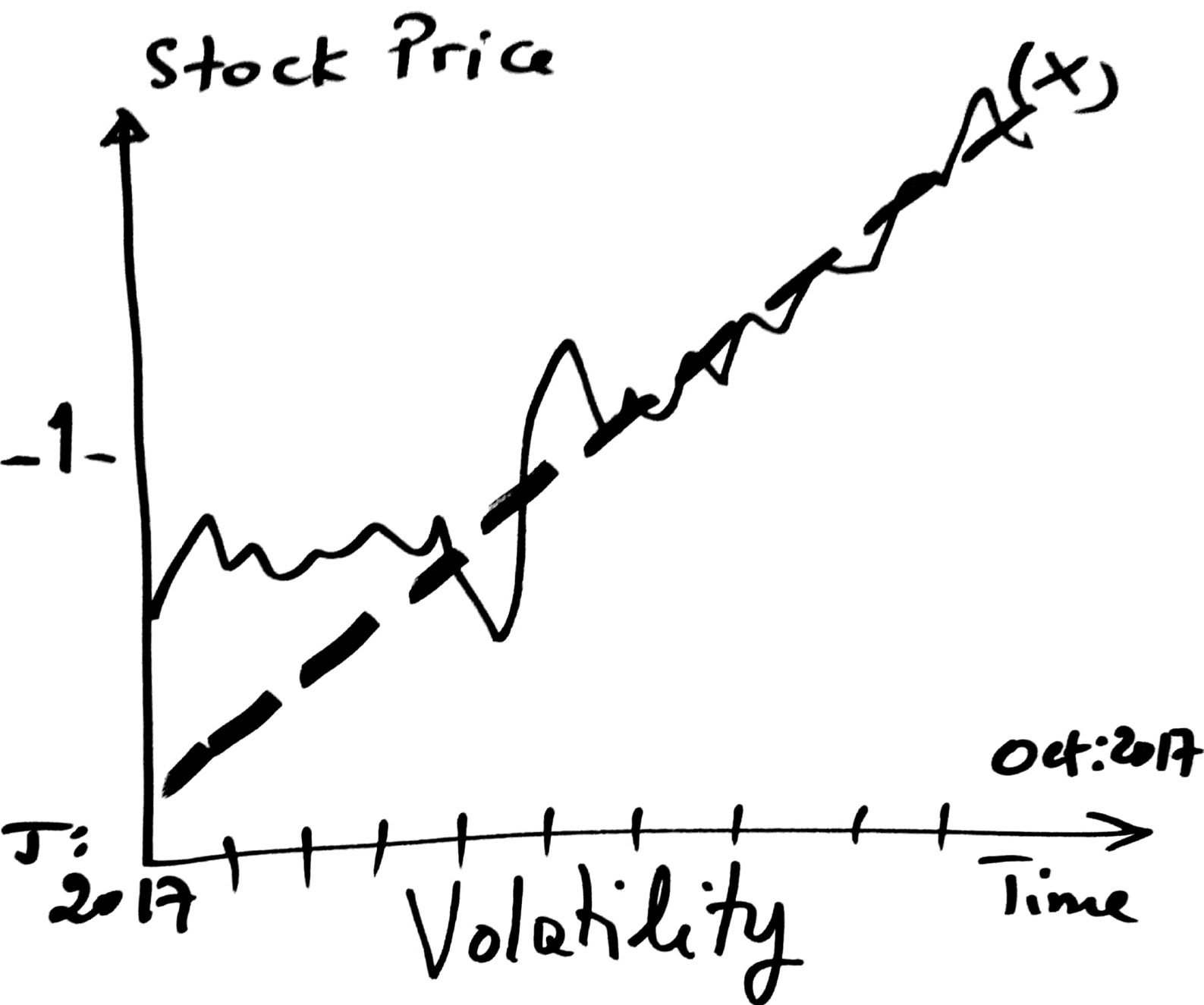


Chap 1

Introduction to Derivative Markets and Securities.



