

Sell 1 SPX Mar 16th 2025 Call at 4.60

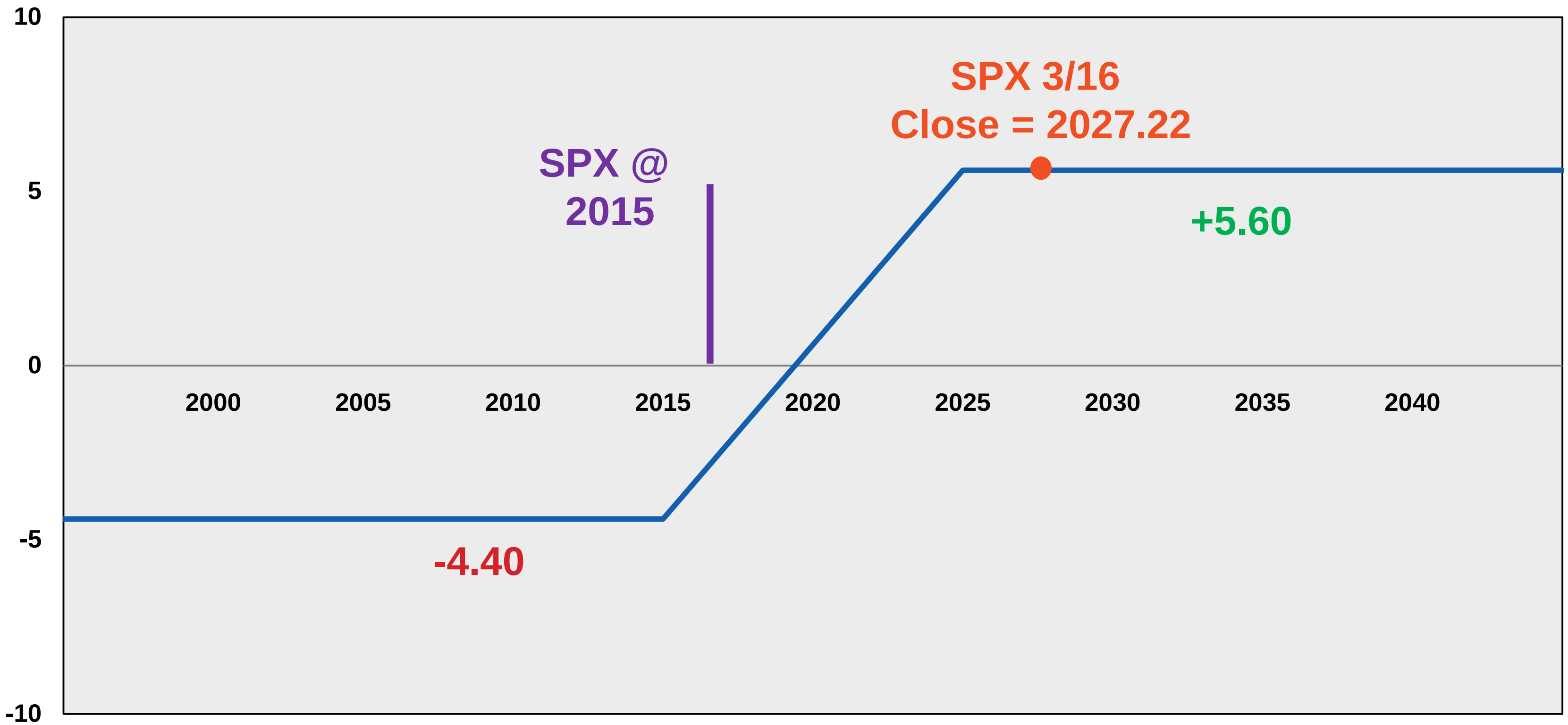
Net Cost = 4.40

(I know…it's not a credit)

