

Interactive Brokers Webcast

Introducing Ratio Spreads

November 13, 2012
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Ratio Spreads

Outline

- **Review of Spreads**
- **Introduction to Ratio Spread**
- **Back Spreads**
- **Front Spreads**
- **Summary / Contact / Q&A**

Spread Trades

Review

- **Spread trade is a very generic term when related to option positions**
- **Can be a combination of the underlying and options or just different options that share an underlying**
- **An unlimited variety of risk reward scenarios may be created utilizing options**

Options give you Options

Ratio Spreads

Introduction

- **A ratio spread consists of options that are the same type and have the same underlying**
- **The options have different strike prices**
- **A contract is sold and another purchased**
- **The number of long options is different than the number of short options in the spread**

Ratio Spreads

Motivations

- **These spreads may have different motivations based on strikes relative to the underlying market**
- **A spread with more long than short options would benefit most from a big move in a certain direction**
- **More short than long option contracts would benefit from the underlying settling at a certain price**
- **If spread is implemented for a credit, there will be a neutral outlook as well**

Back Spreads

Introduction

- **Back Spread consists of more long options than short options**
- **Constructed with calls this is typically neutral or very bullish**
- **With puts the trade is neutral to very bearish**
- **Trade is usually initiated at a net credit**

Back Spreads

Back Spread with Calls

- ▶ XYZ at 35.00
- ▶ We believe there may be a positive announcement between now and December expiration (30 days)
- ▶ If no announcement stock may be stuck around 35.00
- ▶ Two potential outcomes – big upside move or neutral

Sell 1 XYZ Dec 35 Call @ 1.00

Buy 2 XYZ Dec 37 Calls @ 0.35 ea.

