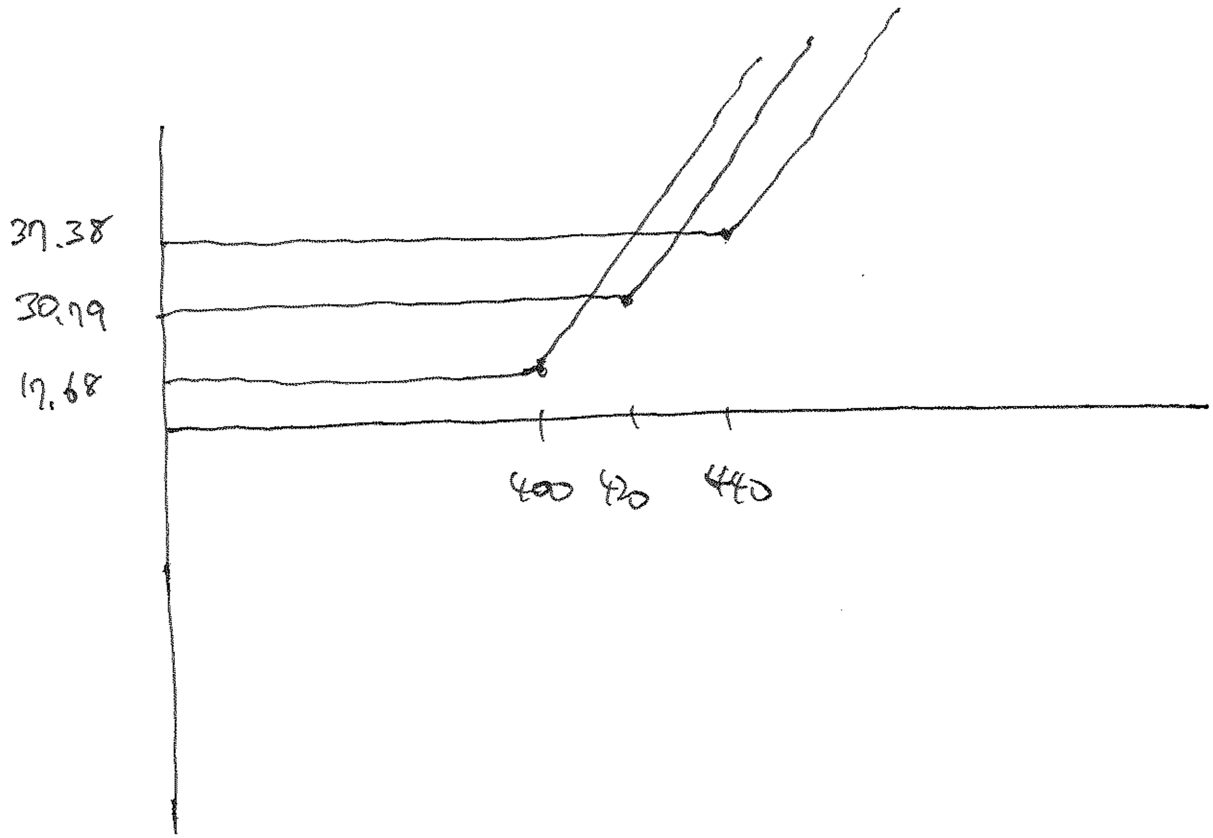
4. Risk Management

Effect of Strike price K.

			premium	
440-strike	long	put	21.54	440 - 380 - 21.54(1.05) = 37.38
420-	"	"	8.77	420 - 380 - 8.77(1.05) = 30.79
400-	"	"	2.21	400 - 380 - 2.21(1.05) = 17.68



Reason to Headge

- Tax
- Bankruptcy + distress costs
- Costly external financing
- Increase debt capacity
- Managerical risk aversion
- Nonfinancial risk management

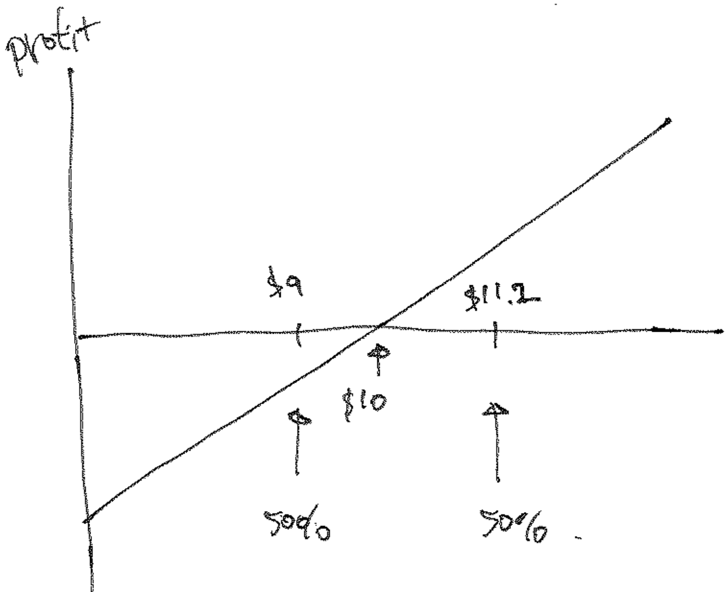
Reasons not to Hedge

- Transaction costs, Commissions and bid-ask spread.
- need to assess the strategy.
- need to manage transactions.
- need for more complicated reporting.

Effect of Tax

Suppose Tax rate 40%.

