

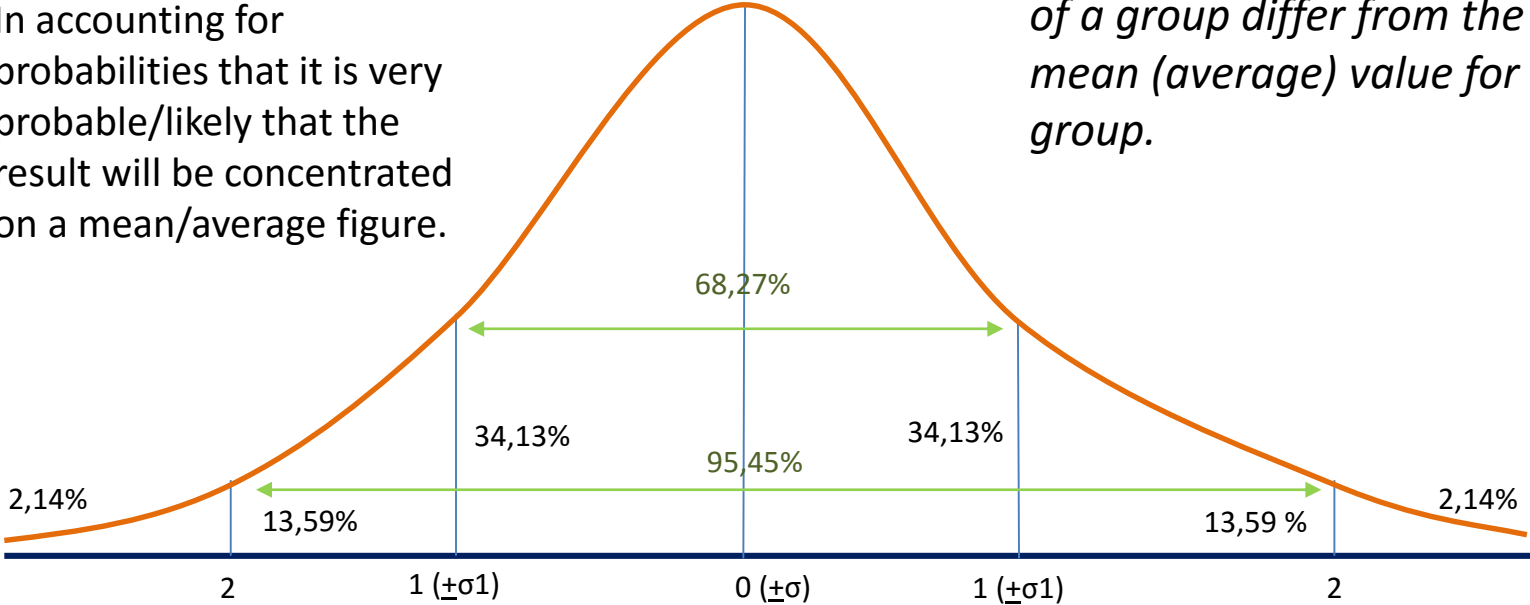
Option Basics Standard Deviation

Using Standard Deviation
In Options Trading

Standard Deviation Curve

In accounting for probabilities that it is very probable/likely that the result will be concentrated on a mean/average figure.

* σ - how much the results of a group differ from the mean (average) value for the group.



Standard Deviation Bell

Standard deviation cone projected on an underlying (RUT)



RUT 1SD Projection, *Snapshot - 30.06.2017

A vast majority of financial instruments show over a period of time that they do move within the standard deviation (SD) bell. Shown above is the projected 1 SD price on RUT.

Standard Deviation Curve

Projected on the July 7, 2017 expiry options

Option Chains

JUN 30 '17 0 DAYS JUL 07 '17 7 DAYS JUL 14 '17 14 DAYS JUL 21 '17 21 DAYS MORE

TABBED VIEW All STRIKES SMART TMUS 100 Load My Chains IV: 19.5%

CALLS						STRIKE	PUTS							
BID	ASK	VOLUME	THETA	OPTN	OPN INT...		DELTA	BID	ASK	VOLUME	THETA	OPTN	OPN INT...	DELTA
4.75	5.60		-0.006			0.989	55.5							
						0.980	56		0.21		-0.005	3	-0.011	
						0.965	56.5		0.23		-0.008	8	-0.020	
						0.943	57		0.19		-0.012	8	-0.035	
						0.927	57.5		0.15		-0.018	10	-0.057	
						0.902	58		0.03		-0.020	8	-0.073	
						0.864	58.5		0.06		-0.024	10	-0.098	
						0.807	59		0.10		-0.028	8	-0.136	
						0.724	59.5		0.17		-0.033	38	-0.193	
						0.618	60		0.27		-0.039	40	-0.276	
						0.499	60.5		0.43	10	-0.043	89	-0.382	
						0.382	61		0.61		-0.045	85	-0.501	
						0.278	61.5		0.90		-0.043	57	-0.619	
						0.193	62		1.23	16	-0.038	80	-0.724	
						0.124	62.5		1.60	12	-0.031	2.24K	-0.809	
						0.076	63		2.04	11	-0.023	216	-0.878	
						0.043	63.5		2.48	1	-0.015	131	-0.927	
						0.023	64		2.61		-0.009	12	-0.960	
						0.012	64.5		3.45	14	-0.005	215	-0.981	
						0.005	65		3.90		-0.002	1.29K	-0.993	
									4.45	21	0.000	27	-1.000	

The standard deviation is projected on individual option chains. This is a statistically relevant projection of the probabilities of win/loss each strike/option instrument holds.

2,4% SD

1,5% SD

0,9% SD

1,5% SD

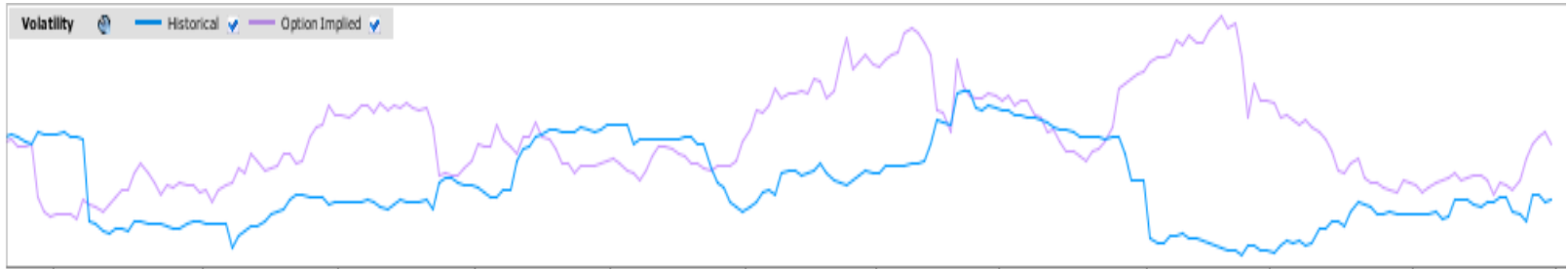
2,4% SD

Standard Deviation Curve and IV



IV is a figure that projects the „market expectation“ as to the volatility of an option. Actual volatility is often lower than the implied volatility. This goes to show that option prices are mostly overstated.

HV vs. IV



Typical IV HV Chart: As you will observe IV is more often greater than HV (historical volatility). As an option seller you can take advantage of this opportunity to sell the right instruments for a decent profit. On the other hand if IV is relatively low, profiting from a net option buying strategy works best.

Standard Deviation Curve and IV



With the proper understanding and mindset
the optionswriter is more advantaged most of
the time.