

## **Risk Management and Decision Making in Finance and the Real World**

Chapter 7 – Options

Hi there

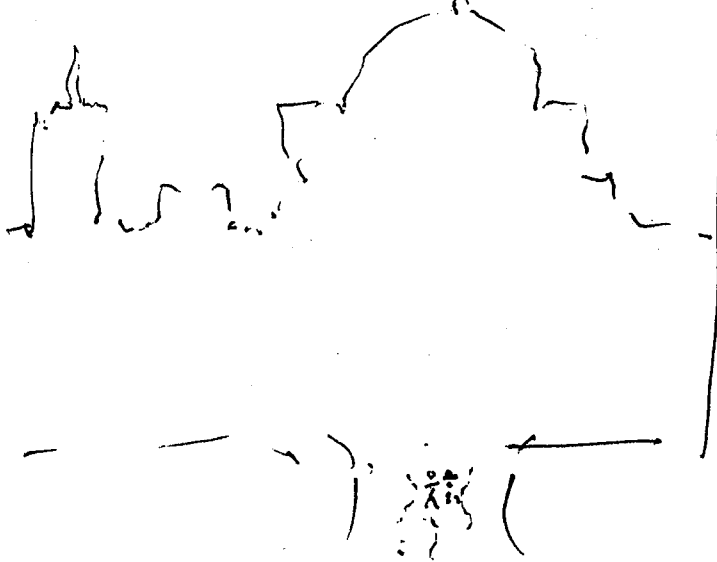
Thank you for reading this rough draft of the Risk Management Book.

It is meant to be understood by pretty much anyone. If you are reading it and come across something that does not make sense, please e:mail me at [chris.matts@gmail.com](mailto:chris.matts@gmail.com) and tell me which bit does not make sense. I'll then try to make it clearer.

Many thanks

Chris

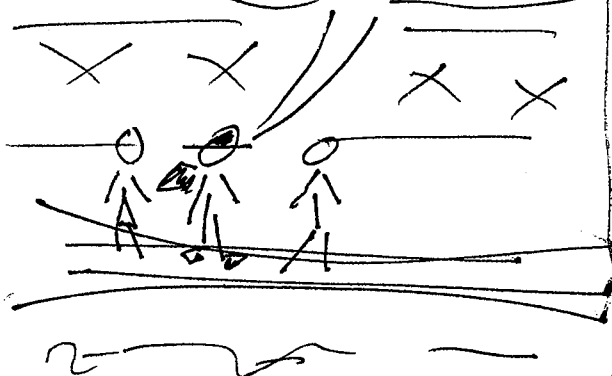
THE SUN ROSE OVER LONDON



MUCH TO THE SURPRISE OF

CITY BOY

THE MARKET IS  
KNACKERED!  
KNACKERED I SAY!



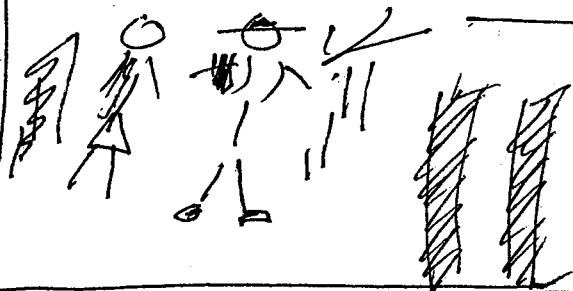
WHY?

THEY BANNED  
SHORT  
SELLING!



SO?

THEY HAVE  
DRIVEN ALL  
THE LIQUIDITY  
FROM THE OPTION  
MARKET.



WITHOUT THE ABILITY  
TO BUY PUT OPTIONS, THE  
FUND MANAGERS WILL  
SELL SELL SELL.



JUST ONE THING

YES?

WHAT THE  
HELL IS  
AN OPTION?



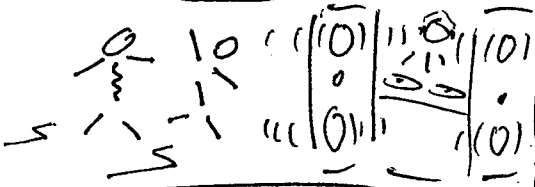
AN OPTION IS THE RIGHT  
BUT NOT THE OBLIGATION  
TO DO SOMETHING.



