

# EXAMPLE OF PROBABILITISTIC THINKING

HUGHES ECONOMICS – 14 May 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 around \$150. Currently it is just over \$600. Below we examine possible share prices for Tesla over 3 months' time, allowing for corrections, further advances or status quo movements that are marginally up or down from \$600. We present 5 possibilities ranked from lowest to highest likelihood:

1. A significant 35%+ rise to \$850 or more (35+).
2. Around a 20% rise to \$750 (20+).
3. A major correction to \$450 or less or around a 30% drop (30-).
4. A less dramatic correction to \$575 or around a 10% drop (10-).
5. Marginal up/down moves around \$600 in the range \$575+ to \$750- (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	Percent Prob
35+ or \$850	1.00	1.00	$1/27.25 = 0.037$	4%
20+ or \$750	1.50	$1.00 \times 1.5 = 1.50$	$1.5/27.25 = 0.055$	6%
30- or \$450	3.00	$1.50 \times 3.0 = 4.50$	$4.5/27.25 = 0.165$	16%
10- or \$575	2.00	$4.50 \times 2.0 = 9.00$	$9.0/27.25 = 0.330$	33%
SQ or \$600	1.25	$9.0 \times 1.25 = 11.25$	$11.25/27.25 = 0.413$	41%
		<b>27.25</b>	<b>1.000</b>	<b>100%</b>

Note that 10- is seen as twice as likely as 30-. Price corrections are seen as more likely than price rises.

Using the above price points and probabilities a current "fair price" for a 3-month horizon on the Tesla share price (derived as an EV using the above price points and probabilities) is about \$585. Recent stock prices are shown below in red.

12/5 \$617.20 or about 5% higher than \$585.

13/5 \$589.89 or about 1% higher than \$585.

14/5 \$571.69 or about 2% lower than \$585.

Word Count 341, 14<sup>th</sup> May 2021.