ACTIVE INVESTING

A COMPLETE ANSWER

Alan Hull

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Dedication

In memory of
Shani Hull and Leigh Burkitt...
let's build a foundation

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PREFACE

I owned my first share at the age of eight. It was a birthday present from my father and it cost $5. I can't recall the name of it, but I remember that I chose it and it doubled in price during the next six months. As my birthday is in June, it was a good Christmas that year! $10 was a lot of money to an eight-year-old in 1970. I spent my fortune on lollies for myself and presents for my siblings.

When I turned nine, my father gave me another $5 to buy a share, but this time he advised me on what to buy. The share price fell steadily in the following months and eventually I went to my father for more advice. I have never forgotten his words: "If the share price is going up you'll make money, but if it is going down you'll lose money." With the reflex thinking of a nine-year-old, I asked him to sell the share. I then asked him if he was going to give me back my original $5. He took a deep breath, looked at me and paused... a sure sign of bad news. He gently told me that I could only get back the current value of the share, and that if I didn't want to rely on advice from others then I should learn about shares for myself. I took his words seriously.

When I look around me today it is of little surprise that the average 'mum and dad' investor is often paralysed by confusion. There are too many choices, too many opinions, too many financial products and a myriad of specific and non-specific books on investment. *Active Investing* is my response to this confusion. Average investors want to profit from stock market investments by making their own decisions, without risking the family home or any hard-earned savings. They want to be hands-on when it comes to managing their share portfolios. They want to be *Active Investors*.

Active Investing, as I present it in this book, is simple. It takes less than one hour per week to implement, and combines nearly every existing form of market analysis into one fluid approach.

It also involves managing risk to ensure long-term survival in the marketplace.

There is a mass of misinformation in the stock market. Much of it is not wrong, as such, but is misused by market participants. Active Investing flies in the face of many entrenched ideas and established conventions which are the main reason most people don't succeed in the marketplace.

The one concept I openly attack is that of 'universal truth'. There is no single truth or fixed set of facts that govern the stock market, and hence there is no single right way of buying and selling shares. There is an element of validity to every method being employed and Active Investing acknowledges this reality by combining a wide range of market analysis methods.

The first key to success in the marketplace is to understand that survival depends on market experience and not on being in charge of all the facts. The following story illustrates this point.

It's a Jungle Out There

It's a blustery day and I'm chairing a meeting of the 'Sunday Trader's Club'. We meet on the first Sunday of every month for several hours to swap differing opinions, exchange information and analyse a few shares. I'm sitting at a table facing an audience of 50 or so, amongst whom are long-term investors, newcomers to the stock market, and an assortment of traders. Many of those present hold investments in the property market as well as the sharemarket.

The members of the group come from a range of occupations. There are truck drivers, home-based business operators, doctors and retirees. Our ages vary from mid-thirties to mid-seventies.

It's discussion time and Douglas, a relative newcomer, has stood up and asked the room about a share that he holds – he can't decide what to do with it. We all know his line of questioning, as this is the third month in a row that he has interrogated us for our collective opinion. Signs of disinterest are evident around the room.

He receives the same responses as he has on the last two occasions. The investors suggest reviewing the company's fundamentals and future prospects to ascertain whether holding over the longer term would be prudent. The traders and chartists offer analysis and technical strategies for assessing share price movements.

Harold, a regular attendee who is not known for his tolerance, has had enough. He begins reciting a summary of today's opinions for Douglas. At the end of his summary, he asks Douglas if he is happy with the group's responses. With a smile Douglas answers, "Yes... thanks everyone" and starts to sit down. Harold loudly asks Douglas to stay standing, with an urgency that brings him swiftly back to a standing position and has him glaring at Harold with an expression that is both angry and apprehensive. In a businesslike tone, Harold reminds him that he has rained questions down on us for the past three months and is by his own admission in possession of all the relevant facts, and asks him, therefore, to share his decision with the group. Before Douglas can offer the obvious response of "I'm going to think about it for a while", Harold cuts in with, "Three months Douglas... what's your decision?"

You Must Take Action

Douglas' inertia reminds me of a young deer, straying from the jungle on to bitumen for the first time, at dusk. In the distance several spots of light can be seen, and appear to be growing larger. As they are still far away and present no immediate danger, the young animal continues to hold them in its gaze.

The driver of the fast-approaching semi-trailer stares through the windshield at the deer caught in his headlights, willing it to move out of his way. He releases his frustration into the confines of the cabin, yelling, "Left or right you dumb animal, just move!" Oblivious of the expletives that are filling the interior of the cabin, the deer freezes, suddenly terrified by the audible protests of the downshifting transmission. As the truck slows, the driver begins dipping his headlights and using the air horn... but he's not prepared to stop or swerve for the benefit of a single, dumb animal. Besides, all it has to do is move... which way doesn't matter.

The marketplace is like the huge semi-trailer. It is a powerful machine comprising thousands of moving parts, large and small – the small speculators, the investors trying to build wealth over time, the company directors, the stockbrokers and many, many more on the periphery. If we, the user, want more information, faster delivery of information, different information or the ability to buy and sell shares from overseas, then the machine will adapt. It's there to serve

us and its evolution is driven by our needs. The evolutionary process has accelerated, with the help of technology, to the point where the machine is even beginning to adapt to needs that it anticipates we will have in the future.

Like the semi-trailer hurtling towards the deer, the marketplace won't stop to avoid injuring the unsuspecting. It may lower the price of entry for the newcomer, provide education, offer expert advice, facilitate fast and easy access to information and do anything else that users may want of it. But it won't stop, backup and refund your money.

Investors like Douglas – the 'mum and dad' investors – trying to graduate to the next level may be armed with knowledge after having bought books on fundamental analysis (including the compulsory text on Warren Buffett); they may even have bought a computer and a sophisticated (read 'expensive') package of charting software to boot. But this is all useless if they are paralysed like the deer and unable to take action.