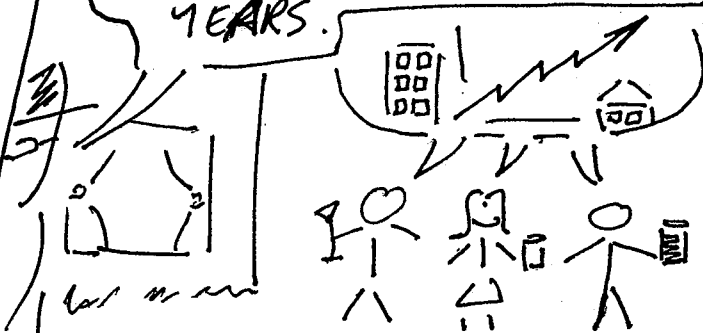
SO THAT WAS  
TWELVE WORDS  
THAT I GOT  
INDIVIDUALLY....  
BUT I HAVE NO  
IDEA WHAT YOU  
JUST SAID.



O.K. IMAGINE YOU ARE  
AT A PARTY.  
EVERYONE IN  
THE BLOCK OF FLATS  
YOU LIVE IN...



EVERYONE IS CELEBRATING  
THE FACT THAT FLATS IN  
THE BLOCK HAVE GONE UP  
IN VALUE BY 50% IN TWO  
YEARS.



ONE OF YOUR  
NEIGHBOURS  
GETS  
A BIT  
CARRIED  
AWAY

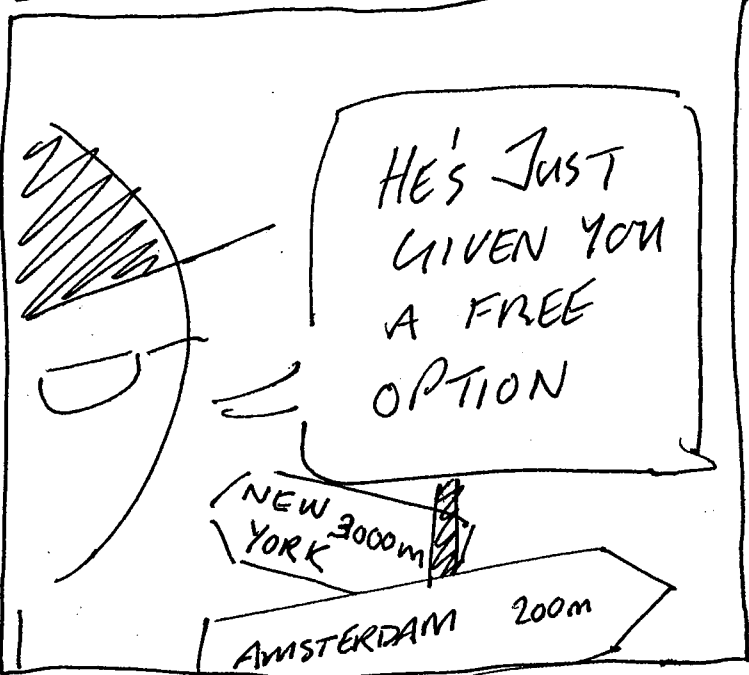
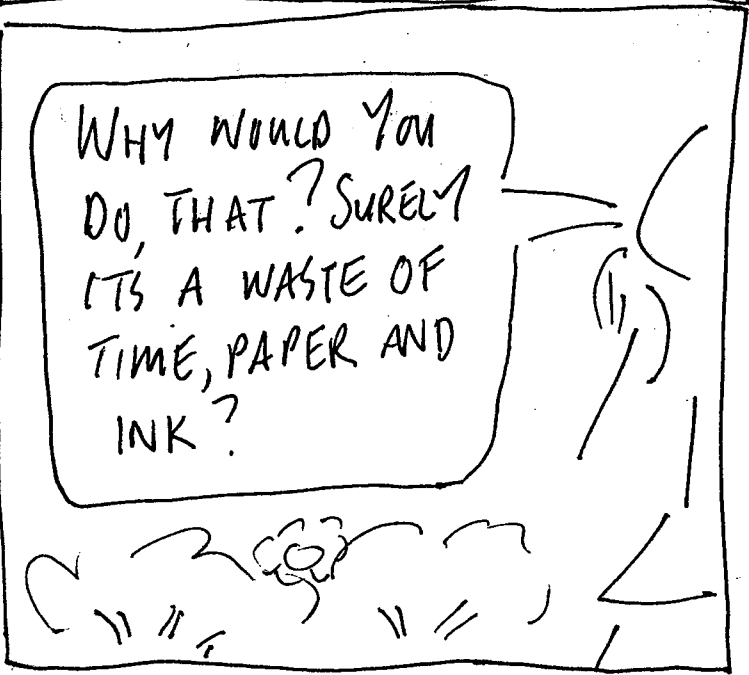