SPX Options

Fed Trade Number 2

Long SPX 2015 Call + Short SPX 2025 Call



SPX Options

Fed Trade Number 3

FOMC Minutes Trade –

About 12:00 April 6th

SPX at 2058

Bullish into FOMC Minutes

Buy SPX Apr 6th 2055 Put at 1.80

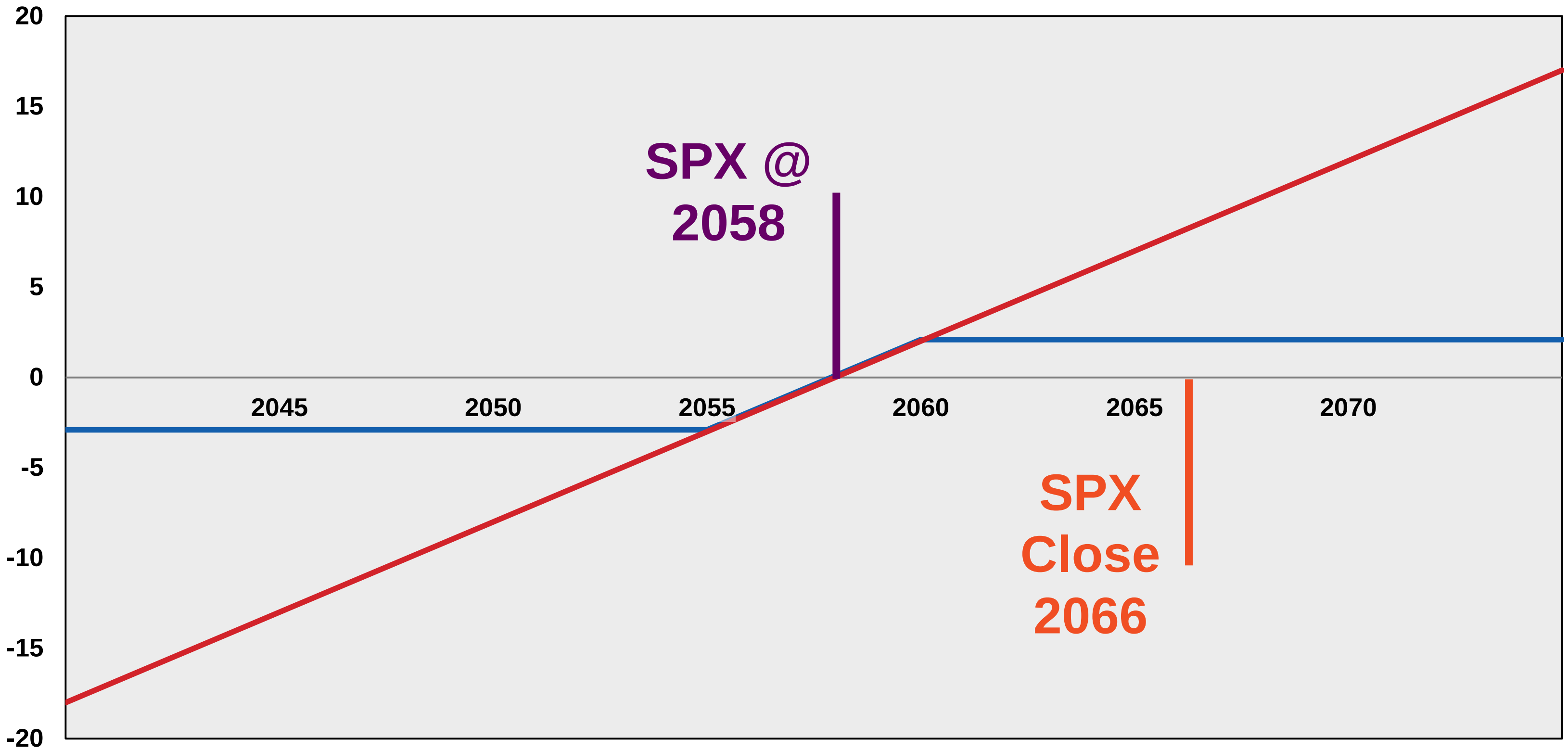
Sell SPX Apr 6th 2060 Put at 3.90

