

- ① Short forward contract to sell 1,000 ounces of gold in May 2024

fixed forward price = \$ 2050 per ounce

Profit or loss = (forward Price - spot price) \times 1000

May-2024 SPot Price	Profit or loss (\$)
1400	(Profit) 650,000
1500	550,000
1560	490,000
1600	450,000
1800	250,000
2050	0
2200	(loss) -150,000
2300	(loss) -250,000
2400	(loss) -350,000

(i) spot price = 1400

$$\text{Profit} = (2050 - 1400) \times 1000 \$ = 650,000 \$$$

(2) spot price = 1500

$$\text{profit} = (2050 - 1500) \times 1000 \$ = 550,000 \$$$

③ spot price 1560

$$\text{profit} = (2050 - 1560) \times 1000 \$ = 490,000 \$$$

④ spot price 1600

$$\text{profit} = (2050 - 1600) \times 1000 \$ = 450,000 \$$$

similarly we fill the table -

② a) Corn futures :-

Contract size = 5000 bushels

(Initially) delivery price in contract = \$ 5.20

• Closing future price = \$ 5.80

If price increase you got profit (long)
one long corn future contract

$$\begin{aligned}\text{Profit} &= (5.80 - 5.20) \times \text{contract size} \times \text{no. of cont.} \\ &= .60 \times 5000 \times 1 \\ &= \$ 3000\end{aligned}$$

Profit of \$ 3000 to buyer

2 (b) contract size = 37,500 pounds of coffee

delivery price in contract = \$ 1.60

After closing delivery price = \$ 1.40

If price decrease you got profit (short)
one short Arabica coffee futures contract

$$\begin{aligned}\text{Profit / loss} &= (1.60 - 1.40) \times \text{contract size} \times \text{no. of cont.} \\ &= 0.2 \times 37,500 \times 1 \\ &= \$ 75,00\end{aligned}$$

Profit of \$ 75,00 to seller

(c) SP1200 futures:-

Number of contract = 40

Notional value = Australian Dollar 25 per index point

Initially fixed price = 7500 index points
Closing price = 7800 index point

40 short SP1200 future contract
(Price increases seller got loss)

$$\begin{aligned} \text{Total loss} &= (7800 - 7500) \times 25 \times 40 \\ &= 300 \times 1000 \\ &= 300000 \text{ (Australian Dollar)} \\ &= \end{aligned}$$

(d) Stainless steel futures:-

no. of contract = 3

contract size = 5 metric tones

(Initially) delivery price in contract = 15,000 per metric ton
After close out delivery price = 13,500 per metric ton

3 long stainless steel future contract
when price fall buyer got loss

Profit =

$$\begin{aligned} \text{loss} &= (15,000 - 13,500) \times 5 \times 3 \\ &= 1500 \times 15 \end{aligned}$$

$$\text{Total loss} = 22500 \text{ (loss)}$$