HIC

YOU KNOW WE  
ARE BRILLIANT!  
ANY TIME YOU  
WANT YOU CAN  
BUY MY FLAT  
FOR ONE  
MILLION

BUT ITS  
ONLY WORTH  
HALF A  
MILLION



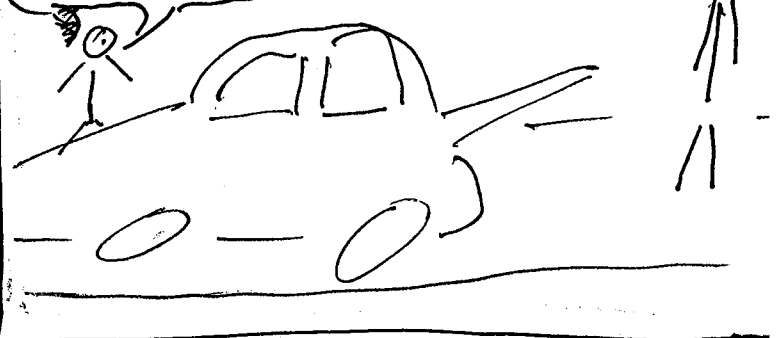


AN OBLIGATION IS SIMPLY THAT. YOU ARE OBLIGATED TO BUY OR SELL SOMETHING IN THE FUTURE AT AN AGREED PRICE

NICE MOTOR HOW MUCH? 10K\*  
\*K = THOUSAND

LOOK. I DON'T WANT THE CAR NOW. HOW ABOUT I BUY IT FOR 11K IN ONE YEAR

A DEAL! LET'S DRAW UP THE PAPERWORK



ONE MONTH ~~YEAR~~ LATER .....  
~~ONE YEAR LATER~~

WHAT'S IT WORTH?



THERE ARE "THREE" POSSIBILITIES

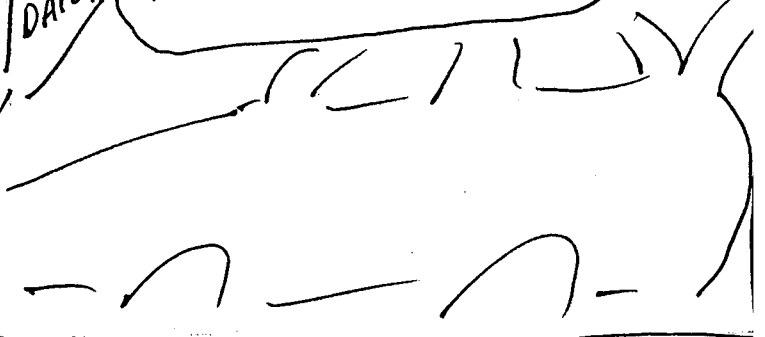
1. THE PRICE HAS GONE UP

12K

THAT MEANS I'VE LOST ONEK.

AND I'VE MADE 1K

CAR PRICE DAILY



2. IT'S GONE DOWN

BLAST! IT'S DOWN TO 8K. I'M DOWN 2K.

CAR PRICE DAILY

AND I'M UP 3K.

3. OR IT HASN'T MOVED

NOT MOVED

CAR PRICE DAILY

WE'RE BOTH FLAT THEN

BOTH SIDES ARE COMMITTED TO THE FUTURE TRANSACTION AT THE AGREED PRICE.