Credit = 2.10

SPX Options

Fed Trade Number 3

Payoff Diagram –



Russell 2000 Index Options

RUT vs. SPX Comparison

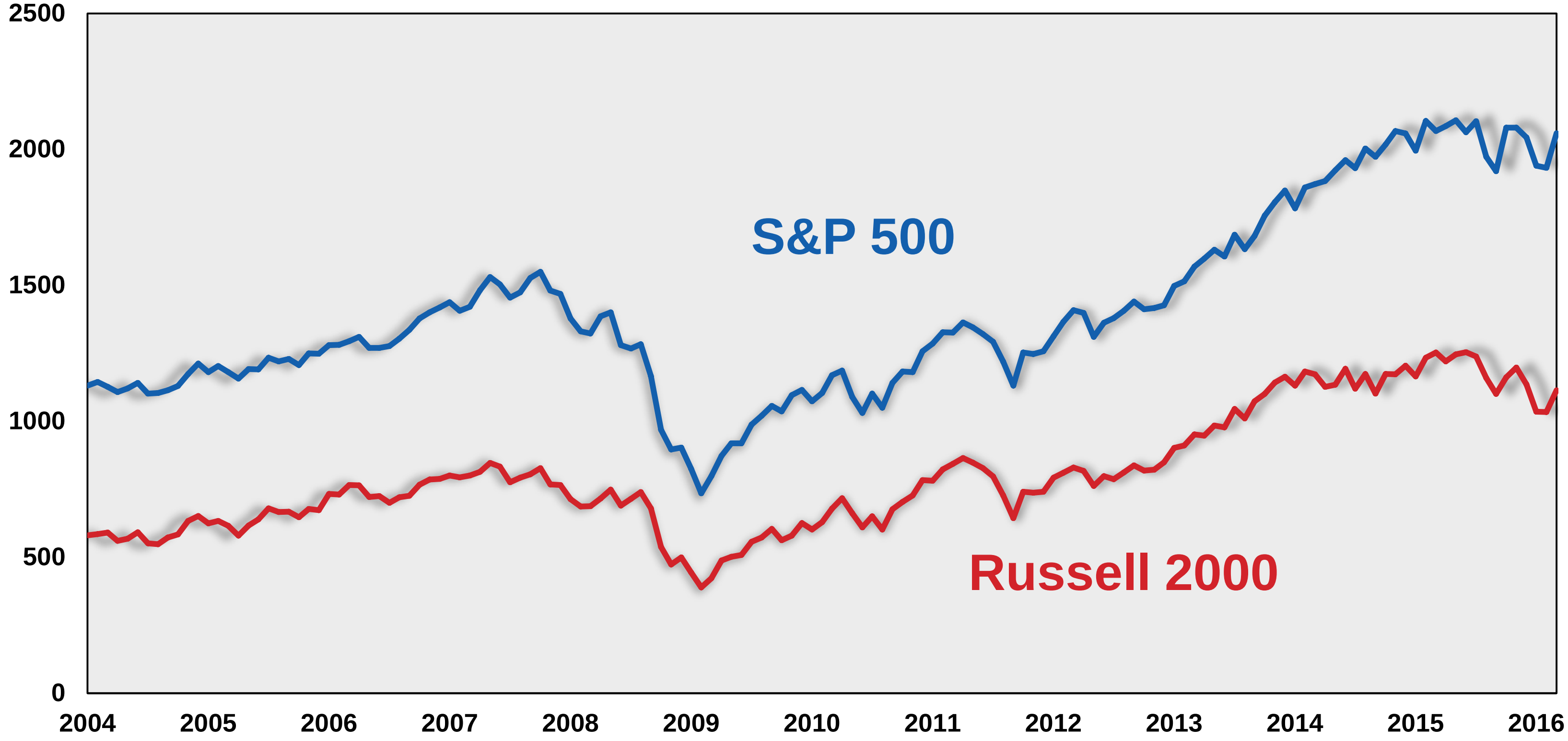
	Russell 2000	**S&P 500®**
Market Cap	Small Cap	Large Cap
Geographic	Domestic	Global
5 Year Average IV	22.26	19.42

