*     - Brainy's eBook (PDF) Articles are only available to Share Market Toolbox members.


## Introduction

When investing or trading in the share market, it is important to be aware of the risks involved, and to minimise the likelihood of adverse events occurring. With appropriate risk and money management, the share market is not as scary, or as frightening, as some people might believe it to be, and we can "sleep at night".
This eBook Article (ST-4000) is an introduction to several Articles that fall under the umbrella of Risk Management and Money Management. We discuss some of the risks that can occur, and we look at how to minimise these risks.

For more details, readers should refer to other Articles in this series:

- Article ST-4020, "How to reduce risk"
- Article ST-4100, "The 2\% Rule"
- Article ST-4300, "Risk and Reward"
- Article ST-4400, "Position size and calculator"
- Article ST-4500, "Stop Loss".


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## Isn't this gambling? — NO!

Some people consider share market investing to be gambling. Depending on how it is approached, it can be gambling; but with a proper approach, and appropriate risk management, it isn't gambling.

Consider this. If you have some money to invest, and you could invest it in an investment property, or into a small business, or into the share market, then which one do you think is more risky? Consider the related aspects in the table below. Based on this, we can see that investing in the share market is a much lower risk than some other investment methods.

| Consideration | Investment property | Small business | Share <br> market |
| :--- | :--- | :--- | :--- |
| Can we invest relatively small <br> amounts as well as large <br> amounts? | Not small amounts | Not small amounts | Almost any <br> amount |
| Liquidity - Can we sell some <br> of the investment quickly? | No | No | Yes |
| Can we diversify the funds? | Not really | No | Yes |
| If the value of our investment is <br> starting to fall, and we want to <br> exit, can we do so easily? | No | No | Yes <br> Very likely |
| Is the investment likely to be <br> impacted by the weather, a <br> changing climate, or <br> catastrophic natural events? | Not likely; <br> but could be. | Businesses in some <br> industries can be impacted <br> (eg. farming, primary <br> production, tourism, etc.). | Could be. <br> If so, then <br> liquidate. |
| Is the investment likely to be <br> impacted by a downturn in the <br> economy? | The standard economic <br> and property cycles can <br> impact property prices. | Many businesses can be <br> impacted by the adverse <br> stages of the economic <br> cycle. | If so, then <br> liquidate. |

[^0]
## We could lose a fortune? - Maybe

Without understanding the risks involved, and without taking appropriate precautions, it is possible to lose your initial investment. In fact, it is possible to lose all of your available investment capital. Actually, that's not quite true - it is possible to lose a lot more than your initial investment capital. By over-leveraging, or not adequately monitoring investment positions, it is possible for some investment methods to lose huge sums of money that you don't actually have. There is real evidence of this in the wash-up from the Global Financial Crisis (GFC) of 2008-2010+.

## Basic principles and assumptions

In this Article, the following principles are taken for granted. They are discussed and supported in other Articles in this series.

- We can achieve a win/loss ratio of only $50 \%$ and still be profitable - this is acceptable, and normal. That is, with proper money management, only half of our investments need to be winners.
- We want to limit losses to relatively small amounts, and this is achievable.
- To limit losses, we will employ some form of sound money and risk management, as well as a sound Stop Loss method.
- We want to let profits run, so that they are larger than the losses. The age-old cliché that we can't go broke taking a profit is false - it can be proven that taking profits too early can lead to ruin.


## Money can slip away

There are three things that can easily eat into profits, and which we should briefly consider:

- brokerage - on each trade;
- slippage - on each trade (or per contract for CFDs and forex);
- interest - payable on borrowed funds (eg. margin loan, or CFDs).

These are discussed in the following paragraphs.

## Brokerage and commissions

Depending on whether we are trading shares, or a derivative like CFDs, there will probably be a brokerage fee, or commission, to be paid. A regular share broker will charge a brokerage fee for every buy, and every sell, transaction. An online broker might charge something like $\$ 19$ for each transaction (also referred to as a trade), whereas a full-service broker might charge something like $\$ 70$ to $\$ 100$ per trade.
Now on a share parcel worth $\$ 10,000$, this amount of brokerage is not a large amount; but on a share parcel as small as $\$ 500$, the impact is significant. Let's consider the detail with some examples.