Douglas's list of questions just seems to grow at every Sunday meeting, together with the growth in his knowledge. He's on the information merry-go-round, looking for the magic bullet that will break the cycle. He's even attended some of the 'Get rich quick' courses that cost the equivalent of an overseas family holiday. Then, having become disillusioned with that avenue of endeavour, he turned to the 'How to manage your poverty' courses that don't hit the hip pocket so hard. But none of them have provided the solutions that he went hunting for in the first place. It had all seemed so straightforward when he and his wife had that initial discussion about using a sensible, balanced and informed approach to actively improving their financial future. He is fully committed to this pursuit and has invested large amounts of time and money in his education, to the point where I believe he knows more than I do. Yet, like the deer in the headlights, he is standing there staring at me with his eyes pleading... unable to make a decision.

Predator or Prey?

Douglas must face the fact that the stock market will not pause while he considers his investment decisions. Worse, the longer he hesitates, the fewer his options become. While he doesn't take any action, there are plenty of market participants who will.

A deer is always the prey, never the predator, and mother nature has equipped it for this role. All the deer's senses are designed to home in on danger and trigger it to flight, for which it is also designed. Its long skinny legs are capable of propelling it at high speed over a variety of terrain, including tall native grass. This speed, coupled with the ability to switch direction as if bouncing off an invisible wall, makes the deer an elusive meal for any adversary – providing it can take action.

A couple of the full-time traders at the back of the room shoot quick, knowing glances at each other. They begin to move in their seats, unable to keep still. These guys talk to each other during the coffee break but always stay apart during the meetings, as if sitting together were breaking some kind of rule. Few in the audience know they're professional traders, and they appear to prefer it that way. I quickly scan the sea of faces to observe the response to this still brief but pregnant silence. One of the traders shoots me a grin. I keep scanning the faces as if I haven't seen it, but inwardly I'm impressed by his perception of the situation. It's only this small band of traders that *aren't* staring at me with a puzzled expression or at Douglas with "We're waiting" written all over their faces.

Whilst a lot of professional traders work alone, there are many who network with others and share their talents in order to exploit opportunities that would be lost to them as individuals. This particular small band of experienced traders are part of a nationwide group of similar self-styled market professionals. Their individual knowledge and skills cover a wide spectrum, and by networking, all have access to a formidable arsenal of weaponry. This arsenal can be drawn upon at a moment's notice and instantly be distributed to the entire network, thanks to e-mail. Like a pack of hyenas, they know that their individual survival depends on their survival as a group, and they do not hesitate to profit from the indecision of others. Indecisive people are prone to rumours and to their own emotions causing them either to hesitate or overreact. These traders all know the lesson of indecision and their bank accounts and trading ledgers bear the scars.

Others in the room might think that the magic bullet is to gain admission to this inner circle. The networks, though, don't make decisions for individuals, but function on each and every member's ability to read the group's consensus and stay with the majority. Admission into the network depends on you having something to

offer, be it knowledge, market information or exploitable connections. You don't join them, they induct you by including your name on an e-mail database. Collectively, these players know the system, the technology, the rules; and they know when to wait, when to move and when to keep quiet. I suspect they come to the meetings to find out what the rest of us do and how we think. You never know... there might be an opportunity. Like the hyenas lurking close by the deer in his time of fear and uncertainty, the stock market traders are never far away from the mum and dad investors.

The Wise Old Owl

To complete the analogy, as well as the market novices and shrewd traders there are the wise owls.

Jan is a divorced baby-boomer, a savvy business woman and a long-term investor. Jan is like an owl.

Decades in the market have sharpened her skills, and the tactics she employs are unique to her long-term objectives. She remains completely unaffected by day-to-day share price movements, as she thinks and operates in a monthly to yearly timeframe. A fast decision for her means having to make up her mind before the month is out. She knows the importance of decision-making and is well aware that hesitation in the stock market is expensive in any timeframe. No doubt she sympathises with the position that Douglas now finds himself in.

The owl, like the driver, wills the deer to move as the final outcome becomes increasingly obvious. The deer's hesitation has seriously reduced its chances of survival. The owl hoots and looks down at its chest, as if resigned to its inability to help. This nocturnal, winged creature is of a different world where different rules apply. Not a world without danger, but one where predators and prey are armed with different weaponry, designed for a different set of circumstances. The owl can rest easy in the roadside tree knowing that it is removed from the world below. About the only common ground it shares with earthbound animals is the ultimate objective of survival.

It's Not About Being Right

The reason for Douglas's inability to make investment decisions, despite his growing knowledge and experience, is in large part the fact that he is afraid of being wrong. That explains why he takes up so much of everyone's time in the Trader's Club meetings – if his self-esteem is damaged or he loses money he has others to blame for his decisions – me not least of all! After all, it's my Trader's Club.

But in the marketplace Douglas's choices will diminish quickly with the passage of time – not unlike the deer's. As if triggered by a starting pistol, two of the hyenas sprint across the road behind the deer and cut off any chance of escape in the opposite direction. The owl, as if responding to a dramatic climax in a movie, suddenly lifts and starts to bring its wings up... only to settle back to its perch. The inevitability of the outcome hits all of those present. The hyenas collectively rise up from their crouching positions with tails relaxed. The deer's small body loses all of its tension and it shifts its gaze to the windshield as if to plead with the semi-trailer, "You have the power... please stop."

The driver feels a sting of guilt as he double-clutches down and guns the engine. He knows that if he and his truck weren't here this macabre theatre wouldn't be taking place. But although his presence is not an act of nature, he too has a purpose to serve that is indirectly linked to his survival and ultimately to the long term preservation of his kind. The owl blinks and looks into the night sky as if unable to watch the final act...

The truck passes by with building speed as if exiting the stage. The hyenas trot forward to the still warm carcass in a casual, unhurried manner. This meal is a favourite, because the predator, unlike lions, leaves them the entire carcass and poses no lingering threat. The incursion of man and machine into their world has introduced the pack to a most convenient way of surviving... roadkill. The lights of the truck gradually disappear over the horizon and the owl flies off in search of its next meal. The show is over.