Net Credit = 0.30

Back Spreads

Back Spread with Calls

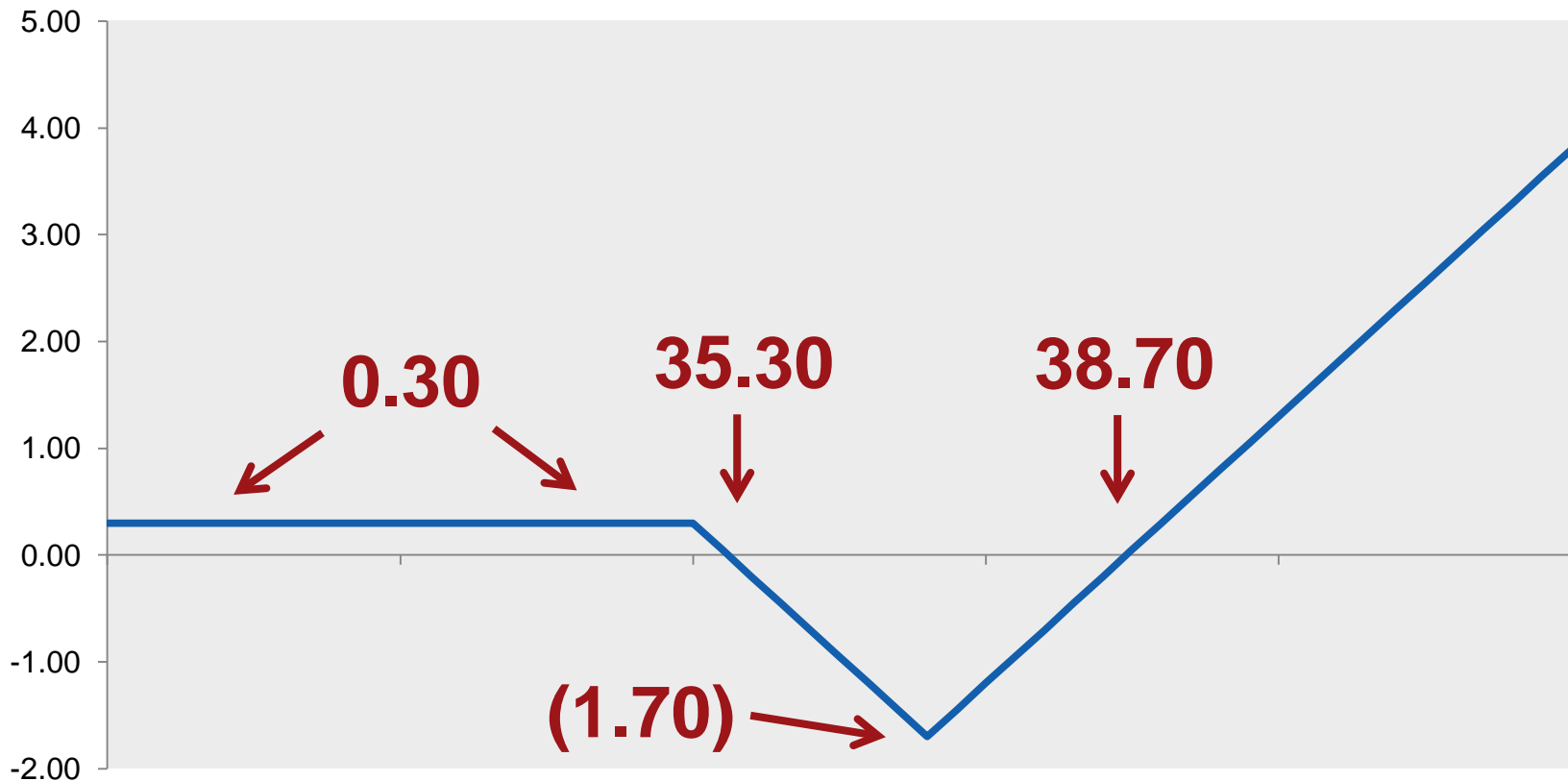
Payoff Table –

XYZ @ Expiration	Short 1 35 Call	Long 2 37 Calls	Credit	P/L
30.00	0.00	0.00	0.30	0.30
32.50	0.00	0.00	0.30	0.30
35.00	0.00	0.00	0.30	0.30
37.50	(2.50)	1.00	0.30	(1.20)
40.00	(5.00)	6.00	0.30	1.30
42.50	(7.50)	11.00	0.30	3.80

Back Spreads

Back Spread with Calls

Payoff Diagram –



Back Spreads

Back Spread with Puts

- ▶ **XYZ @ 40.00**
- ▶ **Believe competitor product announcement is going to put pressure on shares in next 15 days**
- ▶ **January options expire in 15 days**

Sell 1 XYZ Jan 40 Put @ 1.30

Buy 2 XYZ Jan 37 Puts @ 0.30 ea.