Stock Prices are
affected by
Several factors

↓
Inflation

↓
interest rates

↓
Eco. Growth

Information
↓

↓
← Investor Sentiments

Fig. 1.

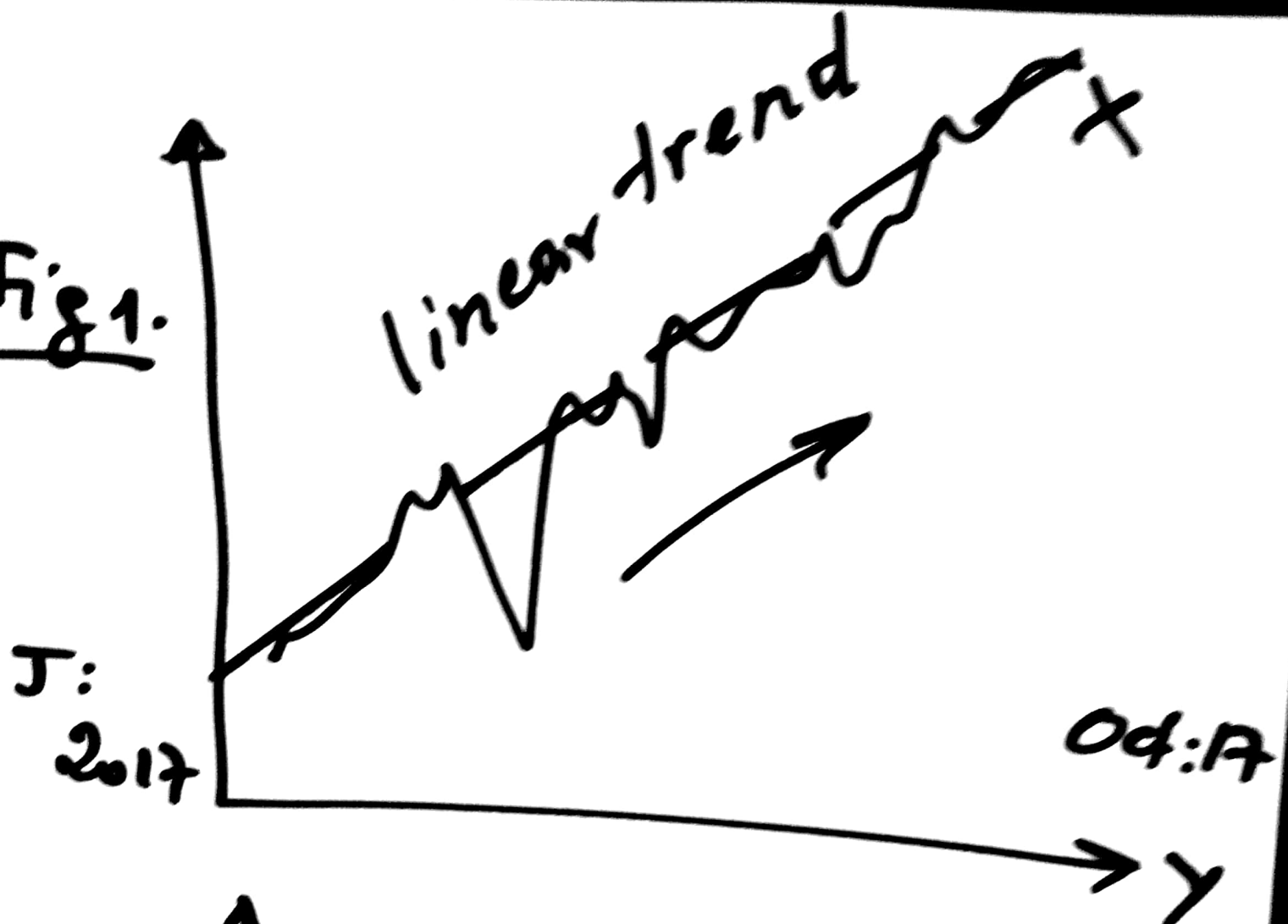
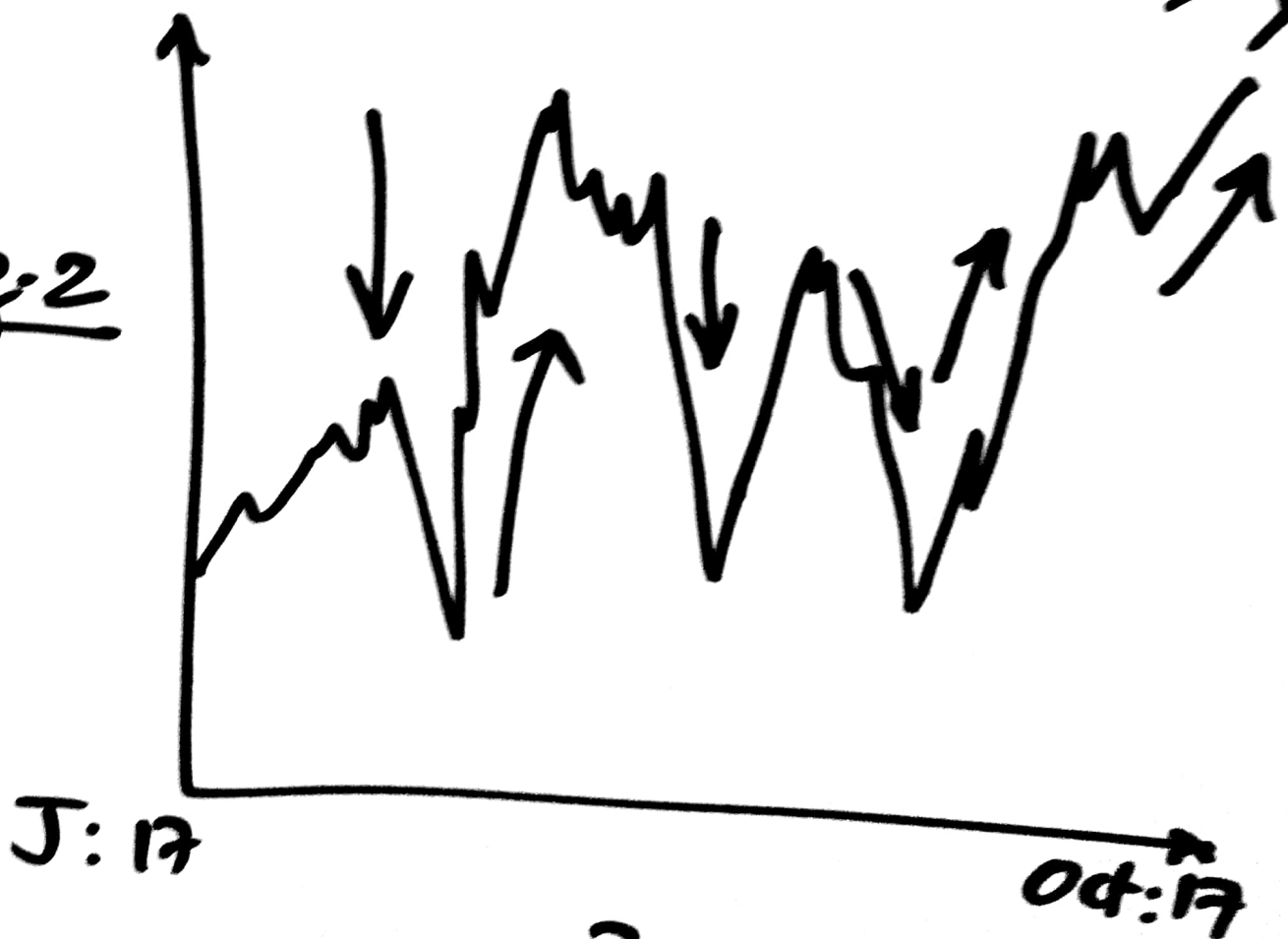


