

$$\text{Price (USD)} = -6.71 + 2.04 \text{ Weight(lb)}$$

$$\Delta 1 \text{ lb Weight} \rightarrow \Delta 2.04 \text{ USD Price}$$

$$\text{Si } \Delta 1 \text{ kg Weight} \rightarrow \Delta (1/0.453) \text{ lb Weight} \rightarrow \Delta 2.04/0.453 \text{ USD Price} \rightarrow \Delta 4.51 \text{ USD Price}$$

$$\text{Price (USD)} = -6.71 + 4.51 \text{ Weight(kg)}$$

$$\text{Si } \Delta 1 \text{ kg Weight} \rightarrow \Delta 4.51 \text{ USD Price} \rightarrow \Delta 4.51 \cdot \text{USD } 0.78 \text{ EUR/USD Price} \rightarrow \Delta 3.52 \text{ EUR Price}$$

$$\text{Price (EUR)} = -5.82 + 3.52 \text{ Weight(kg)}$$

$$\text{Beta}' = \text{Mitjana}[\text{Price(EUR)}] - 3.52 * \text{Mitjana}[\text{Weight(kg)}] =$$

$$= 6165.25 * 0.78 - 3.52 * 3019.46 * 0.453 = 4808.9 - 3.52 * 1367.82 = -5.82$$

$$\text{Price (USD)} = 13419 - 7.27 \text{ Weight(lb)} + 0.0015 \text{ Weight}^2 \text{ (lb}^2\text{)}$$

$$\frac{\partial \text{Price}}{\partial \text{Weight(lb)}} = -7.27 + 0.0030 \text{ Weight (lb)}$$

$$\text{Si Weight(lb)} = 2500 \rightarrow \Delta 1 \text{ lb Weight} \rightarrow -7.27 + 0.0030 * 2500 = \Delta 0.23 \text{ USD Price}$$

$$\text{Si Weight(lb)} = 3019 \rightarrow \Delta 1 \text{ lb Weight} \rightarrow -7.27 + 0.0030 * 3019 = \Delta 1.79 \text{ USD Price}$$

$$\text{Si Weight(lb)} = 4000 \rightarrow \Delta 1 \text{ lb Weight} \rightarrow -7.27 + 0.0030 * 4000 = \Delta 4.73 \text{ USD Price}$$

$$\text{Price (USD)} = 13419 - 7.27 * (1/0.453) \text{ Weight(kg)} + 0.0015 * (1/0.453)^2 \text{ Weight}^2 \text{ (kg}^2\text{)}$$

$$\text{Price (USD)} = 13419 - 16.055 \text{ Weight(kg)} + 0.00738 \text{ Weight}^2 \text{ (kg}^2\text{)}$$

$$\text{Price (EUR)} = \text{XXXXX} - 16.055 * 0.78 \text{ Weight(kg)} + 0.00738 * 0.78 \text{ Weight}^2 \text{ (kg}^2\text{)}$$

$$\text{Price (EUR)} = 10467 - 12.52 \text{ Weight(kg)} + 0.0057 \text{ Weight}^2 \text{ (kg}^2\text{)}$$

$$\text{Si Weight(kg)} = 1000 \rightarrow \Delta 1 \text{ Kg Weight} \rightarrow -12.52 + 0.0114 * 1000 = \Delta -1.12 \text{ EUR Price}$$

$$\text{Si Weight(kg)} = 2000 \rightarrow \Delta 1 \text{ Kg Weight} \rightarrow -12.52 + 0.0114 * 2000 = \Delta 10.28 \text{ EUR Price}$$

$$\text{Si Weight(kg)} = 3000 \rightarrow \Delta 1 \text{ Kg Weight} \rightarrow -12.52 + 0.0114 * 3000 = \Delta 21.68 \text{ EUR Price}$$

$$\text{Price (USD)} = -37678 + 5494.99 \text{ Log}(\text{Weight(lb)})$$

$$\Delta 1\% \text{ lb Weight} \rightarrow \Delta (5494.99/100) \text{ USD Price} \rightarrow \Delta 54.9499 \text{ USD Price}$$

$$\text{Price (USD)} = -67818 + 9140.82 \text{ Log}(\text{Weight(lb)}) + 457.35 \text{ FOREIGN} * \text{Log}(\text{Weight(lb)})$$

$$\text{Si FOREIGN} = 0 \text{ (USA)}$$

$$\Delta 1\% \text{ lb Weight} \rightarrow \Delta (9140.82/100) \text{ USD Price} \rightarrow \Delta 91.4082 \text{ USD Price}$$

$$\text{Si FOREIGN} = 1 \text{ (no USA)}$$

$$\Delta 1\% \text{ lb Weight} \rightarrow \Delta [(9140.82+457.35)/100] \text{ USD Price} \rightarrow \Delta 95.9817 \text{ USD Price}$$

$$\text{Log}(\text{Price (USD)}) = 7.18 + 0.0004338 \text{ Weight(lb)} + 0.00022266 \text{ FOREIGN} * \text{Weight(lb)}$$

$$\text{Si FOREIGN} = 0 \text{ (USA)}$$

$$\Delta 1 \text{ lb Weight} \rightarrow \Delta (0.0004338*100)\% \text{ USD Price} \rightarrow \Delta 0.04338\% \text{ USD Price}$$

$$\text{Si FOREIGN} = 1 \text{ (no USA)}$$

$$\Delta 1\% \text{ lb Weight} \rightarrow \Delta [(0.0004338+0.00022266)*100]\% \text{ USD Price} \rightarrow \Delta 0.0656\% \text{ USD Price}$$