Net Credit = 0.70

Back Spreads

Back Spread with Puts

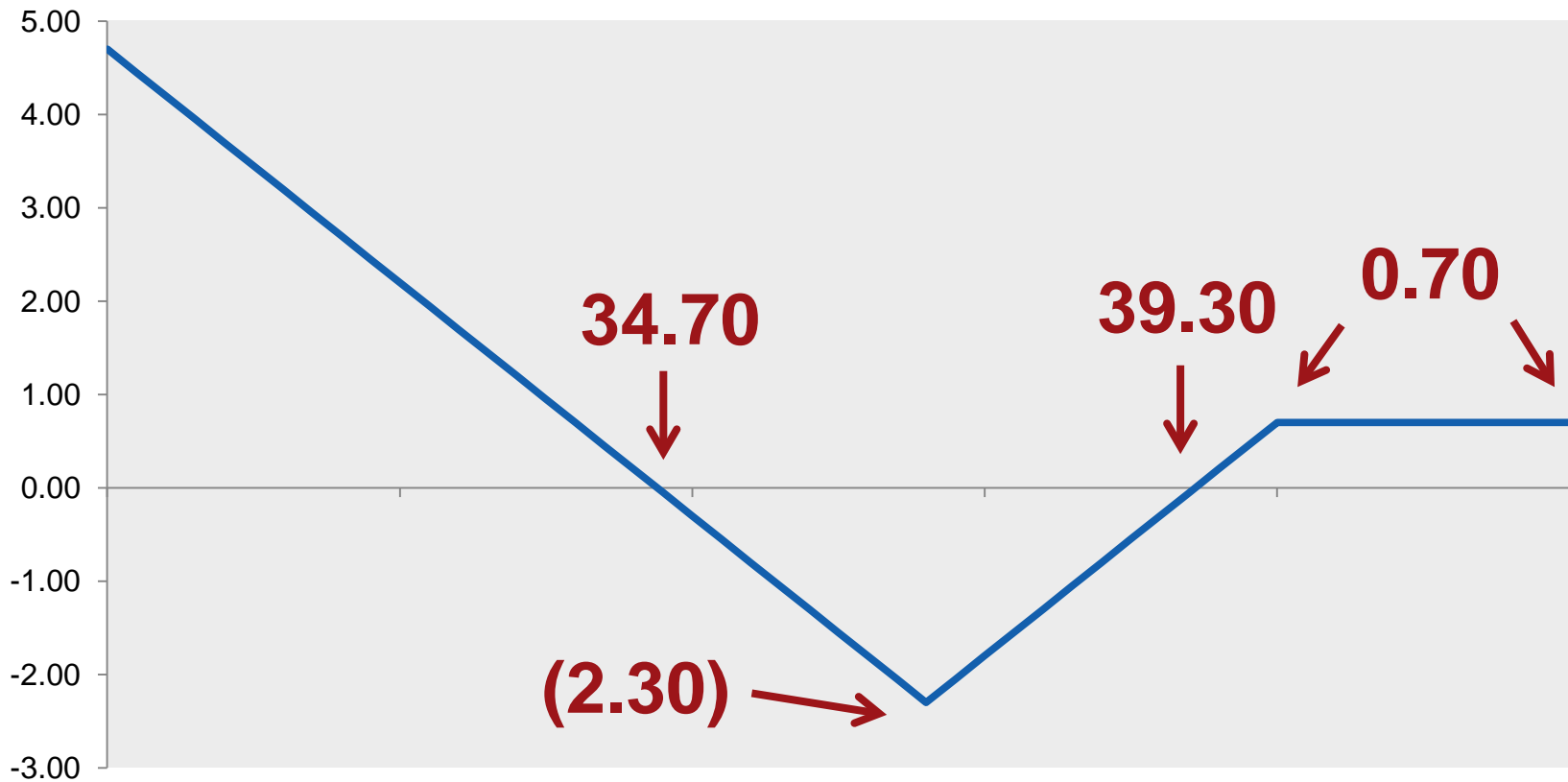
Payoff Table –

XYZ @ Expiration	Short 1 40 Put	Long 2 37 Puts	Credit	P/L
30.00	(10.00)	14.00	0.70	4.70
32.50	(7.50)	9.00	0.70	2.20
35.00	(5.00)	4.00	0.70	(0.30)
37.50	(2.50)	0.00	0.70	(1.80)
40.00	0.00	0.00	0.70	0.70
42.50	0.00	0.00	0.70	0.70

Back Spreads

Back Spread with Puts

Payoff Diagram –



Front Spreads

Introduction

- **Front Spread consists of more short option positions than long option positions**
- **Constructed with calls this is neutral to slightly bullish**
- **With puts would be neutral to slightly bearish**
- **May be initiated for a debit or credit**

Front Spreads

Front Spread with Calls

- ▶ XYZ at 45.00
- ▶ Neutral to slightly bullish on XYZ for next 50 days
- ▶ February expiration is in 50 days

Buy 1 XYZ Feb 45 Call @ 2.00
Sell 2 XYZ Feb 48 Calls @ 1.20 ea.
Net Credit = 0.40