Back to Douglas. I offer him a last-ditch escape: "You could put it in the bottom drawer." I say it with a grin and the tension washes from the room. Jan, who's been glaring at Harold the whole time, finally looks away from him but she's still not smiling.

Everyone knows that I'm offering Douglas a poor, virtually unacceptable answer, but it's the only way he can get back into his seat and become one with the group again. He takes the bait but plays politics with his answer, "Unless you can offer a better alternative." One of the traders rolls his eyes as Douglas retakes his

seat. I grin and give him some added dignity by announcing that I don't necessarily know the right answer either.

The meeting moves on and I look in Douglas's direction to observe him with his head down, staring at the back of the chair in front of him. He knows that by his own volition he's condemned himself to the mythical land of passive investing.

For every 'Douglas' who learns to survive, there will be a dozen uninitiated 'Douglases' who fall by the wayside. It may seem that this man-made machine known as the marketplace doesn't want the newcomer to know the rules. Maybe the machine needs its share of victims to feed its insatiable appetite?

It's the ability to make a decision and cop the consequences that counts. It is not the ability to make the right decisions... that comes with time. Provided, of course, that it's YOU making the decisions. The rules you learnt in school where a wrong decision was considered bad don't apply in the marketplace. The newcomer certainly has to gain knowledge, but it must be born out of a real need for answers and not a desire to be right all of the time. For Douglas to survive and thrive in the marketplace instead of becoming roadkill, he needs to alter his perspective. To help him do this we have to go back to the beginning of the whole process. Not to the initial, well-intended discussion with his wife about their financial future where they decided to build a prison of knowledge... but earlier.

Money Not Maths

You do not have to have an accounting degree or be an expert at technical analysis to be a successful investor or trader. What you do need is an elementary level of numeracy. This is unavoidable – buying and selling shares requires it. I have included charts throughout to illustrate different concepts and validate the different forms of analysis being used, and no doubt this may lead some readers to accuse me of being more chartist than anything else. Whilst such an accusation is probably true, charts contain the only facts that are to be found in the marketplace – historical price data. However, I have kept the use of rocket science to an absolute minimum and I have assumed that the reader is interested in money, not maths.

Alan Hull
September 2001

1 | THE MARKETPLACE

Fact – Stockbrokers are not paid to give advice on shares

Before we decide on a plan of attack we must study the game and the rules that govern it. As the name implies, the stock market is a marketplace where shares are bought and sold. Each share effectively represents an infinitesimally small piece of the underlying company. If you own a share in a publicly listed company then you own a small piece of that company. Shares are also referred to as 'stock' or 'equities', depending on where you're from and what circles you move in. Anyone can buy and sell shares via the stock market. Thanks largely to the advent of the Internet, the cost of entry, brokerage, may be as low as $10 to $20.

The stock market, then, is the nucleus of the machine we affectionately refer to as the marketplace, and its operation is relatively straightforward. The complexities occur in the outer shells around this simple nucleus – the first of which is the industry that has emerged around the stock market. The finance and investment industry has evolved over decades and is driven, like all other commercial enterprises, by consumer need.

The Players

So, before we discuss the industry, let us first identify the direct users of the stock market and shed some light on their activities. They include, among others:

- Individual investors
- Traders
- Speculators

- Broking houses
- Private and public companies
- Managed funds.

This assortment of users will probably come as no surprise to you, but it is worthwhile noting the differing timeframes in which they operate. Some can work in timeframes as short as ten minutes – owing largely to the use of modern technology – whilst other individuals will hold shares for decades. Most of us fill the space in between these two extremes. To adopt the view that there is only one workable timeframe would be extremely foolish, and a historical study of the longevity of each group will quickly correct it. Only intra-day trading is yet to establish a proven track record, as it has only been made possible by recent technological advances.

Initial Public Offering

The picture gets more interesting as we look at the functions of the larger users – corporate and institutional buyers and sellers of shares, and brokers (i.e. the last three users on our list). If you're a private company wanting to list on a stock exchange and you wish to issue millions of shares in your company to raise working capital, then someone's going to have to sell those shares. So, you would employ the services of a stockbroking house to promote your new shares and orchestrate your 'Initial Public Offering' or IPO, because this will be the first time your shares have seen the light of day in the marketplace. The brokers receive a substantial fee for services they render and are keen to obtain such business, particularly when a market boom is underway and shiny new shares with a lot of promise are easy to move. The ultimate IPO for stockbrokers in recent times (at time of writing) would have been the floating of Telstra 1, which was heavily over-subscribed (i.e. in demand). Unfortunately, Telstra 2 didn't receive the same reception and some stockbrokers were left holding unwanted shares

Stockbrokers can be caught out in this way because their end of the deal is to 'underwrite' the issuing of shares being offered by the would-be public company. That is, if any shares aren't issued (i.e. bought), the stockbroker picks up the tab at the issue price. Hence, the stockbroker is also a direct user of the stock market. This underwriting puts the stockbroker under considerable pressure to issue the shares, whilst alleviating any uncertainties for the company.

Having had to deal with this pressure over the decades, stockbrokers have turned the process of issuing new shares into an art form. Prior to the shares being traded on the stock market, the stockbroker offers allocations of shares to its private clients, with several stockbroking firms being able to offer allocations of shares in the same company at the same time. This adds another dimension to the whole process, as it now pays for you and me to be the clients of a stockbroker who can offer us an allocation of shares at the issue price, prior to their initial listing on the exchange. It is our hope that the issue price we pay is at a discount to the price that the shares are likely to fetch in the open marketplace. Stockbrokers use 'exclusive access' to share issues as a marketing tool.

Stockbrokers are doing a balancing act between getting the best possible price for the shares and not being caught out with any unissued shares. If there are any unwanted shares left over, the stockbroker will sell them into the open marketplace after the initial listing. You can see how the tech boom was of great benefit to all concerned. Stockbrokers couldn't get enough IPOs on the books to meet the demand that you and I placed on them for share allocations in tech stocks, and the private technology companies were lining up to get their hands on more working capital.