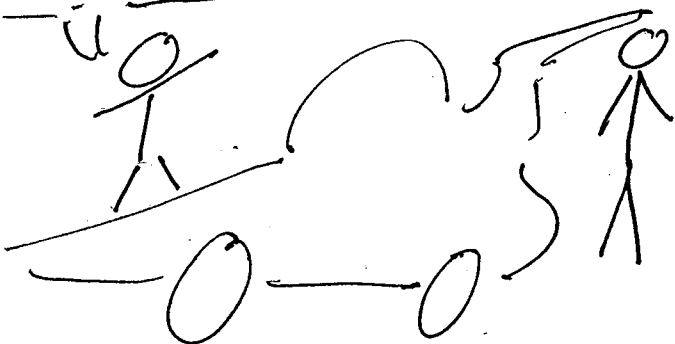
I've BOUGHT

AND I'VE SOLD



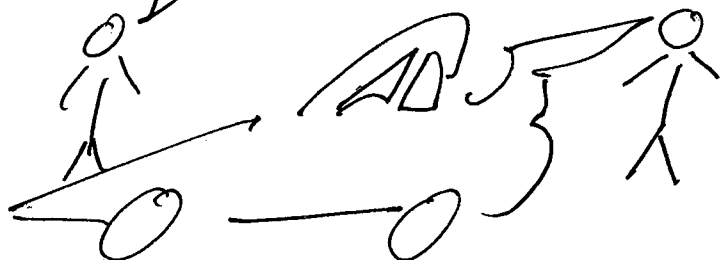
IF THE PRICE GOES UP I MAKE MONEY

AND I LOSE MONEY

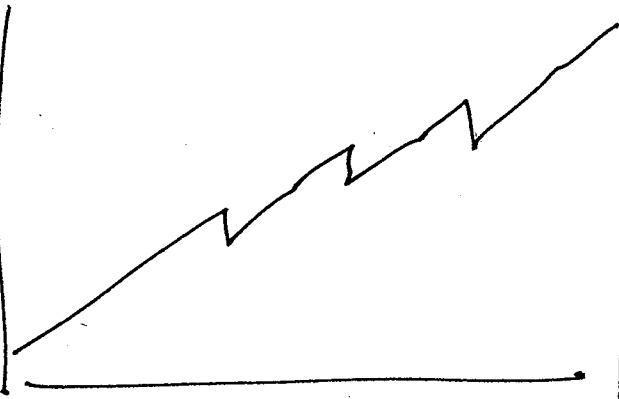


IN FINANCE, WE SAY I HAVE A LONG FUTURE'S POSITION

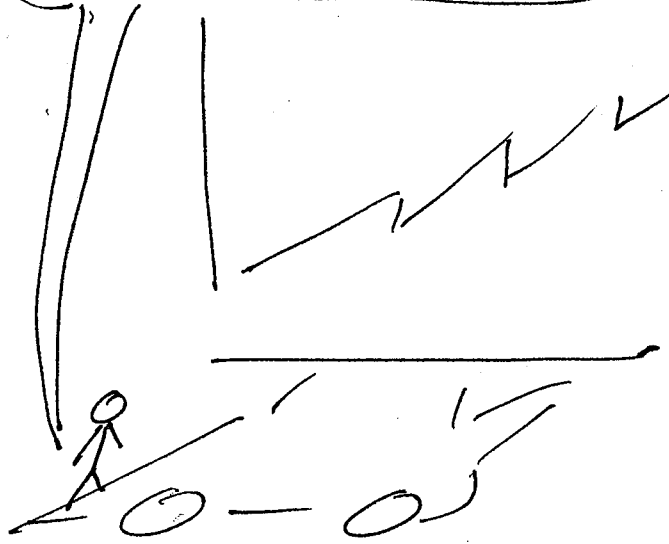
AND I HAVE A SHORT FUTURE'S POSITION



SO IF THE PRICE GOES UP...



