Trading in practise
Risk management,
initial stop loss,
optimum position size

Workshop
ATAA Melbourne, January 2016
(Robert Brain)

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When investing/trading shares:-

How to:

- Minimise our risk?
  (so we can sleep at night)
- Set the *Stop Loss* price level?
- Estimate our *Price Target*?
- Optimise the *Position Size*?

So, how can we do all this?

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Session purpose

- To consider several a trading example using historical price data.
- To share ideas and experiences.
- To compare opinions, and understand how other people do it.
- We will consider:
  - initial stop loss,
  - position size calculation,
  - Reward / Risk Ratio
  - (but not trailing stop loss in this session).

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Teams

1. Ideally, form into teams:-
   - of 3 or 4 people
   - in the seats where you are
   - (turn round and say hello to your team members).
2. Preferably also have:
   - *Trading Work Sheet* (or a piece of paper),
   - Pen (or pencil),
   - A calculator might be handy.

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The paper work...

"Trading Work Sheet"

Similar to last time, but tweaked.
Download a copy from here:
www.robertbrain.com/files/trading-worksheet-sample.pdf

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Our Trading Work Sheet

This one has several elements:

1. Portfolio & Trade Risk

2. Trade Planning & Position Size

3. Trade Work Sheet

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Portfolio & Trade Risk Mgt

Portfolio & Trade Risk

		Example	Your amount
(a) Today's total Capital	=	$ 10,000	$..............
(b) Maximum Capital per pos'n	=	20%	..............%
Max capital per pos'n ($):	= (a) x (b)		
	=	$2,000	$..............
(c) Percent "at risk" per trade	=	2%	..............%
(d) Total Amount "at risk" per trade	= (a) x (c)		
	=	$ 200	$..............

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[R]isk per trade — 2% ?

NOTE:

- In this example we are using what is widely referred to as the "2 Percent Rule"; and

- We are using the amount of 2 percent; but

- A more conservative approach would be
to use a value less than 2%, and
perhaps as low as just 1%.

Also see: https://www.incrediblecharts.com/trading/2_percent_rule.php
Also see: Colin Nicholson's web site discussion:
http://www.bwts.com.au/index.cfm/resources/ask-colin/817-could-you-explain-the-6-rule-as-opposed-to-the-2-rule-and-sugges/

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Position Size

Detail on next slide

Trade Planning / Position Size

Stock Code: ....

(1) The "RISK" (=R) amount:

Preferred Entry Price	PEP	= $ ....
Initial Stop Price	IS	= $ ....
RISK (per share)	= (PEP – IS)	= $ ....

(2) The "REWARD" amount:

Target Price	TP	= $ ....
Preferred Entry Price (above)	PEP	= $ ....
REWARD (per share) = (TP–PEP)		= $ ....

(3) The REWARD:RISK Ratio:

$$\frac{REWARD}{RISK} = \underline{\qquad} = \underline{\qquad}$$

(4) Position Size (number of shares):

$$\frac{Amount\ at\ risk\ (d)}{RISK\ (1)} = \underline{\qquad} = \underline{\qquad}$$

(5) Position Value ($ value amount for this position):

Position Size x PEP = $ ....

Q: Is this Position Value less than (b) above?

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Diagram EXAMPLE

- Recent trading range $10-$13
- Anticipate a break out and rising trend.

sample price

$20
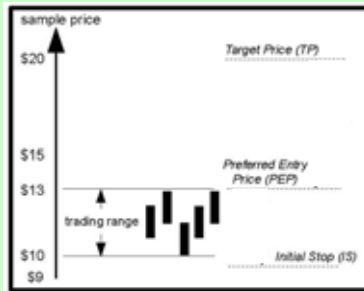
$15
$13
trading range
$10
$9
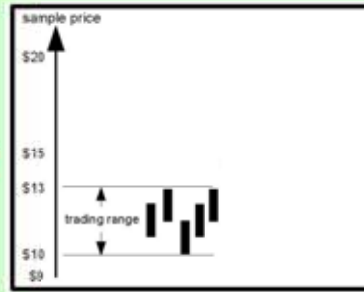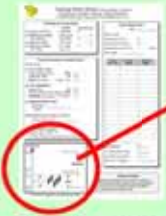
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Diagram explanation