Fig. 2



Risk ?

Certainty ?

uncertainty ?

Risk

اليقين - التاكيد: Certainty

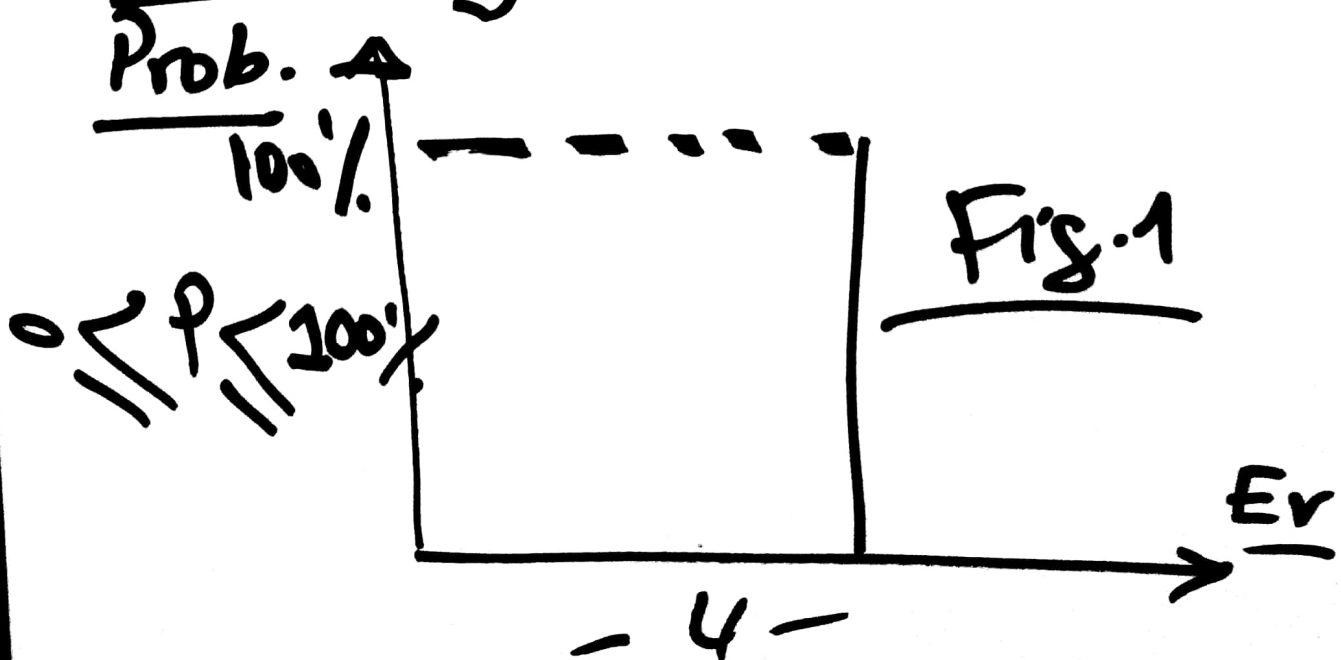
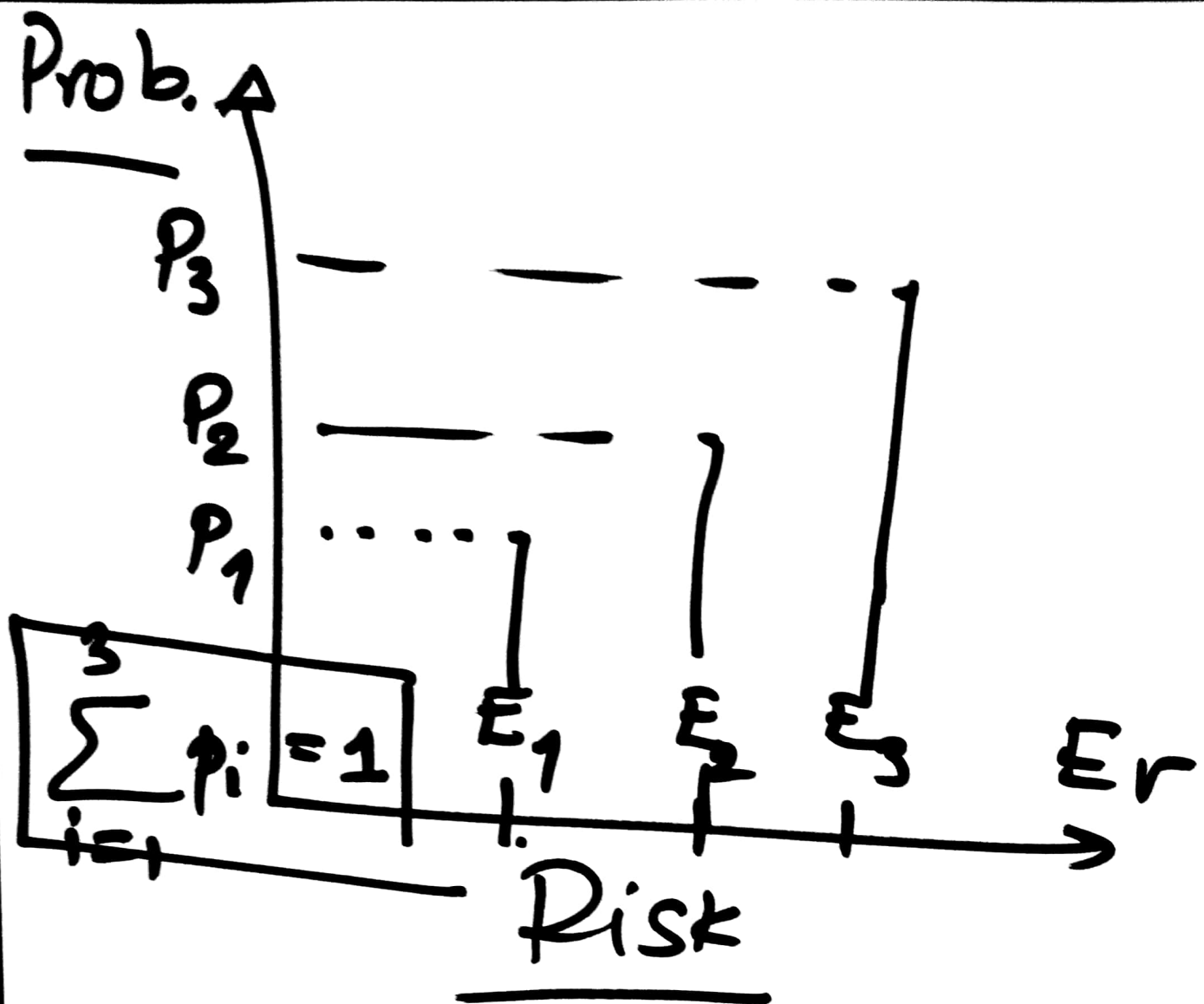