1. For a $\$ 10,000$ parcel with brokerage of $\$ 20$, the "round trip cost" will be $2 \times \$ 20=\$ 40$ (that is, $\$ 20$ to buy, and $\$ 20$ to sell).
This represents a cost of $0.4 \%$.
For this share parcel to return to break even, the shares need to increase in value by $\$ 40$, or about $0.4 \%$. This is a reasonable objective.
2. For a $\$ 1,000$ parcel, the round trip brokerage of $\$ 40$ is $4 \%$ of the total. To break even, the shares need to increase in value by about $4 \%$.
This expectation is not reasonable in the short term.
3. For a $\$ 500$ parcel, the round trip brokerage of $\$ 40$ is $8 \%$ of the total.

If we only have $\$ 500$ to spare (including all costs), then we actually have only $\$ 460$ available to buy the shares, and we can reserve the other $\$ 40$ to cover the brokerage.
Just to cover the costs before making a profit, the $\$ 460$ investment needs to increase to $\$ 500$, which is an $8.7 \%$ increase. Is this reasonable? Are the shares likely to increase in value by

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about $9 \%$ in the short term? What about over a 3-month or 6-month period? What if the brokerage was $\$ 30$ each way for a total of $\$ 60$ ?
A share parcel worth only $\$ 500$ is not likely to be profitable in the short term, and maybe not in the medium term either. If the share price falls to our stop loss position and we exit the position, then we have to take the loss. And slippage can make this situation worse.

## Slippage

The issue of slippage is not discussed very much, but it is something that every investor and trader needs to be aware of. Let's look at an example.

Slippage on entry - Let's say we want to buy shares in a medium-size mining company and the shares are currently trading at about \$1. We analyse the company and the recent share prices, and we decide to buy a parcel of shares for $\$ 1$ each. Now, before we can actually buy our share parcel there is some news announced to the market which pushes the share price up to $\$ 1.10$ - that's a $10 \%$ increase. If we then manage to make our purchase at $\$ 1.10$, we can say that the share price has "slipped" by 10 cents from our intended entry price. This is slippage.

Slippage on entry (fixed price) - In practise, this sort of event can easily happen, resulting in just a very small amount of slippage, simply because the share price has moved since we placed our order in the market. We might decide to buy at $\$ 1$ while the market is open and while the stock is trading. We might place an order in the market at this price, but find no willing sellers to buy from. We could wait a while, and watch the share price rise as other buyers step over us and bid higher prices. In this situation there are three things we could do:
(a) We could let this purchase attempt go, or
(b) We could wait for a retracement back to our price (which may not happen), or
(c) We could chase the price and absorb the slippage.

Slippage on entry (at market price) - If we decide that we really want a position in a stock, and we place an "at market" order to buy at the next available opportunity (with a price limit set), the next available seller might offer the stock at a price a little less favourable than we wanted. This also results in slippage.

Slippage on exit - Slippage can also occur on the exit from a position. For example, if a share price falls to our Stop Loss level, and we place an order to sell our share parcel, there might not be any willing buyers at our intended sell price. They might instead be willing to buy for a much lower price. This slippage amount can be considerable. But by trading in liquid stocks we are minimising this risk and improving our chances of not suffering from this.

## Interest

When borrowing money to invest, or trade, the borrowed funds attract an interest charge. The borrowed funds might be a margin loan, or associated with a CFD position. It is important to be aware of the amount of interest being charged, and to factor this into any calculations. It is possible that this can eat away large portions of any profit. The interest expense might be tax deductible, but if it consumes the entire profit, then what's the point?

## Worst case scenarios

In the table below, let's briefly consider some of the worst possible outcomes, and the sensible risk management steps that we can take to minimise the likelihood of these adverse events occurring, and the steps to minimise the impact if they do occur. If you like, this is a classical (but incomplete) risk analysis approach to investing in the markets. There is more information on this in the sections that follow below.

For consideration in this table, let's consider that we have a sum of money available to invest in the share market, and that we have the following issues:

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1. Question - How much of our available funds should we commit to any one position in the market? That is, if we had $\$ 10,000$, for example, is it acceptable to allocate all of this amount to shares in just one company, or should we spread it across a couple? Is there an optimum amount to allocate per position?
2. When we enter a position (ie. buy a parcel of shares), we will determine a good Stop Loss value, and we will sell the shares if the share price falls to this level. The amount of money that we might lose in this situation needs to be limited (this is what we call the amount at risk). But, how do we calculate the best Stop Loss level and the amount at risk?