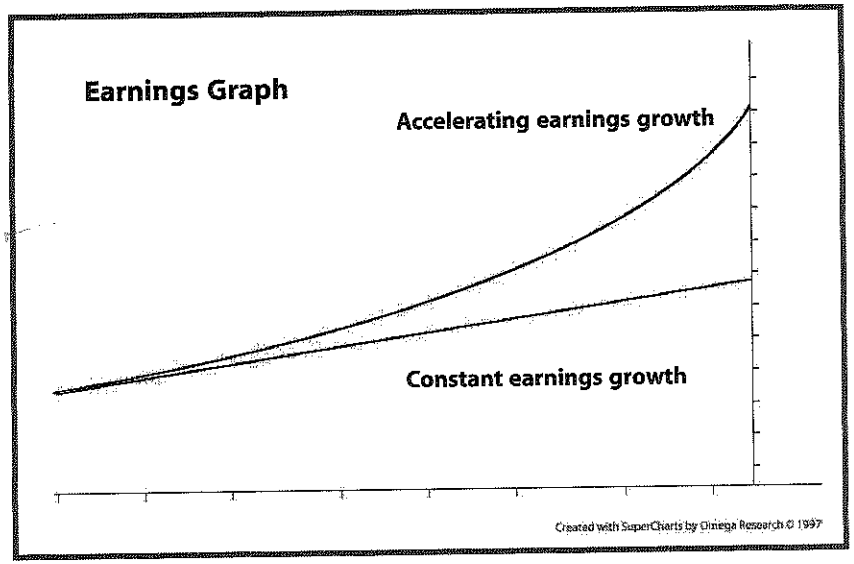
Raising Working Capital

Let's look at this process from the company's point of view. Let's pretend that you are a partner in a privately owned technology company. It's 1999, the tech boom is underway and everyone is trying to sell you and your partners on the idea of going public and listing on the stock market. You are reluctant to list because the idea of losing any degree of control is abhorrent to you. But you decide to play this silly game on the proviso that you retain control. After all, more working capital never hurt anyone! The first step in listing is to set up your prospectus, which the Australian Securities and Investments Commission (ASIC) must rubber stamp. You will be setting up the prospectus with the assistance and guiding hand of the stockbroker who will have the job of selling it to the marketplace.

You value your company at $1 million in assets and a further $10 million in goodwill. The goodwill is based on your existing

earnings plus projected earnings growth using an exponential curve approach. The following chart shows a comparison between a straight line, indicating constant earnings growth, and an exponential curve which represents accelerating growth.

Figure 1.1



You will have to make out a good case for using an exponential earnings growth curve to gain ASIC's approval, so your supporting argument goes something like this:

Year	Earnings	Earnings Growth
1995a	$50K	—
1996a	$55K	10%
1997a	$63K	15%
1998a	$77K	22%
1999a	$95K	34%

(Proportional increase in earnings based on the previous period, where 'a' = actual figures)

You are understandably reluctant to rock the boat by going public because you've just got your business to the point where all five business partners are drawing a wage and receiving a 20% share of $95K in profits. You can slow down and still achieve growth. But wait... there's more.

Year	Projected Earnings Growth	Projected Earnings
2000p	51%	$143K
2001p	67%	$239K

(Based on previous five years' earnings growth where 'p' = projected figures)

These figures come from projected earnings growth into the future. Because nobody knows the full potential of the information revolution you can't set the ceiling for earnings growth. But you do your best by using third-party statistics that infer conclusions from the current rate of penetration of the Internet into family homes and the total population base. Your statistics reflect that you intend entering the US market with the help of the working capital you are going to raise. You are diligent in this process of setting up your prospectus and achieve your rubber stamp. You're happy, the broker's happy and the public are happy because they're going to get a piece of the action when you enter the US home market.

You retain control of your company, because the five partners retain six million shares issued at $1 each between them with the other five million shares going outside the company. The day of the initial listing arrives and the share price closes at $1.50, having been as high as $2.00 during trading.

You sit down and do some calculations, and realise that you are now worth:

20% of 6,000,000 shares worth $1.50 each = $1.8 million

It suddenly dawns on you why they drink champagne on the floor of the ASX during initial listings. You always wondered why company directors got so excited about getting more working capital... now you know. Your choices are to take your company to the US yourself and be answerable to thousands of shareholders for your actions or sell your holdings. Having been reluctant to go public in the first place, you decide to sell and retire a millionaire at age 25.

Raising Capital Again and Again

Existing public companies are also direct users of the marketplace, as it provides them with a mechanism to raise additional working

capital, acquire other companies, and so on. They raise additional working capital by issuing more shares and effectively going through the float process all over again. However, as this can have a diluting effect on the share price, depending on the reaction of the marketplace, they need shareholder approval to do it. The company is, in effect, proposing to increase the supply of shares in the marketplace, and if the demand for them doesn't meet the increased supply then the share price will fall accordingly. Companies try to avoid this diluting effect by demonstrating to the marketplace what their improved future prospects will be, should they obtain the capital required to implement new strategies.

A company has several options available to it when it comes to issuing additional shares. It can offer the new shares to the general public, to institutional investors, to other companies where a strategic alliance would be mutually beneficial or to existing shareholders. And yes, you guessed it... it's back to the stockbroker.

As the conversion of shares to cash is a very direct process, it is possible for public companies to use shares as a form of currency. They can use their shares to buy other public companies, providing they have the approval of the majority of shareholders. Let's look at an example of a dot-com company that wants to acquire control of a media company to boost its online content. At the start of the tech boom both companies have the same market capitalisation. That is, they both have the same number of shares on issue and the value of their shares is identical, as follows (market capitalisation = value of shares × number of shares):

	Dot-com Company	Media Company
Market Capitalisation	$10 million	$10 million

The tech boom starts to take effect on the dot-com company's share price but only has a marginal impact on the media company's share price. The market now values the dot-com at four times the value of the media company:

	Dot-com Company	Media Company
Market Capitalisation	$48 million	$12 million

The board of directors at Dot-com get together and start to discuss their options. As you can probably guess, this is going to be a lengthy meeting due to the number of possibilities that need to be considered.