Fig 2 uncertainty

- . Events are unlimited (do)
- . Probs. cannot be specified?





- Events are limited. (n)
- Prob can be determined for each event.

Derivatives \rightleftarrows

Hedging

Risk
(K)

RISK



Probability
Distribution

Discrete

Continuous

Normal



E_i	Prob
E_1	P_1
E_2	P_2
\vdots	
E_n	P_n

$\sum_{i=1}^n p_i = 1$

Future

[Forward]

Asma

Long

Lamra

Short

Stock X

underlying
Asset

$$S_0 = 50 \$$$

$$S_T = ?$$

$T = 1 \text{ month May 2017}$
(Maturity date)

Strike Price

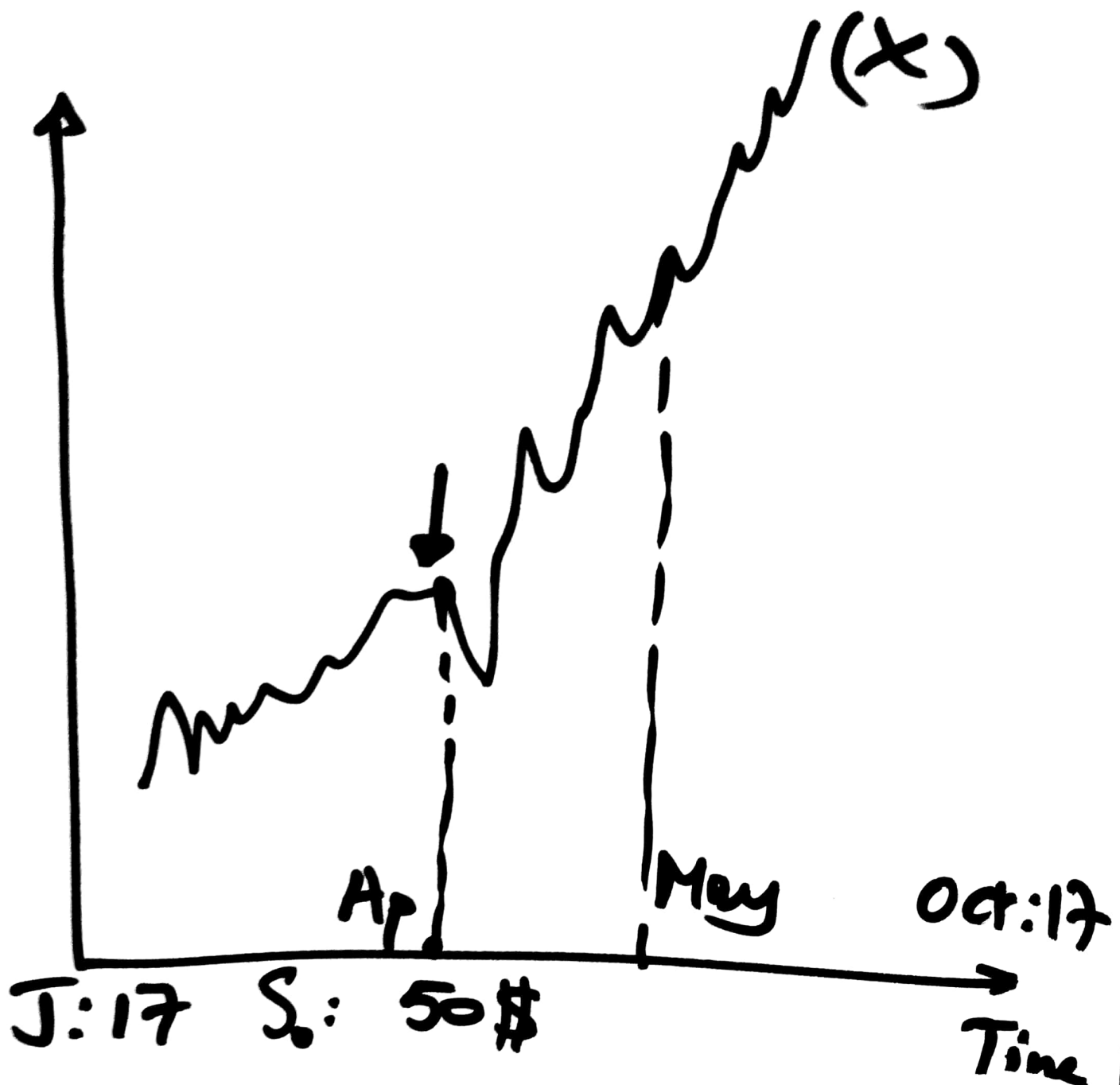
- 7 - Exercise Price (= 55 \$)

$$F_{0, 1 \text{ month}} = 55 \$$$

$$\textcircled{F}_{0, 30 \text{ days}} = 55 \$$$

* forward Contract

عقد شراء بالاجل



Investor or Trader:

I want to buy Stock X in 1 month.

$$S_0 = 50\$$$

$$S_T = ?$$

-9-

Long - Profit Payoff

S_T	30	40	50	55	60	70	80
Asmr	-25	-15	-5	0	+5	+15	+25
<u>Long</u>	+25	+15	+5	0	-5	-15	-25
Result	0	0	0	0	0	0	0

{ $F_{0,T}^X = 55 \$$
 $S_0 = 50 \$$ - 10 -
 $T = 1 \text{ month}$

for Asmā : Long.