Data Source: CBOE.com

Russell 2000 Index Options

S&P 500 vs. Russell 2000

Monthly Prices: 2004 – 1Q2016

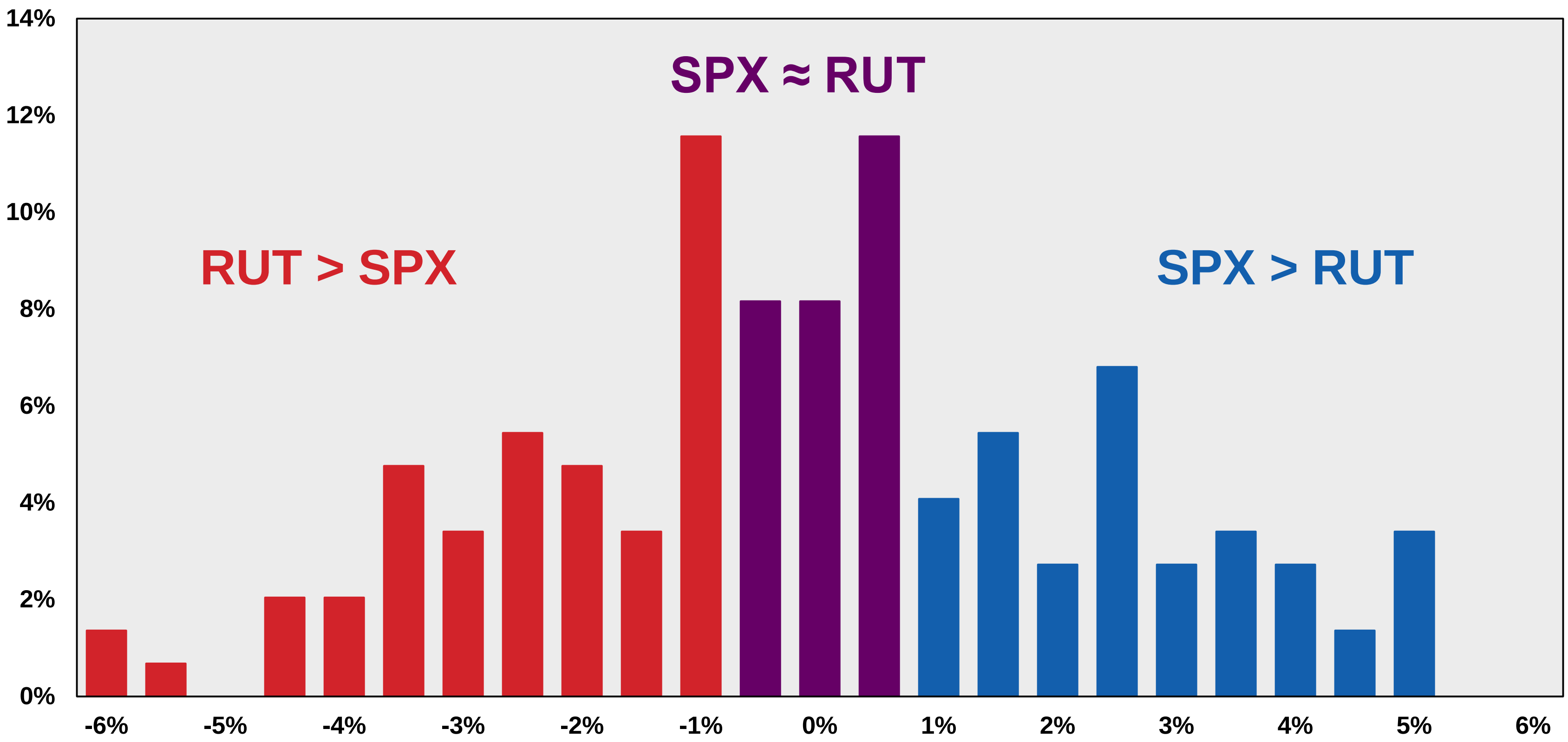


Data Source: Bloomberg

Russell 2000 Index Options

S&P 500 vs. Russell 2000

Monthly Performance Comparison



Data Source: Bloomberg

Russell 2000 Index Options

RUT vs. IWM

Option Contract

Factor	RUT Options	IWM Options	Comments
Underlying Price	1163.93	116.07	Very close to a 10 to 1 relationship
Underlying Market	Cash Index	ETF	RUT has no potential delivery of shares
Settlement	AM or PM	PM	IWM on close / RUT depends on date
Exercise Style	European	American	Risk of early assignment on IWM
Expirations	Multiple	Multiple	Both have several dates available

Russell 2000 Index Options

Short Term Bull Put Spread

- **January 14, 2015 – RUT at 1177**
- **One three day weekend, five trading days and one overnight until following week's RUT Weeklys settlement**