## RISK ANALYSIS <br> What could go wrong, and how to minimise the impact?

| Risk item | Impact if it occurs | Mitigation actions |
| :--- | :--- | :--- |
| Too much of the investing capital <br> is assigned to any one position. <br> The investment might fold <br> completely, with a nil return of capital. | High impact, if it is a <br> large portion of the <br> investment capital. | Limit the amount of capital that <br> is committed to any one <br> position. |
| Too much of the investing capital <br> is at risk in any one position. <br> If our investment suffers a loss and <br> we sell, we could lose a big chunk of <br> money. | Can have high impact. | Restrict the amount of money at <br> risk so that any loss is not a <br> significant portion of the total <br> capital. |
| Brokerage and commissions. <br> If we invest a small amount at a time, <br> then brokerage fees might eat <br> significantly into the profits. | Brokerage fees occur, <br> so we need to minimise <br> their impact. | Make the position size large <br> enough so that the impact is <br> reduced. That is, optimise the <br> position size. |
| The position size is large enough <br> to be a significant portion of the daily <br> liquidity of the stock. | Trying to sell the whole <br> position at once could <br> find not enough willing <br> buyers, and move the <br> price lower. | Either keep the position size <br> small enough to not cause this <br> problem, or avoid illiquid stocks. |

## Good money management

Some of the principles that are considered to be good money management include the following which are discussed briefly below and elaborated on in other Articles:

- Proportion of capital - $20 \%$ ?
- The 2\% Rule - percent-risk position sizing model.
- Position size optimising.


## Proportion of capital - 20\% ?

It is not a good idea to put all eggs in the one basket. To spread the risk, many people limit the investing allocations so that any one investment is no more than about $20 \%$ of the total available funds. For example, if we had $\$ 10,000$ of available capital, we might limit each position size to $20 \%$ of this, or $\$ 2,000$. Of course, we could use a different amount - maybe down to $10 \%$ or lower, or even as high as $40 \%$ or $50 \%$, provided we are aware of the risks, and we are managing the risks.
The important point is to be aware of the risk and the possible implications, and to manage the risk. It is wise to give this careful consideration and record your own approach in the Trading Plan document, and perhaps reinforce this in the documented Trading Strategy document.

[^2]Brainy's Articles on Share Trading** Risk \& Money Management

## The 2 Percent Rule

The idea of the so-called " 2 Percent Rule" is to do with how much of our money we are prepared to put "at risk" in any one investment. In simplistic terms, consider the following:

- If we have $\$ 10,000$ of available capital, and if we use "The $2 \%$ Rule", it means that we are prepared to risk $2 \%$ of the $\$ 10,000$ - that's $\$ 200$.
- Now if we intend to buy a parcel of shares at $\$ 10$ per share, and if we set our Stop Loss level at $\$ 9.50$, then we are "risking" 50 cents per share.
- In this example, if we are comfortable with risking \$200 of our capital, and the specific stock purchase will be risking 50 cents per share, it equates to a parcel size of 400 shares (that's $\$ 200$ at risk divided by $\$ 0.50$ per share at risk).
Now we can see that by using a rule such as this, we should be able to sleep at night without worrying about any one particular investment position. For more details on the $2 \%$ Rule, see Brainy's Article ST-4100, "The 2 percent rule".


## Position size optimising

It can be argued that when considering the purchase of a parcel of shares, a very small parcel size would not be very wise, due to the effect of brokerage charges (this was discussed above). At the other extreme, a very large parcel size might not be wise either (due to stock liquidity, or lack of liquidity - see Articles ST-6210 and ST-6215 for discussions about stock liquidity).

So, it can be very useful to optimise the parcel size to suit one's own risk and money management principles. A good Position Size Calculator can be used to study the effects of different position sizes and risk amounts. See Brainy's Article ST-4400, "Position size and calculator", for more details.

## Stop Loss

A very important approach to consider is that if the investment starts to go against us, then we cash in the position before too much is lost. With a share market investment, we ought to determine a Stop Loss value before we enter the position, and if the share price falls to the Stop Loss level then we sell without question. This removes the emotion from the situation, and removes any discretionary aspect.

## Summary

In this Article in Brainy's series on Share Trading, Article ST-4000, we have taken an introductory look at the topic of risk and money management, and considered some of the situations that put our funds at risk, and considered how to minimise these risks. These topics are all explored in more detail in other Articles in Brainy's series on share trading/investing.
Readers are encouraged to refer to other articles including the following:

- Article ST-4020, "How to reduce risk"
- Article ST-4100, "The 2\% Rule"
- Article ST-4300, "Risk and Reward"
- Article ST-4400, "Position size and calculator"
- Article ST-4500, "Stop Loss".



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