Front Spreads

Front Spread with Calls

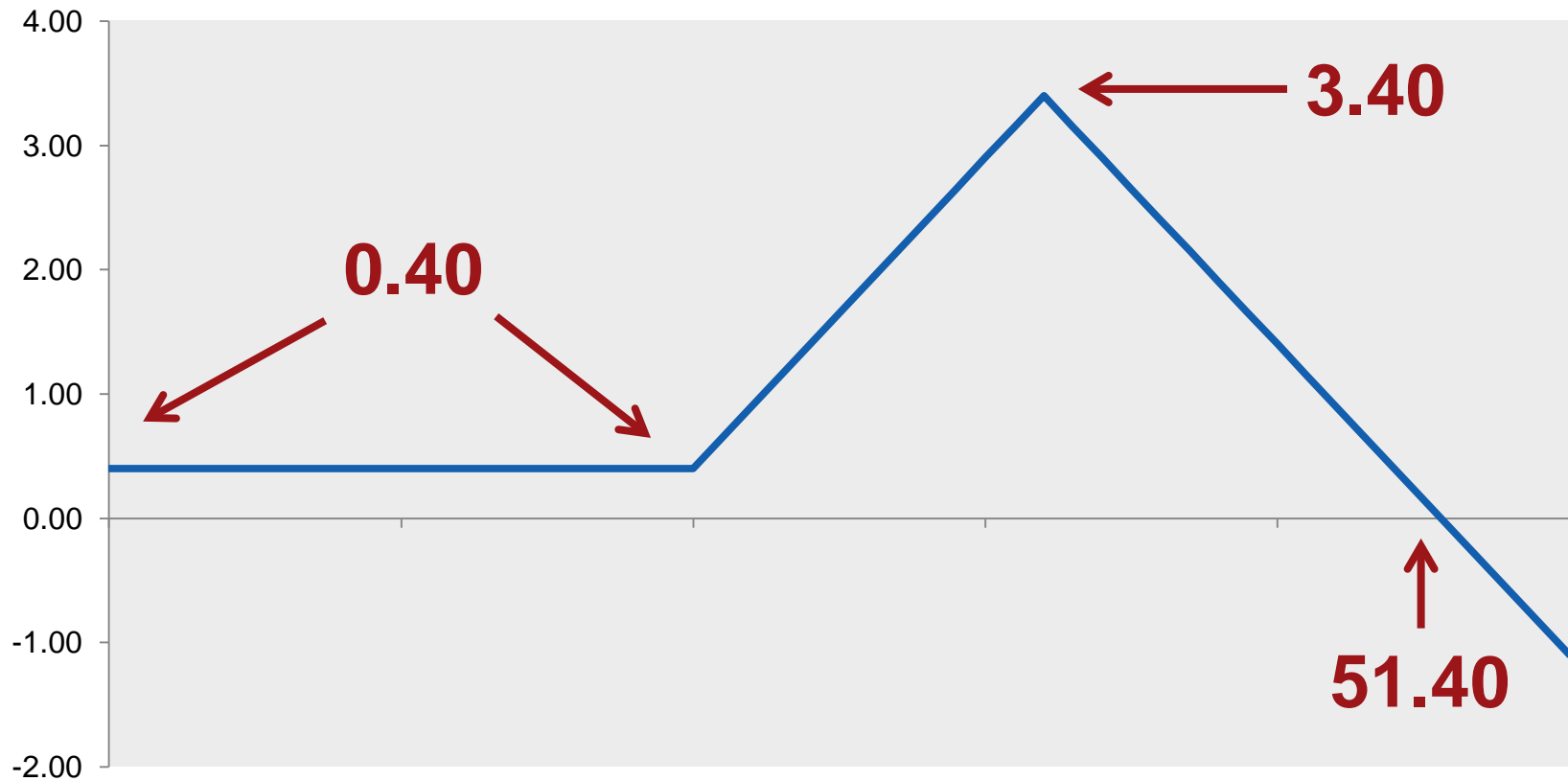
Payoff Table –

XYZ @ Expiration	Long 1 45 Call	Short 2 48 Calls	Credit	P/L
42.50	0.00	0.00	0.40	0.40
45.00	0.00	0.00	0.40	0.40
47.50	2.50	0.00	0.40	2.90
50.00	5.00	(4.00)	0.40	1.40
52.50	7.50	(9.00)	0.40	(1.10)
55.00	10.00	(14.00)	0.40	(3.60)

Front Spreads

Front Spread with Calls

Payoff Diagram –



Front Spreads

Front Spread with Puts

- ▶ XYZ at 50.00
- ▶ Neutral to slightly bearish on XYZ over next two months
- ▶ March expiration in two months