Sell RUT Jan 23rd 1070 Put @ 1.15

Buy RUT Jan 23rd 1060 Put @ 1.00

Net Credit = 0.15

Russell 2000 Index Options

Historical Context

Rolling RUT Performance – January 2, 2000 – January 14, 2015

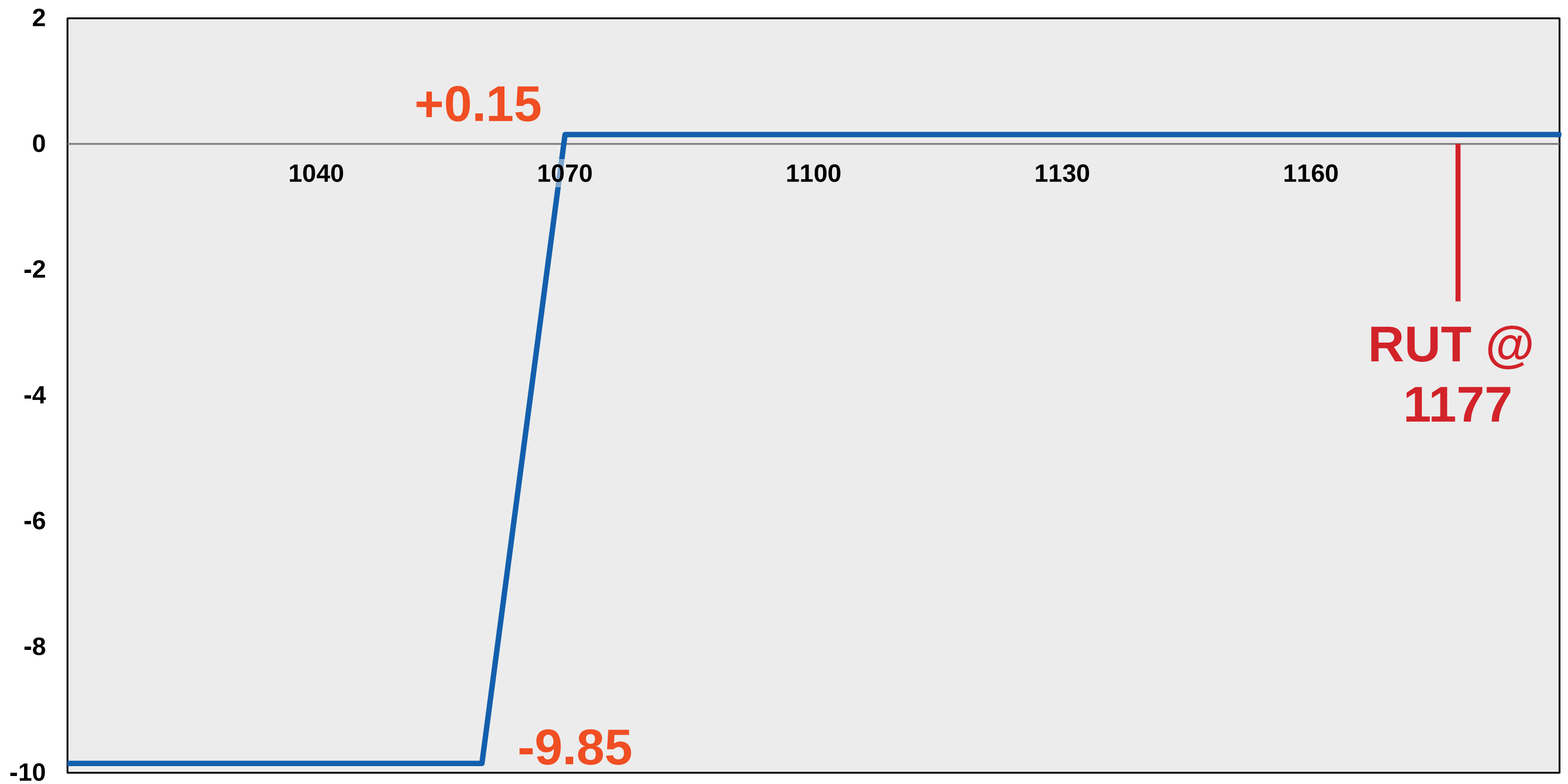
	Number of Periods	Down More than 9%	Percent
5 Days	3782	39	1.03%
6 Days	3782	51	1.35%