Do they use shares held by the company, have a share issue, pay cash, attempt a complete takeover or just gain majority control? They can also combine any number of these options. Understandably, they are all quite giddy and excited about the whole thing as this opportunity is solely due to a change in market perception about the future prospects of Dot-com stocks. Obviously they've been forgiven for their past record of negative earnings. Back at the directors' meeting the big question finally hits the boardroom table... who's going to ring the broker?

Advisers, Experts and Critics

The complexities that we face in dealing with and understanding the direct users of the stock market have given rise to yet another layer of complexity. Now bear in mind that this second layer has evolved out of our desire not to have to deal with the underlying layer. It is the world of advisers, experts, critics and gurus. Their sole mission in life is to comprehend what we don't want to and translate their understanding into some meaningful guidance or, more succinctly, put money in our pockets. Notice that I wrote, "We don't want to" instead of, "We can't"... These guiding lights of the marketplace come in many different shapes and sizes, including:

- Financial planners
- Investment advisers
- Market commentators and analysts
- Trading system vendors.

This group of willing helpers has an impact on the marketplace just like any other group, and it is useful for us to get to know them.

Financial planners and investment advisers, in my experience, are very similar. On that basis I will share one of my early encounters with a financial adviser. At the tender age of 20, just several months short of my 21st birthday, I received a phone call from a man who said he was a financial adviser and that he would like to set up a consultation to discuss my financial future. It was at no cost to me and he was very flexible as to where and when the consultation would take place. Due in large part to his apparently altruistic intentions and concern for my future welfare, I agreed to meet with him. At the

time of the consultation I found myself in the presence of a tallish man, dressed in a very impressive double-breasted three-piece suit, sporting just a touch of grey at his sideburns and wearing a friendly, obliging grin.

Having just left home and the watchful eye of my parents, my first thought was, "How lucky am I?" Here was this obviously important man, to whom I warmed immediately, who was going to look after me by taking care of my financial future while I worried about more immediate problems like girls and cars. He asked me, in an authoritative tone, if I had a superannuation policy. It was, he explained, vital to my future wellbeing at retirement. He added that all sensible and mature people who didn't want to become a burden on their friends and family in retirement had one. He then handed to me a document containing national statistics on the aging population to prove that reliance on the pension in retirement was futile.

Fear shot through my mind as it dawned on me that I couldn't even spell 'suporanuation', and I felt my face flush with embarrassment. Add to this my shame at being a future burden on the ones I loved and my confusion at the word 'demographic' written on the piece of paper in my hand. I'd been on my own in the big bad world for a few brief months and look at the damage that I might have caused by simply not knowing about something like 'suporanuation'!

I whimpered, "What should I do?" He had prepared an important-looking document with my name at the top of each page that contained the most fantastic news. If I contributed just $700 a year, BEFORE TAX, SO I WOULDN'T EVEN FEEL IT, to a superannuation fund, I would have over $300,000 to play with in retirement. Well I nearly kissed the man as I realised that not only was financial Armageddon going to be avoided but I was going to have enough money to help others in retirement.

Whilst this anecdote is based on real events in my life, I have exaggerated it for the purpose of illustrating a point. I was dealing with a salesman, not someone with altruistic intentions. I do recall that I was curious as to why he required no payment for his services. Curiously, several of my friends were also approached just prior to their 21st birthdays.

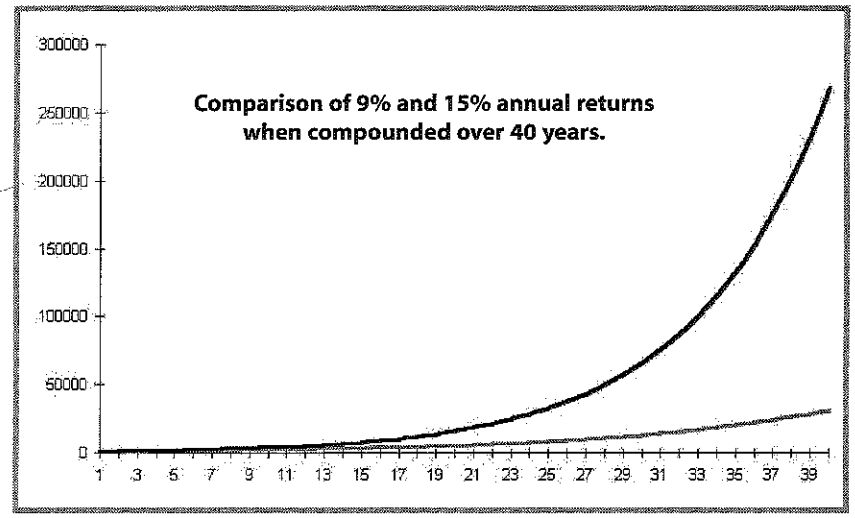
Now to the policy in question, and the facts regarding its performance over the ensuing decade. The lesson here, in advance, is to read the fine print. The short version is that the printout I was shown, containing figures that would have made Donald Trump drool at the time, bore scant resemblance to the actual performance of the policy. It was based on 15% annual interest compounding over 40 years. My contributions, included in the equation, started at $700 per annum but increased over time in line with the then annual CPI figure. The 15% annual growth figure used was the current performance of the superannuation fund at that time. Like most individuals at the ripe old age of twentysomething, I left the superannuation policy in the bottom drawer and simply went about life, comfortable in the knowledge it was there.

After 10 years of dutifully making the compulsory contributions to the fund and having the option of not making any more, I decided to fish out the policy and original printout to see if I was still on target for my villa in the Bahamas. This action was also prompted in part by the constant increases in the annual contributions, which were becoming a perpetual annoyance. You can imagine my surprise when the actual performance of the fund, according to my annual statement, was approximately half the projected figure on the printout. Finding the relevant figures for the performance of my fund amongst the reams of paper that the fund was sending me each year was no mean feat either. I will demonstrate in simple form what happened to me, and the power of compound interest. The following table shows the difference between the guaranteed performance of the fund and the performance used on the sales printout using 15%. For the purposes of illustration I have excluded my contributions and the fund's administration fees and simply used a starting figure of $1,000.