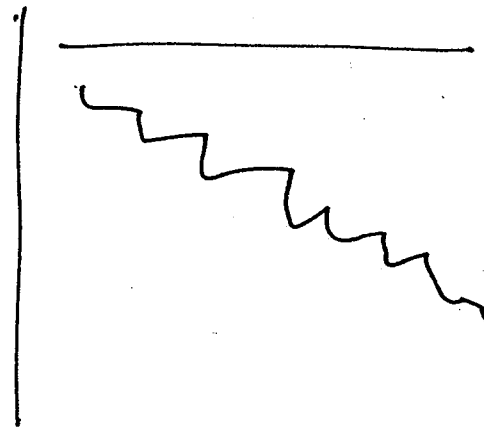
(SO DOES MY PROFIT)



(BUT I MAKE A LOSS)



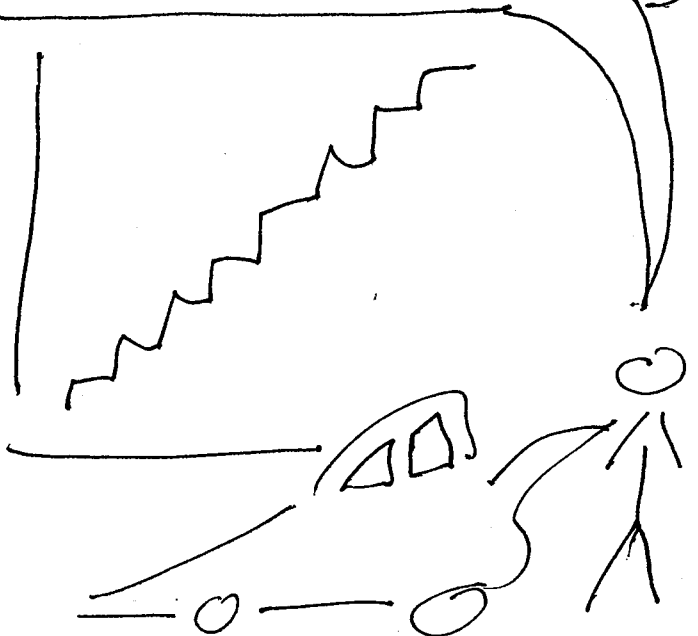
AND IF THE PRICE GOES DOWN....



(I MAKE A LOSS)



(BUT I MAKE A PROFIT)



SO BACK TO OUR FRIEND AND THE FREE OPTION

ANYTIME YOU WANT I CAN BUY MY FLAT FOR ONE MILLION

HOW MUCH IS YOUR "OPTION" WORTH?

SO LET ME GET THIS RIGHT. I CAN BUY HIS FOR ONE MILLION EVEN THOUGH IT'S ONLY WORTH 500K

er NOTHING!

BUT WHAT IF THE FLAT WERE WORTH ONE MILLION?

er STILL NOTHING

AND NOW IF SAY IT'S ANNOUNCED THAT THE 2012 OLYMPIC BEACH VOLLEY BALL IS NEXT DOOR TO THE FLAT AND

CAN WE STICK TO THE POINT? ..... PERV!

AND THE PRICE GOES UP TO TWO MILLION!

LET ME SEE. I CAN BUY A FLAT FOR ONE MILLION WHEN IT IS WORTH TWO MILLION. I WOULD MAKE A ONE MILLION PROFIT.

LET'S DRAW  
A GRAPH OF  
THE OPTION  
VALUE VERSUS  
FLAT VALUE

WHEN THE  
FLAT IS WORTH  
500K

OPTION  
PRICE

PRICE OF  
FLAT

500K

THE OPTION  
IS WORTH  
ZERO

AND WHEN THE  
FLAT IS WORTH  
ONE MILLION

500K

1M

THE OPTION  
IS STILL  
WORTH  
ZERO

AND TWO MILLION?