Data Source: Bloomberg

Russell 2000 Index Options

Short Term Bull Put Spread

Payoff Diagram –



Russell 2000 Index Options

Price Action

RUT Daily Prices –

Data Source: Bloomberg

Russell 2000 Index Options

Short Term Bull Put Spread

December 2, 2016

RUT @ 1314.25

Sell RUT Dec 16th 1190 Put at 0.85

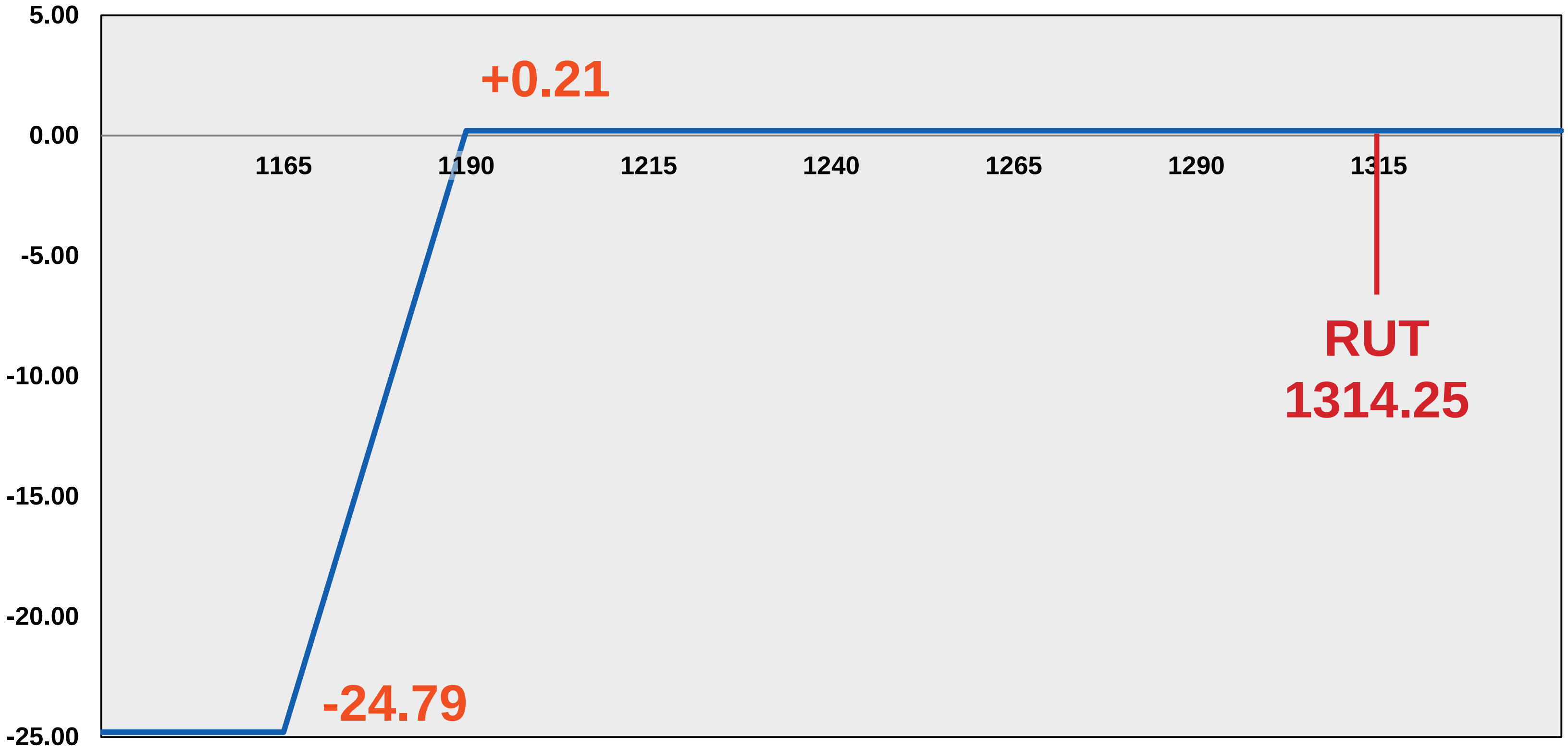
Buy RUT Dec 16th 1165 Put at 0.64

Net Credit = 0.21

Russell 2000 Index Options

Short Term Bull Put Spread

Payoff Diagram –