Year	Guaranteed Performance (9%)	Projected Performance (15%)
1	$1,090	$1,150
2	$1,188	$1,322
3	$1,295	$1,521
4	$1,412	$1,749
5	$1,539	$2,011
6	$1,677	$2,313
7	$1,828	$2,660
8	$1,992	$3,059
9	$2,172	$3,518
10	$2,367	$4,046

I was probably lucky to have a guaranteed 9% from a superannuation fund. My point is that the interest rate is absolutely critical when you are compounding it over time. The following chart illustrates the difference between 9% and 15% per annum when compounded over an entire working life:

Figure 1.2



If I was to continue the above table for another 30 years to my retirement, the resulting figures would be as follows:

Year	Guaranteed Performance (9%)	Projected Performance (15%)
40	$31,409	$267,863

My figures were muddied by other factors, such as my annual contributions, the actual CPI, increases to the administration fees and the actual performance of the fund. However, I was looking at a similar scenario and I found myself with the phone at my ear, dialling a number that was also buried in the reams of paper. I had prepared a couple of confronting questions and the conversation went something like this:

Me The growth on the fund doesn't match the figure used on the printout I was shown when I joined the fund... what's the story?

Consultant The figure used for the projections was the most accurate figure available at the time you joined the fund. Have you been reading your annual statement and the annual report that we've been sending you every year?

(Pregnant pause)

Me No, but I assumed that if there was...

(Cut off by the consultant)

Consultant I do recommend that you take the time to read it, even if not straightaway.

Me (With an incredulous tone in my voice) So you're telling me if I don't have enough money to retire, it's my fault because I haven't read the material you've sent me? Surely there's some kind of guarantee on the performance of the fund?

Consultant (With an indignant tone in his voice)

Of course there is. It's in your original policy document... haven't you read that either?

Me (With the sudden realisation that I'd been staring at the headlights of an oncoming truck all these years)

No.

Consultant (Resigned to the inevitability of the situation, the consultant double clutches down and guns the engine.)

I SUGGEST THAT YOU READ IT AND THEN CALL ME BACK.

Me Thanks... bye.

Needless to say, my embarrassment was so great that I never rang back. Now we get to the reams of paper that were delivered annually to my letter box... AND the original policy document that I neglected to read in the first place. It was all there in black and white. The minimum annual growth guarantee of 9%, notification of changes in administration fees for the forthcoming period and changes to my contributions based on the CPI, including a complete explanation of the calculation being employed. By burying it all in the proverbial bottom drawer, I hadn't lost a single cent. Indeed, I was even showing a small profit. But I felt the loss of 10 wasted years.

Managed Funds

When shopping for a babysitter for your money you have several options available to you. You can let a financial consultant, by whatever name, do it all for you, or you can avoid being a direct user of the marketplace in another way, by choosing managed funds. The financial pages carry large ads expounding the virtues of a wide range of investment products from a variety of different institutions. The marketing tactics employed in these ads are not dissimilar to the tactics often employed elsewhere, where advertisers attempt to sell through fear, social pressure, authority, scarcity, etc. Many of these tactics exploit the fact that modern life is very busy and we all seek shortcuts.

An example of social pressure is a financial institution that uses most of its advertising space to expound on how many countries it has offices in and that it has 20 million customers worldwide. Your thinking goes, "If 20 million other people have done their homework and they all agree, who am I to argue?" You go with the consensus of the group because that will save you having to do your own investigations. International equity funds use the 'scarcity' tactic by telling you how insignificant the Australian marketplace is on a global scale and that if you don't have offshore exposure then you're missing out on most of the action. At the expense of personal embarrassment, I think I've already covered fear and authority as marketing tactics.

Save on Tax!

One common tactic that never ceases to amaze me is the use of tax deductibility to sell investment products. Whilst I don't dismiss the importance of the tax issue, I liken this tactic to selling a car by showing customers the fuel economy figures and not the car. Fuel economy is relevant, but don't you think it would be a good idea to see the car first? If you're shopping for an investment product then you are shopping for growth first and possible tax savings second. It's easy to cross these two issues over, as both can mean money in your pocket. Always remember that everyone's tax situation is different and never accept general statements from someone who doesn't know your personal circumstances. Translated, this means always to check the tax deductibility of a potential investment with your own accountant. He or she should also make sure the ATO has given the investment product its rubber stamp of approval. In summary – your fund manager is in charge of your investments and your accountant is in charge of your tax liabilities and deductions. Let them liaise with each other but don't let them switch roles. Never forget that your fund manager's job is to get you the best possible return, not a tax deduction.

Reading the Fine Print

Let's go back to the reams of paper and my new hobby of reading fine print. Coming forward in time to a recent example, I will show you how this hobby can be very entertaining and enlightening. It was Saturday morning and I had the business section of the newspaper in front of me, and a cup of coffee in my hand. I had read my fill of the articles and begun scanning the ads, as is my habit. I was tiring of the whole process and ready to reach for the motoring section when the most amazing ad caught my eye. Details have been altered to protect me against litigation from the guilty company, which is probably larger than the entire public service of Australia. I have only included details from the ad which I deem relevant:

Capital

***20% Guaranteed+**

Acme Australian Equity Fund

* Annualised compound interest over the 3-year period from 1/1/2000 through to 1/1/2003 and 20% is based on all growth being reinvested over the period specified – Past results are no guarantee of future performance.
+ Capital guarantee by third party underwriter and exercisable at the completion of the term at 1/1/2005.

My eyes widened and my jaw dropped at '20% Guaranteed'. But I quickly regained my composure as I read the small print. Let me translate what this ad is actually saying. We'll deal with the CAPITAL guarantee first. This guarantee covers your initial investment capital and not the 20% return. But here's the kicker... you can only reclaim your original investment at the end of the term of the investment, which is the beginning of the year 2005 – and this ad appeared in mid-2003. So the worst scenario that the fund is looking at is an interest-free loan of your money for the next one and a half years. Hence, you get your money back but you've wasted your time. The next and most important point is that the 20% is annualised compound interest. This

means that they have included the effect of the compounding principle in this figure. Allow me to demonstrate with an example.