1) Identify three key price points:
   – Target price = $20
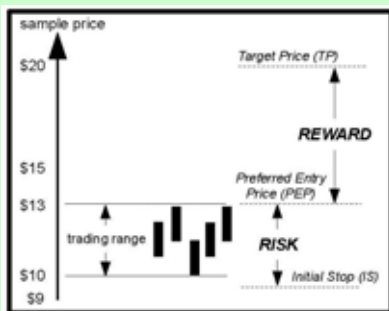   – Likely purchase (or entry) price = $13
   – Initial stop = $9.50

sample price

$20 .... Target Price (TP)

$15
$13 .... Preferred Entry Price (PEP)
trading range
$10 .... Initial Stop (IS)
$9

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Diagram explanation

2) Determine:
   – Reward amount
   – Risk amount
3) Calculate:
   – Reward/Risk Ratio
   – Ideally greater than 2

sample price

$20 .... Target Price (TP)

REWARD

$15
$13 .... Preferred Entry Price (PEP)
trading range
RISK
$10 .... Initial Stop (IS)
$9

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Diagram explanation

Reward/Risk Ratio

= $7.00
  $3.50

= 2

The greater the reward, the better the ratio.

Great if 3, 4 or 5+

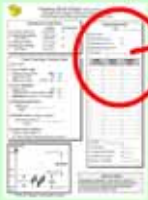sample price
$20 — Target Price (TP)
REWARD
$15
$13 — Preferred Entry Price (PEP)
trading range — RISK
$10 — Initial Stop (IS)
$9
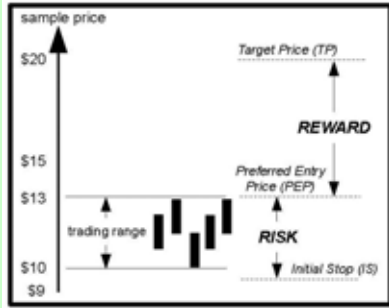
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Trade Work Sheet

Daily / weekly reviews, can enter the details onto the Work Sheet, and revised Trailing Stop.

Trade Work Sheet
Date: ___ / ___ / _____

Stock Code: . . . .
Actual Entry Price   = $ . . . .
Initial Stop Price (IS)   = $ . . . .
Initial Stop Amount: **R**   = ... cents
Entry date: ____ / ____ / _____

Date (dd / mm)	Close Price	Trailing Stop

Case Study

Case Study
Exercise #3

Are we ready?
(we did #1 and #2 last time)

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Case Study — Assumptions

Our Case Study *Trading Plan* says:

- Invest / trade in **Australian equities**
- We only have **$10,000 total capital**
- We won't use any leverage
- **Trend following** strategy
- Find an **up-trending** stock
- Join the trend.

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Weekly* chart — Nov 2011 - Jan 2013
Break out above resistance
Uptrending stock
also: 30 week MA now rising

Uptrend

What about the bigger picture? (The market is like an elephant)

Nov 2011

Jan 2013

* - On a weekly candlestick chart, every candle summarises the price action in one week.

Bigger picture
January 2010 — January 2013

Jan 2010

Nov 2011

Jan 2013

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The planning steps

Up-trending stock — confirmed

We have decided to take the trade.
So let's consider:
(a) position size — how much?
(b) initial stop loss — where?

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The planning steps

In the next slides we will:
1. Estimate **Preferred Entry (purchase) Price**
2. Set **Initial Stop Loss** position
3. Calculate the dollar amount to **RISK**
4. Estimate a **Target Price**
5. Calculate the possible **REWARD**
6. Calculate the **REWARD / RISK ratio**.
   BUT, there are some questions:- . . .

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but some QUESTIONS!!