Russell 2000 Index Options

Russell 2000 Trades

Friday February 12, 2016

RUT @ 960

Sell RUT Mar 18th 1060 Call at 2.90

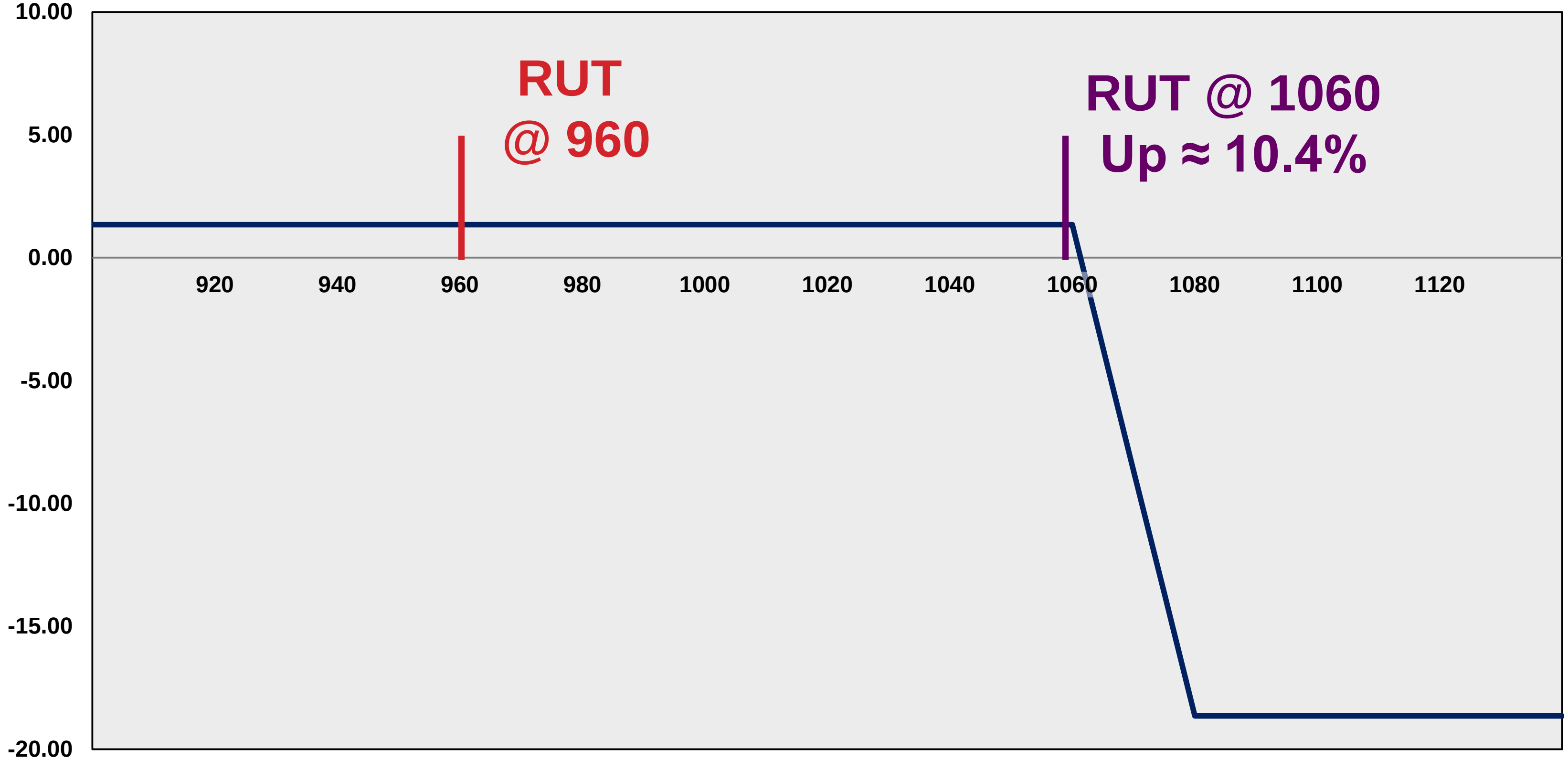
Buy RUT Mar 18th 1080 Call at 1.55

Net Credit = 1.35

Russell 2000 Index Option Trading

Russell 2000 Trades

RUT Mar 18th 1060 / 1080 Bear Call Spread



Russell 2000 Index Option Trading

Russell 2000 Trades

Friday January 22, 2016

RUT at 1015

Buy RUT Feb 19th 980 Put at 14.13