Let's assume that you invested $1,000 in the fund from the beginning. The 20% annualised compound interest means that your initial investment has grown 20% per year using the compound effect:

Year	Using 20% annualised compound interest	Using 20% annual interest
1	$1,200	$1,200
2	$1,400	$1,440
3	$1,600	$1,728

If you made the assumption that you were going to do the compounding, then think again. In terms of the actual return you're down from a 73% return on investment to 60%. But the reason the investment company has done it is because the annualised compounded return is higher than the average annual return. Let's look at how it has performed on an annual return basis:

Year	Your investment is actually growing at 17% per annum
1	$1,170
2	$1,369
3	$1,602

The 20% is calculated by dividing the return over the entire period by the term of the period. My way is the way the vast majority of people would interpret any advertised return but the company's way makes for a more impressive ad. Has there been a deception?.. no. Is the ad visually deceptive?.. matter of opinion. I suspect there has been a bit of liaising between an unethical marketing man and a legal eagle. This is why it *does* pay to have a good investment adviser. If you are shopping for a managed fund yourself then make sure that you understand the difference between annual interest, which can be compounded, and annualised compound interest which has already been compounded. It also pays to look for consistency over the lifetime of a fund. I once found an Asian Equity fund that returned 88% in 1999 but only returned 4% in the previous year. This fund was simply in the right place at the right time during the tech boom. As with any other commercial enterprise, promoters of managed funds will put their best foot forward when it comes to advertising and marketing. Unfortunately though, investors have to take the best with the rest.

Armed with Information

Those of us who want to have more direct control over our investments and be better informed about the marketplace have a plethora of options when it comes to getting our hands on information and informed opinion. We have television, radio, newspapers, investment clubs, the Internet, seminars, books, research analysts who work for stockbroking houses, magazines and more. Through this range of media we have access to both factual information and opinions from a variety of experts who specialise in an array of fields. Their combined expertise covers economics, specific industry sectors, local and foreign financial markets, taxation, shares, companies, debt management, politics, currencies, commodities, cyclical analysis, technical analysis, fundamental analysis, managed funds, futures contracts, options, warrants, superannuation, pensions and annuities... just to name a few.

These experts can, and often do, offer up opposing opinions. Aided by technology, the range of communication media is growing and the number of experts also continues to grow. Unfortunately, I don't have a Cray computer to calculate the number of permutations of media and experts there are. However, I know the number is such that I can't absorb and assimilate all of the information and opinions on offer. Bear in mind that the information overload is created by our desire to be better informed by someone else's expertise. Being human, of course, we will take the obvious shortcut to deal with the problem. We decide on a favourite medium such as a particular magazine. We subscribe to it religiously and avidly follow a particular expert commentator's opinion, until the inevitable happens and the realisation that we have misplaced our faith sinks in. We then go in search of another expert and a new home for our faith.

Enter Big Brother

Regardless of who gives us advice or which market commentators we listen to, the one constant is Big Brother. Big Brother is omnipresent and is watching the marketplace from several vantage

points. ASIC polices, in association with the Australian Stock Exchange (ASX):

- The activities of private and publicly owned companies;
- Everyone who buys and sells shares;
- Everyone who gives advice on buying and selling shares; and
- All managed funds.

In its job of policing publicly listed companies it receives aid and assistance from the Australian Competition and Consumer Commission (ACCC), which keeps a watchful eye over the interests of consumers. An example of the ACCC's power is the ability to block a merger between any two public companies if the merger is deemed to be detrimental to the interests of the general public. Whilst it is my opinion that the ASX is not entirely impartial (given that it is itself a publicly listed company and therefore has a commercial agenda), Big Brother does the best job it can. However, be aware that the police usually show up at the scene of a crime... not before. The only cure for losing money is to get it back, not a shoulder to cry on.

The best analogy I can use to describe the marketplace in its entirety is to compare it to the hallowed turf of the MCG after an Aussie Rules football match. If you walk down to the fence line and stare across the ground, you will see what appears to be a confused swarm of footballs flying overhead. As soon as one falls earthward, another one is kicked up to take its place. The swarm never rests and you get the impression that a large unstoppable force is at work. As you look across the ground, all you can see is the people who are playing kick-to-kick right in front of you.

When I first witnessed this phenomenon, I quickly realised I wasn't taking in the whole scene before me and I went up to the top of the stand to take another look. Watching from an elevated vantage point, I stood in awe of the scene in front of me. There were children and adults kicking footballs, people very purposefully crossing the ground, others just idly standing about, policemen dotted around the fringe looking in, and many others. But the big picture was lost, save for the swarm of footballs, when I went down again, jumped the boundary fence and joined the throng.

Strolling around the ground, you are then struck by a different phenomenon. Each person or group of people appear to be totally self-absorbed, and independent of every other group. All of them have a purpose in being on the ground and they all contribute to the swarm effect, but they are oblivious to the other people around them. Suddenly you're aware of the danger from the swarm. Badly aimed kicks mean that if you're not concentrating skyward, you are likely to be randomly struck by a Sherrin (football). But... if you love the game, you accept the danger.

2 | THE EVOLUTION OF THE MARKETPLACE

We always get what we need out of life... but not necessarily what we want

We will gain a better understanding of the marketplace if we focus our attention on the objectives of the participants, rather than our perception of their function. Companies are, obviously, looking out for their own interests and that of their shareholders. If you listen to the CEO of a publicly listed company being interviewed, you will notice that he or she chooses words that will paint the company in the best light possible.

So, if you want an unbiased opinion on a company, you need to listen to the media commentators or fund managers. It's in their interests to give the facts, regardless of the impact on the company. I personally ignore reports from research analysts who are in the employ of stockbrokers. Stockbrokers work for companies as well as for investors and their in-house analysts are highly unlikely to put out a critical report on one of their own clients.

