

M339D: September 10<sup>th</sup>, 2025.

## Overnight Purchase of One Share of Stock.

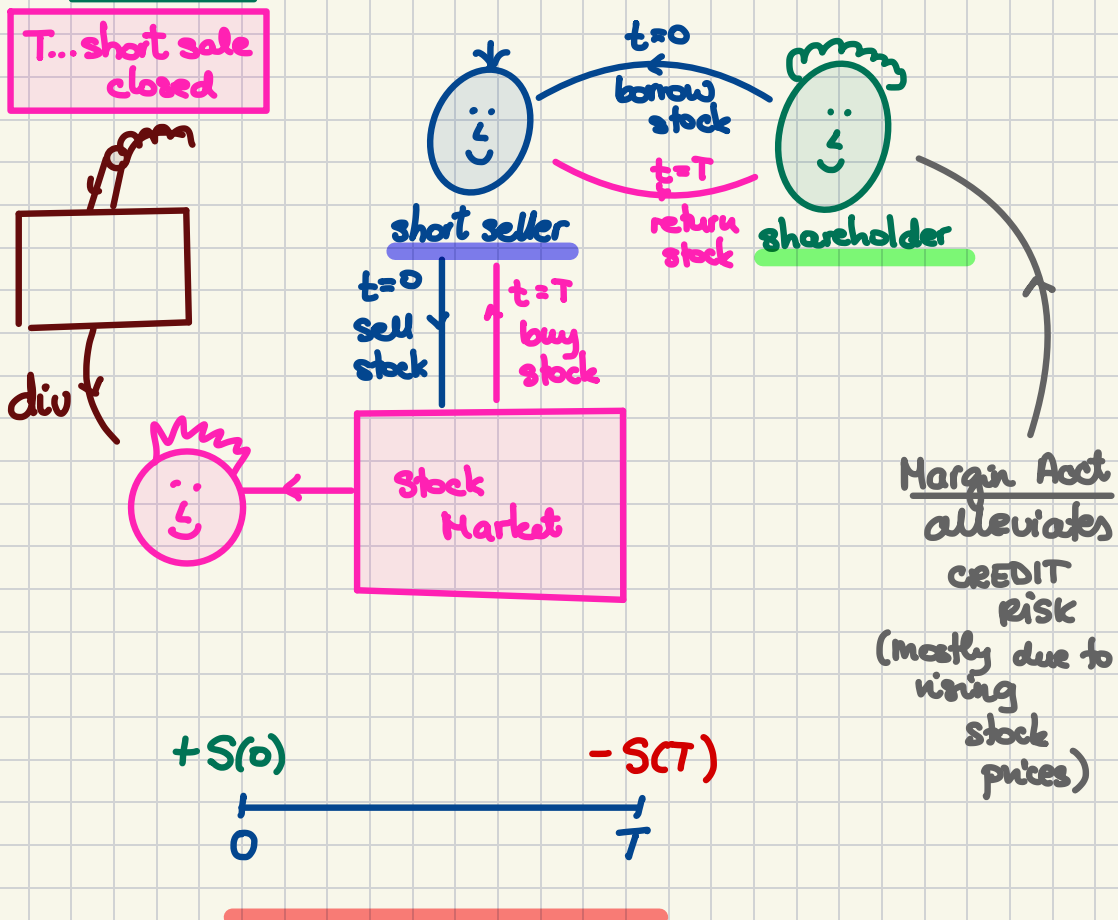
$S(t), t \geq 0$  ... stock price

RANDOM PROCESS  
STOCHASTIC PROCESS

$-S(0)$   $S(T)$  ... time  $T$  stock price  
0  $T$   
"today" TIME HORIZON

RANDOM  
VARIABLE

## Short Sale.



## On Portfolios.

Time	Cash	Stock
	+	+ #
	-	- #