1. How much money (ie. **total amount**)
   do we need for our investing/trading activity? *
   At least:-

   (a) $ 500
   (b) $ 1,000
   (c) $ 5,000
   (d) $ 10,000
   (e) $ 50,000
   (f) $100,000

   ?

   * - Shares, no leverage.

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**In our Case Study
we will use a value of
$10,000
investment capital**

Portfolio & Trade Risk

	Example	Your amount
(a) Today's total Capital	= $ 10,000	
(b) Maximum Capital per pos'n		%
Max capital per pos'n ($):	= (a) x (b)	
	= $2,000	$
(c) Percent "at risk" per trade	= 2%	%
(d) Total Amount "at risk" per trade	= (a) x (c)	
	= $ 200	$

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QUESTIONS!!

1. How much money (ie. **total amount**)
   do we need for our investing/trading activity?

2. What's our **minimum position size**?

  (a) $ 500
  (b) $ 1,000
  (c) $ 2,000
  (d) $ 5,000
  (e) $ 10,000 or
  (f)   it doesn't matter!

?

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**In our Case Study
we will calculate it,
and
expect it to be
greater than $1,500**

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QUESTIONS!!

1. How much money (ie. **total amount**)
   do we need for our investing/trading activity?

2. What's our **minimum position size**?

3. How much of our **total investment capital**
   are we happy to have in each position?

   (a) up to   5% of total capital
   (b) up to 10% of total capital
   (c) up to 20% of total capital
   (d) up to 30% of total capital
   (e) more than 30%.

See discussion points next slide…/

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Discussion on risk

The (three) biggest risks:

(a) ?

(b) ?

(c) ?

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Discussion on risk

The (three) biggest risks:

(a) The **market collapses** and most of our
    positions plunge in value in short term
    (we should have a plan to deal with this — no disc'n now)

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Discussion on risk

The (three) biggest risks:

(a) The **market collapses** and most of our positions plunge in value in short term
(we should have a plan to deal with this — no disc'n now)

(b) Any one stock goes into **trading halt** and does not recover — entire position gone
(nothing we can do about this? so limit the potential damage)

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Discussion on risk

The (three) biggest risks:

(a) The **market collapses** and most of our positions plunge in value in short term
(we should have a plan to deal with this — no disc'n now)

(b) Any one stock goes into **trading halt** and does not recover — entire position gone
(nothing we can do about this? so limit the potential damage)

How can we limit the potential damage of (b)?
Limit the % amount of capital in one position?

(c) (The third risk… later...)

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QUESTIONS!!

Limit the amount of capital in any one position to 20% max (but 10% might be preferable)

3. How much of our **total investment capital** are we happy to have in each position?

(a) up to 5% of total

(b) up to 10% of total

(c) **up to 20%** of total

(d) up to 30% of total

(e) more than 30%.

Portfolio & Trade Risk		
	Example	Your amount
(a) Today's total Capital	= $ 10,000	$
(b) Maximum Capital per pos'n	= 20%	%
Max capital per pos'n ($):	= (a) x (b)	
	= $2,000	$
(c) Percent "at risk" per trade	= 2%	%
(d) Total Amount "at risk" per trade	= (a) x (c)	
	= $ 200	$

Another consideration

Re: how much of our total investment capital in any one position?

(a) If it is up to 20%,
   then we can only have five positions,
   and it is relatively high risk

(b) If it is up to 10%,
   then we can have up to 10 positions,
   and is lower risk,
   but might miss the "Ten Bagger"

   Option (b) gives more flexibility.

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Discussion on risk (cont.)

The three biggest risks:

(a) The market collapses and most of our
   positions plunge in value in short term
   (we should have a plan to deal with this)

(b) Any one stock goes into trading halt and
   does not recover — entire position gone
   (nothing we can do about this? so limit the potential damage)

(c) The share price of one position falls
   (eg. into a confirmed down trend)
   What do we do?