Buy 1 XYZ Mar 49 Put @ 1.15
Sell 2 XYZ Mar 48 Puts @ 0.75 ea.
Net Credit = 0.35

Front Spreads

Front Spread with Puts

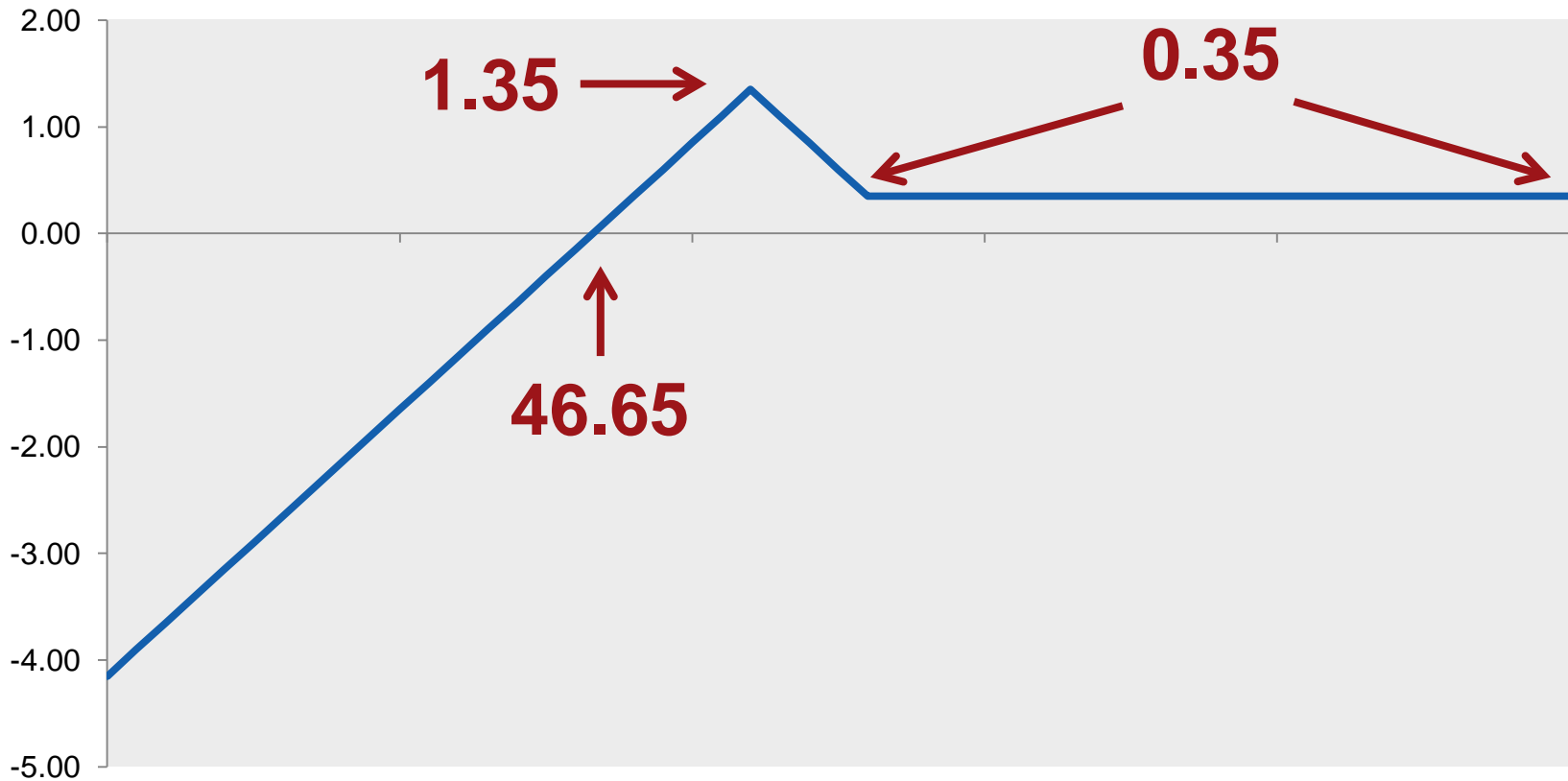
Payoff Table –

XYZ @ Expiration	Short 2 48 Puts	Long 1 49 Put	Credit	P/L
40.00	(16.00)	9.00	0.35	(6.65)
42.50	(11.00)	6.50	0.35	(4.15)
45.00	(6.00)	4.00	0.35	(1.65)
47.50	(1.00)	1.50	0.35	0.85
50.00	0.00	0.00	0.35	0.35
52.50	0.00	0.00	0.35	0.35

Front Spreads

Front Spread with Puts

Payoff Diagram –



Front Spread

Managing a Position

- **Closing a position is always an alternative when trading spreads**
- **Altering the spreads to create a new risk / reward profile is another alternative**