1M

500K

1M

2M

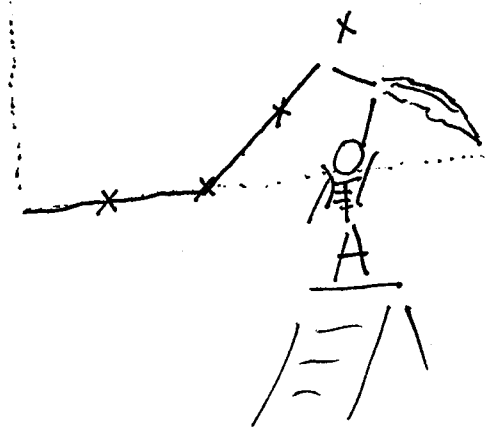
THE OPTION  
IS WORTH  
ONE  
MILLION

AND FOR GOOD MEASURE  
ONE AND A HALF MILLION

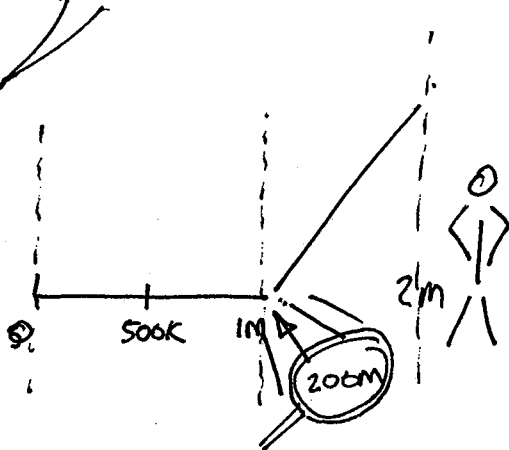
1M  
500K

500K!

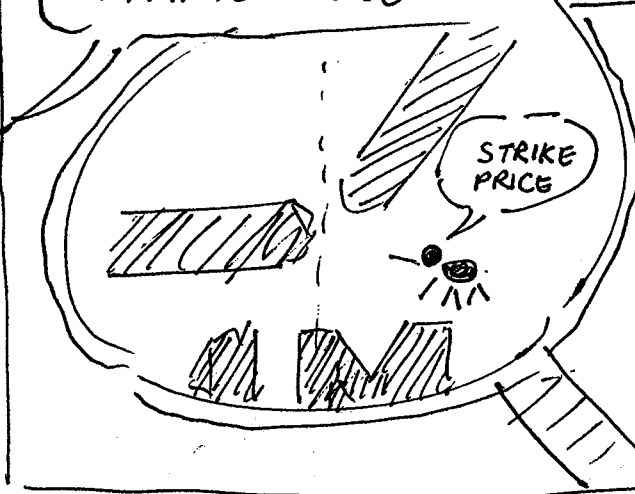
LET'S JOIN THE DOTS....



THIS IS KNOWN AS THE  
PAYOFF PROFILE OF A  
CALL OPTION



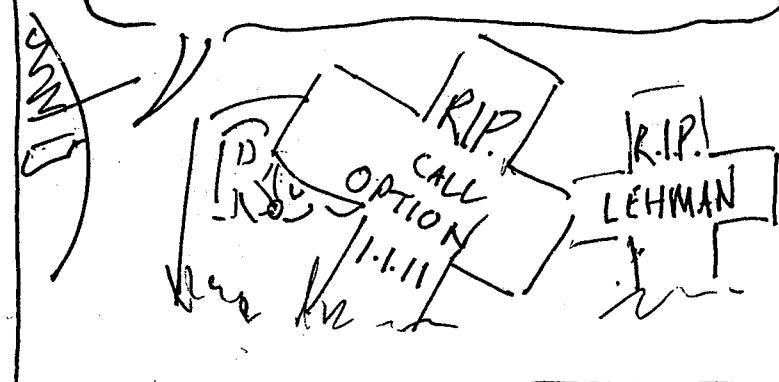
THE PRICE AT WHICH YOU  
CAN BUY IS KNOWN AS THE  
"STRIKE" PRICE



OUR NEIGHBOUR KINDLY  
SET IT A ONE MILLION



NORMALLY FINANCIAL OPTION  
HAVE A MATURITY DATE.  
A DATE AT WHICH THEY  
DIE OR "EXPIRE".



OUR NEIGHBOUR KINDLY  
DIDN'T SET A  
MATURITY OR "EXPIRY"  
DATE



WHEN HE GAVE AWAY THE  
OPTION HIS FLAT WAS WORTH  
ONLY 500K