Risk management

1. In our case study strategy,
   if the share price falls,
   we will exit the position to protect capital!

2. So, how much are we prepared to lose?
   (our documented strategy ought to have a rule)

   (a) A dollar amount? or

   (b) A percentage amount?
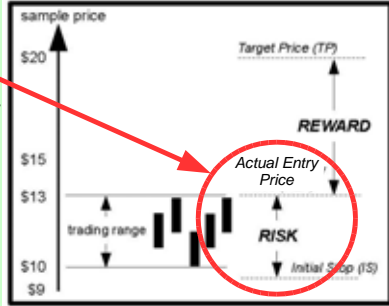
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It falls… we sell…

If the share price falls and we close the position, how much money have we actually lost?

- The amount "at RISK"
- Assuming that we can sell at our Stop Loss value (ie. no slippage).

sample price

$20 — Target Price (TP)

REWARD

$15

$13 — Actual Entry Price

trading range — RISK

$10 — Initial Stop (IS)
$9

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The amount "at risk"

- Many experts suggest to set the amount "at risk" at something like 2% of total capital
- This has led to the **"2 Percent Rule"** *
- More conservative approach — use 1.5% or 1%
- Larger portfolios can use a smaller value (eg. 1%).
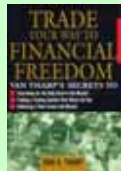
* - The "2 Percent Rule" is very widely used.
  More details: Van K. Tharp,
  "Trade your way to Financial Freedom"

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Summary of our Risk

Portfolio & Trade Risk

		Example	Your amount
(a) Today's total Capital	=	$ 10,000	$................
(b) **Maximum Capital** per pos'n	=	20%	............%
Max capital per pos'n ($):	= (a) x (b)		
	=	$2,000	$................
(c) **Percent "at risk"** per trade	=	2%	............%
(d) **Total Amount "at risk"** per trade	= (a) x (c)		
	=	$ 200	$................

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Back to the case study

Determine:

- Preferred Entry Price (PEP)
- Initial Stop Loss (IS)
- RISK per share (R)

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Daily chart
Nov 2012 — Jan 2013

$3.50

$3.04

Determine:

- Preferred Entry Price (PEP)
- Initial Stop Loss (IS)

Jan 2013

Daily chart

12/01/2016

$3.50

— $3.25 —

$3.04

Where would you put your Initial Stop Loss? And why?
Note your value on the Worksheet

(fill out the "paper work")

Daily chart   12/01/2016

Let's assume PEP = $3.50 $3.50

— $3.25 —

$3.04

Let's assume IS = $3.00
or = $3.25?

Determine:
- Preferred Entry Price (PEP)
- Initial Stop Loss (IS)
- RISK per share = R

(fill out the "paper work")

Determine your Risk

IMITED   12/01/2016

Let's assume PEP = $3.50 $3.50

Risk =
50 cents

$3.04

Let's assume IS = $3.00

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Amount at "risk"

Note down your
Risk amount
(cents per share)
Item (1) on the sheet
(eg. 50 cents)

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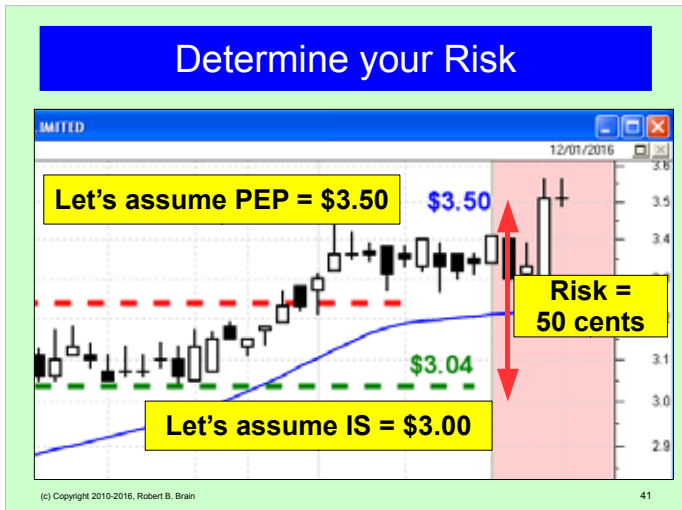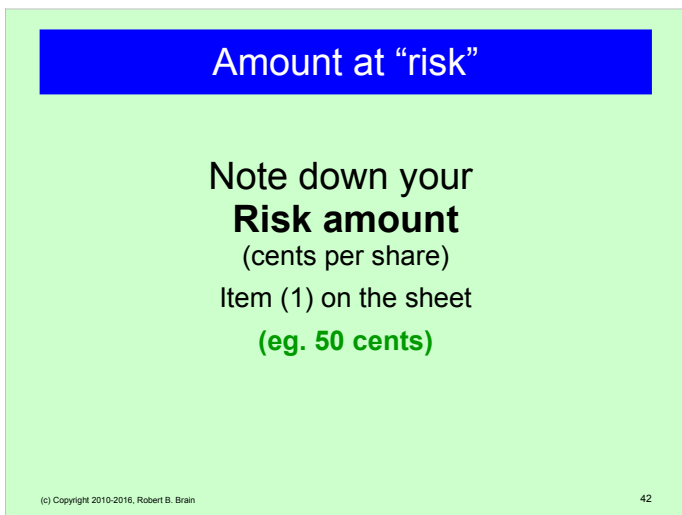
Target Price?