Managing A Ratio Spread

Managing Example

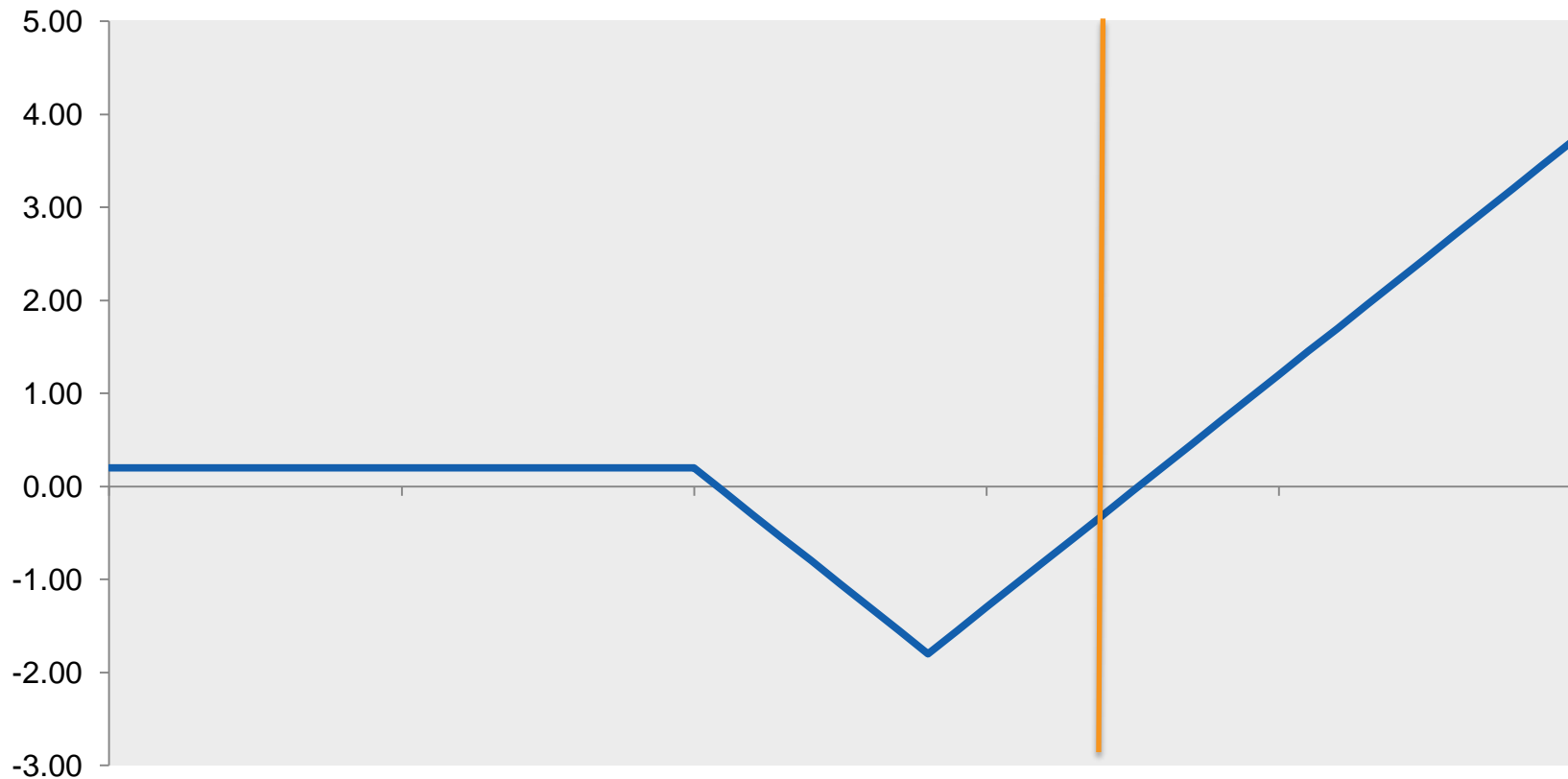
- XYZ at 35.00
- Bullish on XYZ – April expiration in 30 days
- Initiate a Bullish Back Spread

Sell 1 XYZ Apr 35 Call @ 1.20
Buy 2 XYZ Apr 37 Calls @ 0.50 ea.
Net Credit = 0.20

