

Case 1 If Actual future price = ₹ 525

Action [AFP > TFP], since future is overpriced
hence sell future & buy spot.

Arbitrage process

If Two Expected price are not given

Today

- Borrow ₹ 500 from Bank & Buy share
- Sell future at ₹ 525

After 3 months

<u>Gain</u>	Sell future	+ 525
	Dividend received	+ 4
	Repayment 500(1.03)	- 515
		<u>₹ 14</u>

If Two Expected price are given

[Sell future = short position]
at 525 ↓

	<u>₹ 600</u>	<u>₹ 400</u>
Gain/Loss on short position	- 75	+ 125
Sell share	+ 600	+ 400
Repayment 500(1.03)	- 515	- 515
Dividend received	+ 4	+ 4
	<u>₹ 14</u>	<u>₹ 14</u>

Case 1 If Actual future price = ₹ 503

Action [AFP < TFP], since future is underpriced
hence buy future & sell spot [short sell]

Arbitrage process

If Two Expected price are not given

Today

- short sell share at ₹ 500 & Invest for 3 months
- Buy future at ₹ 503

After 3 months

<u>Gain</u>	Investment 500(1.03)	+515
	Buy share at future price	- 503
	Dividend compensation	- 4
		<u>₹ 8</u>

If Two Expected price are given

[Buy future = Long position 503]

	<u>₹ 600</u>	<u>₹ 400</u>
Investment 500(1.03)	+515	+515
Buy share	-600	-400
Gain/Loss on Long position	+97	-103
Dividend compensation	-4	-4
	<u>₹ 8</u>	<u>₹ 8</u>

 If Compounded continuously rate is given

$$F = S_0 \times e^{(r-d)t}$$