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#### **EQDerivatives**

# The Index Option Universe – Making Sense Of All The Choice

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# The Index Option Universe – Making Sense Of All The Choices

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#### **Outline**

- Markets
- Use Of Short Dated Options
- One-Day Options in 2022
- Questions / Contact

#### **Markets**

S&P 500	Nasdaq-100	Russell 2000
SPX	NDX	RUT
XSP	NQX	MRUT
E-Mini ES	XND	E-Mini RUT
Micro ES	E-Mini NQ	
	Micro NQ	

#### **S&P 500 – Typical Week Expirations**

Market	Mon	Tue	Wed	Thu	Fri
SPX Index					
XSP Index					
Mini ES Futures					
Micro ES Futures					

#### Nadaq-100 - Typical Week Expirations

Market	Mon	Tue	Wed	Thu	Fri
NDX Index					
NQX Index					
XND Index					
Mini NQ Futures					
Micro NQ Futures					

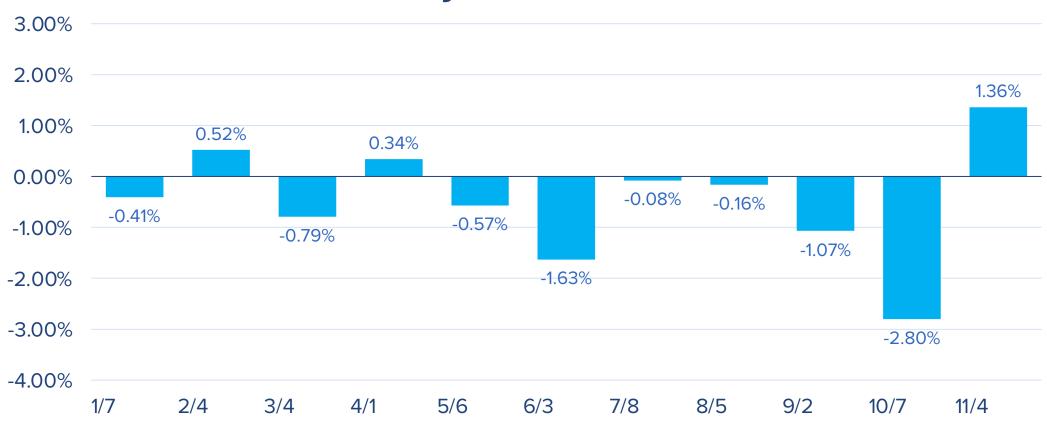
#### Russell 2000 - Typical Week Expirations

Market	Mon	Tue	Wed	Thu	Fri
RUT Index					
MRUT Index					
Mini RUT Futures					

### **One Day Expirations**

- On a typical trading day approximately 40% of index option trading is focused on contracts with less than 24 hour to expiration
- Traders are using very short dated options for income as well as to hedge or speculate on the reaction to economic numbers

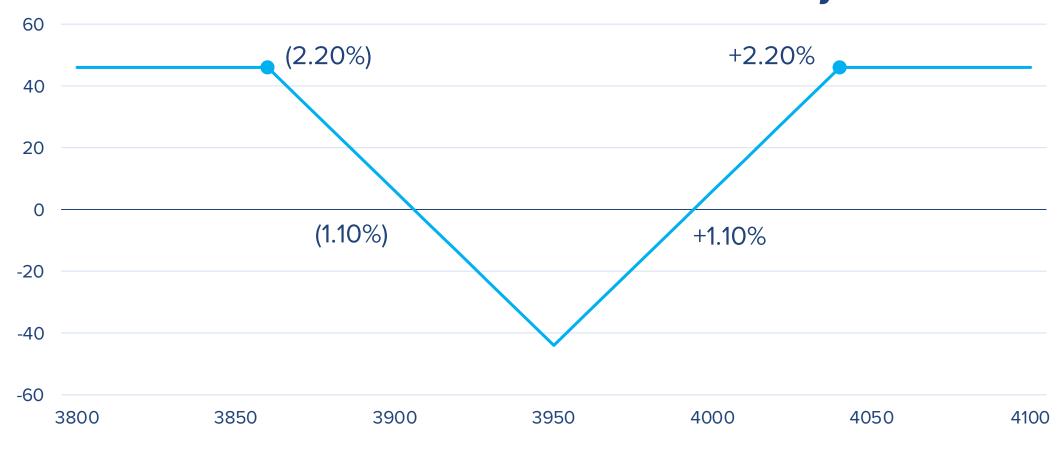
#### **SPX Non-Farm Payroll Reaction Jan - Nov 2022**



#### SPX Dec 1 3950 Straddle



#### SPX Dec 1 3860 / 3950 / 4040 Butterfly



## **One-Day Option Pricing**

- The day before expiration we priced at-the-money straddles for SPX and NDX that expired the following day for all of 2022
- The average SPX straddle cost 1.17% of notional while the average one-day move for SPX was +/- 1.29%
- The average NDX straddle cost 1.52% of notional while the average one-day move for NDX was +/-1.60%

# One-Day Option Pricing - SPX

Statistic	Count
Observations	220
Close Inside Straddle	56.36%
Close Outside Straddle	43.64%
Hypothetical Short Straddle P/L	-191.32

# One-Day Option Pricing - SPX

		Inside			
Expiration Day	Observations	Straddle	% Inside	% Outside	Short P/L
Monday	45	29	64.44%	35.56%	264.52
Tuesday	38	23	60.53%	39.47%	97.57
Wednesday	52	28	53.85%	46.15%	-18.27
Thursday	34	18	52.94%	47.06%	-180.43
Friday	51	26	50.98%	49.02%	-354.71

# One-Day Option Pricing - NDX

Statistic	Count
Observations	182
Close Inside Straddle	52.20%
Close Outside Straddle	47.80%
Hypothetical Short Straddle P/L	-2891.61

# One-Day Option Pricing - NDX

		Inside			
<b>Expiration Day</b>	Observations	Straddle	% Inside	% Outside	Short P/L
Monday	45	28	62.22%	37.78%	716.27
Tuesday	25	14	56.00%	44.00%	-750.65
Wednesday	52	25	48.08%	51.92%	-753.60
Thursday	19	9	47.37%	52.63%	-501.78
Friday	41	19	46.34%	53.66%	-1601.85

#### **Questions / Contact**

Questions?

(Any market related topic is fine)

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