Before Tax

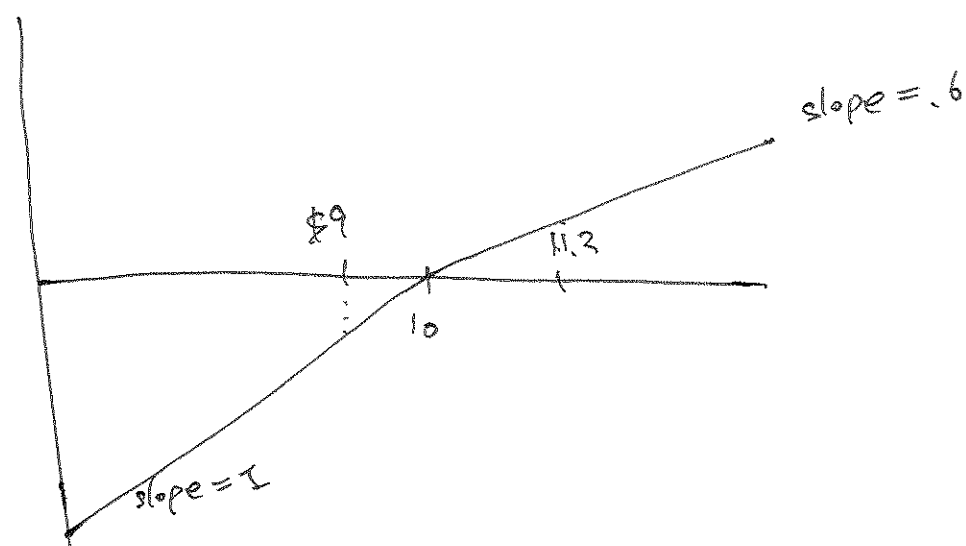


$(-1)(.5) + (1.2)(.5)$

$E(\text{profit}) =$

$= \$.1$

After Tax



$E(\text{profit}) = (-1)(.5) + (1.2)(.6)(.5)$

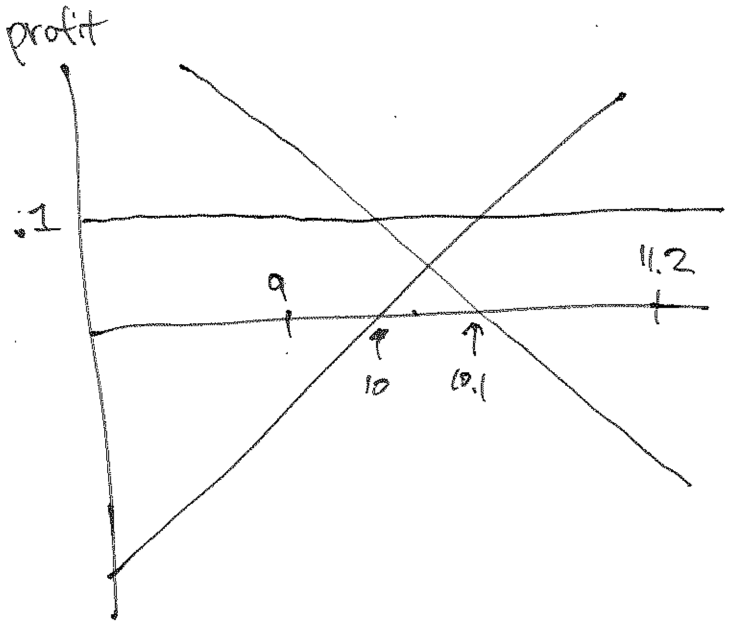
$= -\$.14$

Concave function

After heding with forward

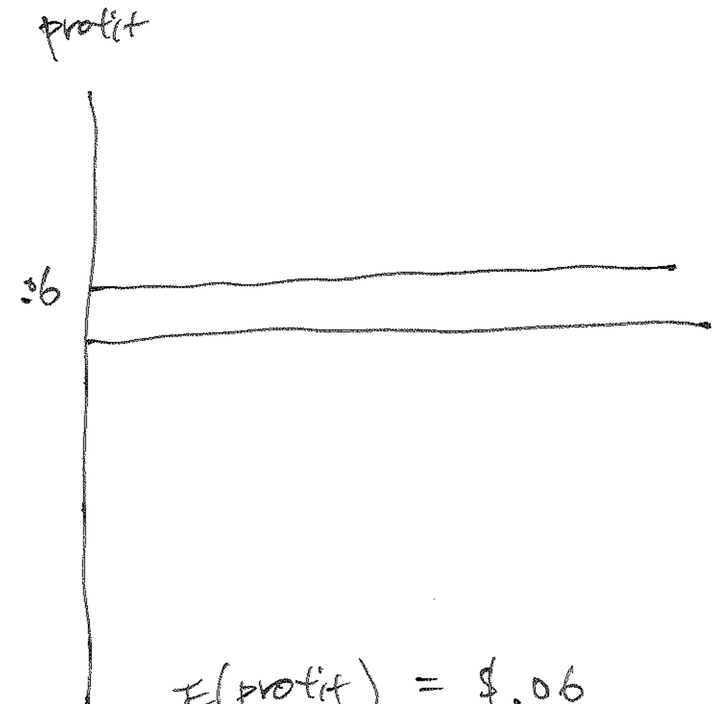
$10.1 exercise price.

Before



E(profit) = $.1

After



E(profit) = $.06

Because of tax, $1 loss ≠ $1 profit. (before tax).