

EXAMPLE OF PROBABILITISTIC THINKING

HUGHES ECONOMICS – April 2021

THE SHARE PRICE OF TESLA (TSLA)

The share price of Tesla has rocketed in recent months to as high as \$900.40 from a 52 week low of \$134.76. Currently it is just under \$740. Below we examine possible share prices for Tesla in 6 months' time, allowing for corrections, further advances or status quo movements that are marginally up or down from \$740. We present 5 possibilities:

1. A major correction to \$500 or less or around a 33% drop (33-).
2. A less dramatic correction to \$650 or around a 15% drop (15-).
3. A significant 30%+ rise to \$950 or more (30+).
4. Around a 15% rise to \$850 (15+).
5. Marginal up/down moves around the current price of \$740 in the range \$690 - \$790 (Status Quo or SQ).

The price points used above allow us to calculate a "fair price" as of now after deriving the probabilities, but all calculations are only illustrative. Pairwise judgments and probabilities follow:

Tesla Share Price	Pairwise Judgment	Compound Value	Probability	Percentage Prob
33- or \$500	1.00	1.00	$1/12 = 0.083$	8%
30+ or \$950	1.00	$1.00 \times 1 = 1.00$	$1/12 = 0.083$	8%
15- or \$650	2.00	$1.00 \times 2 = 2.00$	$2/12 = 0.166$	17%
15+ or \$850	1.00	$2.00 \times 1 = 2.00$	$2/12 = 0.166$	17%
SQ or \$740	3.00	$2.00 \times 3 = 6.00$	$6/12 = 0.500$	50%
		12.00	1.000	100%

Note that SQ is seen as 3 times more likely than either 15- or 15+. The smaller price change to \$850 or \$650 is seen as twice as likely as a larger change to \$950 or \$500.

Using the above price points and probabilities a current "fair price" for a 6-month horizon on the Tesla share price is \$740.83 which is around the current share price.

To avoid any charges of spurious accuracy, the distribution could be reported respectively as 10%, 10%, 15%, 15% and 50% with an EV of \$740 (if this accords more with the appraiser's degree of belief) since the pairwise values are rudimentary or tentative.

Word Count 359, 19th April 2021.