Managing A Ratio Spread

Managing Example

5 Days Later – XYZ @ 38.50



Managing A Ratio Spread

Managing Example

5 Days Later – XYZ @ 38.50

Short 1 XYZ Apr 35 Call @ 3.70

~~Long 2 XYZ 37 Apr Calls @ 2.15 ea.~~

~~Sell 2 XYZ Apr 37 Calls @ 2.20 ea (4.40)~~

Buy 1 XYZ Apr 33 Call @ 5.60

Net Cost = 1.20

Managing A Ratio Spread

Managing Example

25 Days to Expiration –

Long 1 XYZ Apr 33 Call

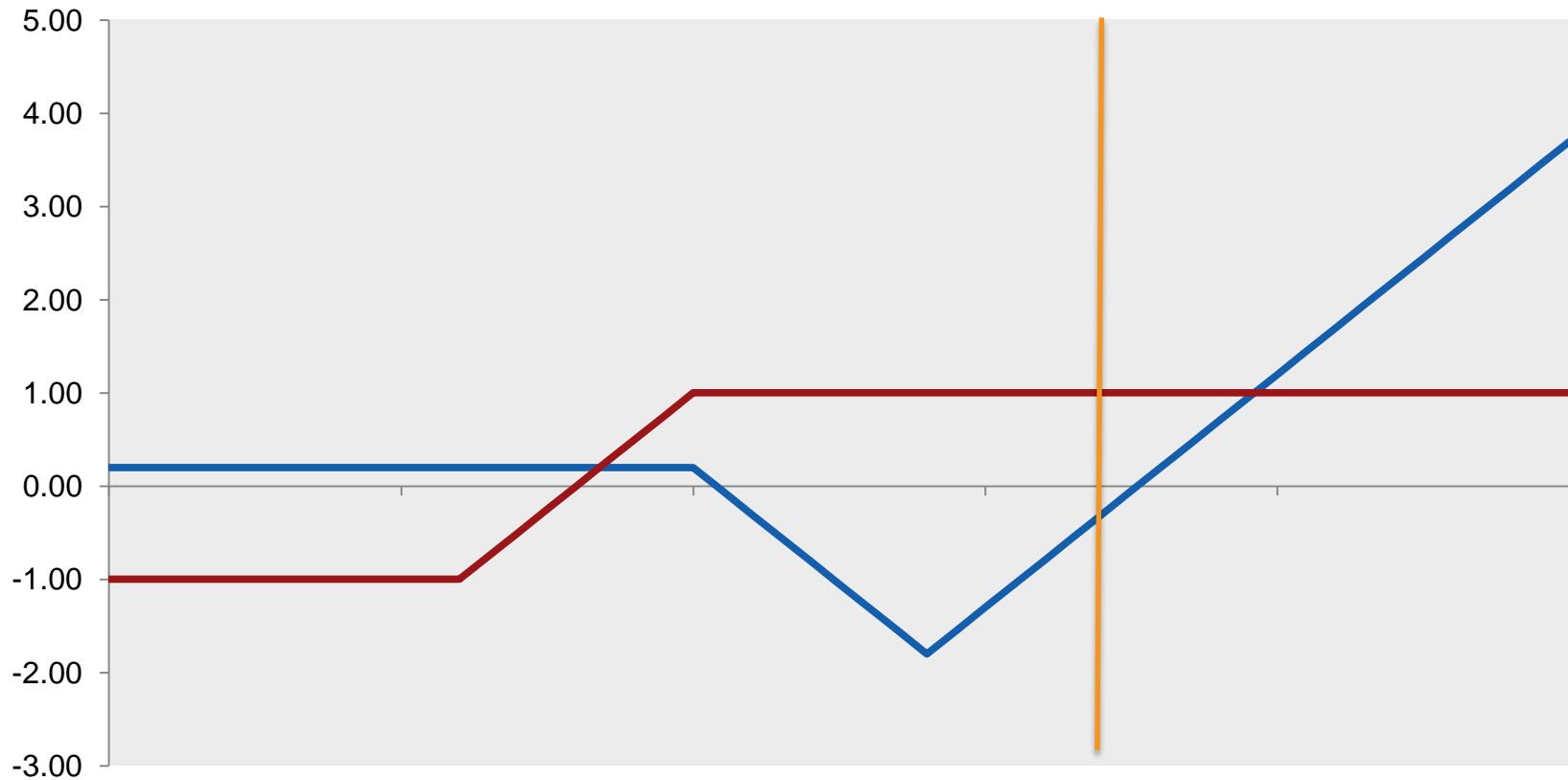
Short 1 XYZ Apr 35 Call

Effective Net Cost = 1.00

Managing A Ratio Spread

Managing Example

Payoff Diagram –



Summary

Ratio Spreads

- Offer a good way to get directional exposure with a credit
- Neutral outlooks with a directional bias may be traded with ratio spreads as well
- A quick move may offer a managing opportunity

Ratio Spreads

Questions / Contact

Questions?

Contact

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