Sell RUT Feb 19th 1010 Put at 23.93

Sell RUT Feb 19th 1050 Call at 10.63

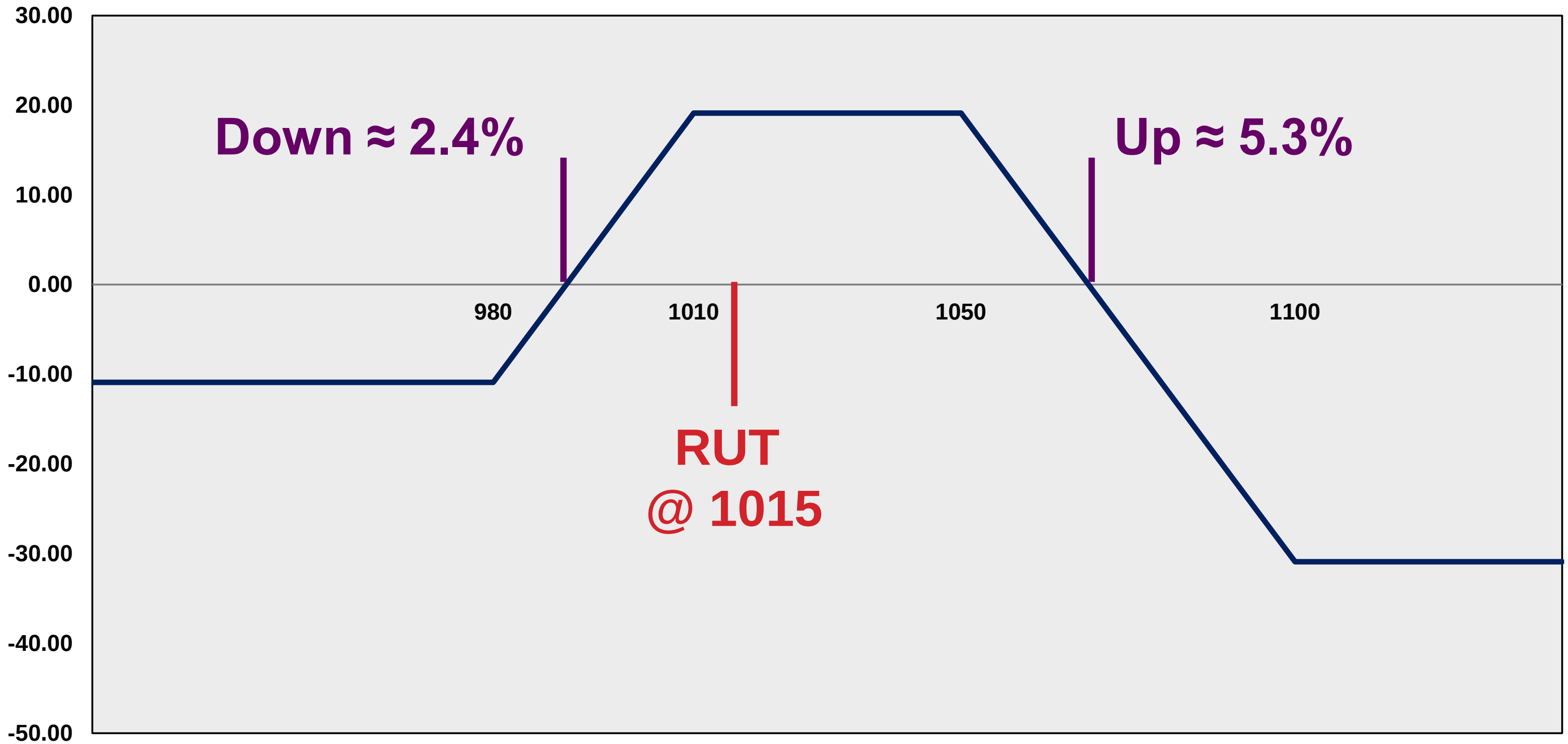
Buy RUT Feb 19th 1100 Call at 1.33

Net Credit 19.10

Russell 2000 Index Option Trading

Russell 2000 Index Options

RUT Feb 19th 980 / 1010 / 1050 / 1100 Broken Wing Iron Condor



Index Options and Credit Spreads

Questions / Links / Contact

Questions?

www.cboe.com/spx

www.cboe.com/rut

www.cboeoptionshub.com

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