What is
your estimate for
the **Target Price**?
(see chart on next slide)

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Target Price?

← ← Target price $4.50 ? → →

$3.50
$3.04

More paper work...

Estimate your REWARD (item (2) on sheet):
- Target Price (TP) = ?
- Preferred Entry Price (PEP) = ?

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More paper work...

Estimate your REWARD (item (2) on sheet):

• Target Price (TP) = ?

• Preferred Entry Price (PEP) = ?

REWARD per share
  = [Target Price] — [Preferred Entry Price]

Note down your REWARD amount...
(cents per share)

Item (2) on the sheet

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More paper work...

Estimate your REWARD (item (2) on sheet):

• Target Price (TP) = ?   **(eg. $4.50)**

• Preferred Entry Price (PEP) = ?   **(eg. $3.50)**

REWARD per share
  = [Target Price] — [Preferred Entry Price]

(eg. $4.50 - $3.50 = $1.00 per share)

Note down your REWARD amount...
(cents per share)

Item (2) on the sheet

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Reward to Risk Ratio

Calculate your:

$$\underline{\text{Reward}}$$
$$\text{Risk}$$

Item (3) on the sheet

eg. $1.00 / $0.50 = 2 ← not bad

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Position Size

Position size (the number of shares to buy):

Total amount at risk*
[R]isk per share

(eg. $200 / 50 cents = 400)

* *Total amount at risk* in this study
  = 2% of $10,000 = $200

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Value of this parcel

The Position Size x PEP = $ _____

(eg. 400 x $3.50 = $1,400)

QUESTION:
Is this parcel value less than item (b)??

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Daily chart — 12/01/2016

$3.50
$3.25
$3.04

What if the Initial Stop = $3.25?
How might that change things?

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Alternative Stop Loss

Initial Stop (IS)	$3.00	$3.25
(a) Entry Price	$3.50	$3.50
(b) Amount at risk per share [R] = (a) - (IS)	50 cents	25 cents
(c) Total $ amount to risk (from Work Sheet)	$200	$200
(d) Position Size = (c) / (b)	400	800
(e) Position Value = (d) x (a)	$1,400	$2,800

Conclusion: A different Initial Stop can give different Position Size, for the same "Total $ amount to risk".

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Trade Work Sheet

On right hand side of the Trade Work Sheet:

- If we place the trade, record the Actual Entry Price
- Complete other details at the top right of the sheet 29 Jan 2013, etc...
- Now let's go forward 18 weeks....

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(now view the charts ....)

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That's all for now

That's all the price action
we have for now.

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Conclusion & Wrap UP

- Where did you end up?
- Was your Stop hit?

- Conclusions?
- Comments?

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Case Study Exercise #4

(not included in this slide set)

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More Information

For more information
about this subject,
and related topics,
see:

www.robertbrain.com/presentations/

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