In the Beginning

The first stockbroker was probably a salesman employed by a businessman to help raise capital to grow the business. Somewhere down the line, another stockbroker must have become sick and tired of having to search for would-be investors. He decided he wanted the potential investors at his fingertips, and so he became an adviser of sorts. Now he had a list of readymade, moneyed investors to offer the companies, and from this point on, the stockbroker was working both sides of the street. Hence, to see stockbroking in its true light, we must get the notion out of our heads that stockbrokers exist solely for our benefit. Stockbroking is a business and, like the rest of us,

stockbrokers have an income to earn. Stockbrokers, like hyenas, can be opportunistic, and are unlikely to change their ways in the foreseeable future.

But at some point in history the investors, using their combined voting power, gave Big Brother, in the form of the government, a wake-up call. They told Big Brother that, as the stockbrokers were working both sides of the street, they needed an umpire. So ASIC was created to institute rules and keep everybody in line. Of course, the rules that govern the marketplace are in a constant state of flux in an effort to keep up with changes.

One of the most damaging aspects of Big Brother's appearance on the scene is the now-enforceable 'duty of care' that stockbrokers and other advisers have towards their clients. Don't misunderstand me, it is not the duty of care itself which is the problem, but its effect on the psych of would-be investors. Stockbrokers and others *should* be answerable for the advice they give, but newcomers to the market tend to be lulled into a false sense of security as a result.

Another unwanted side-effect is that the legal complexities of stockbroking have developed to the point where a stockbroker's training is dominated by the need to understand the legal ramifications of every action. In an ideal world, stockbrokers would be paid for the advice they give, not use it as a marketing tool, and they would be properly trained to give it. We want the governing bodies to protect our interests, but we don't like it when they make the stockbroker's job harder or when they block innovative corporate strategies. To summarise... no one likes the umpire but we all need him.

The History of Investment Advisers

The now wary investors, who weren't happy with the (potentially biased) free advice from their stockbrokers, wanted other ways of finding good investments. More to the point, they wanted someone else to do it for them. Enter the investment adviser.

In a similar manner to the stockbroking fraternity, modern investment advisers are part adviser and part salesperson. They will analyse your personal financial circumstances and make investment recommendations, the idea being that your risk profile, tax situation, personal objectives, and so on will be taken into account in the investment strategy they develop for you.

I suspect that the first investment adviser, who had direct knowledge of the stock market, was stoned to death because he lost clients' money. My theory is that other early investment advisers metamorphosed into fund managers so that they were several layers removed from the general public (based on the fact that I have never met a fund manager in person). They still perform the original function of investing other people's money, but do it from a safe distance. Their services are available to us through their unevolved counterparts – financial advisers, financial planners and modern investment advisers. The expertise of this group is very broad and, like stockbrokers, their training focuses largely on the legalities of their job.

The regulations and disclosure rules governing this group of advisers have been tightened in recent years, to ensure that they act in the best interests of the public and not just themselves. This is an issue because their income is largely derived from the commissions they are paid from the managed funds, and not from us, their clients. It should also be noted that fund managers derive their income from the administration fees that they charge us. These fees are based on the amount of money under management and NOT the performance of the fund. However, the performance of the fund is linked indirectly to the fund manager's income, as he or she will be unable to attract investors to the fund unless its performance is attractive.

I have exposure to managed funds in my superannuation portfolio and I use a very competent financial adviser whom I found after much effort and research. He is a highly conservative man who I suspect sleeps with his tie on. When visiting his office you can hear a pin drop. I used to believe the silence in his office was part of his conservative nature but I now have another theory – I suspect that he fears being stoned to death and he and his staff listen intently for the sound of stones clinking together in their client's pockets.

Do-It-Yourself

The media and other information vendors make a living from meeting the needs of those of us who want to be more hands-on in the stock market. Their income is derived from advertising and the sale of their respective information services, so they are generally unbiased. Organisations and individuals such as myself who aim to educate prospective stock market participants are included in this group.

We provide raw information to the public, and/or sell the methods and strategies for using that information.

The sheer volume of products and advice this group supplies has crippled the consumer. You can pay for any number of courses, books, computer programs, and so on to teach you how to trade and invest in shares. In addition, the newspapers and magazines carry articles by journalists which offer various opinions, depending on their respective areas of expertise. Thus, the original problem of indecision has been exacerbated, rather than solved, by the arrival of the information revolution.

After 15 years of working in the technology industry I can sympathise with those who find themselves more, rather than less, perplexed by the increasing number of options being offered. As an electronic technician, every time a company upgraded the design of a computer, printer, modem, etc., I had to go back to school. You'll probably be gratified to know that many of the people working in technology-related industries haven't got a clear understanding of technology either. We used to joke that the difference between a used car salesman and a computer salesman was that the used car salesman *knew* when he was lying.

Technology should enhance our ability to meet our needs – it is a means to an end and not an end in itself. The problems start when the advancement of technology is driven by forces other than our needs. In short, if it isn't broken... don't fix it, and if it's causing you pain... get rid of it.

Technology must be seen as a tool. As a person who used to derive my income from using tools, I know that I need them to be simple, unbreakable and appropriate to the job. If they are complicated, then they are a hindrance; if they are unreliable, then they will cost me money; and if I use the wrong tool then I am wasting my time.

The technological evolution of the everyday family car is a good example of technology being driven by need. Cars, through the use of highly sophisticated technology, are getting simpler by the model from the consumer's perspective. Years ago we had to use a choke to start our cars, warm them up for five minutes, change gears using a clutch pedal, avoid leaving the headlights on and remember to get a regular service. Today, my car has no choke and doesn't even require the use of the throttle to get it started, doesn't need any warm up time, has an automatic gearshift, and tells me when I've left the headlights on or it needs a service. The only thing I have to know how to do is to drive it to where I'm going. I don't even have to unlock the doors individually by key because I have remote control central locking. I am blissfully unaware that an Engine Management System under the bonnet is doing all the work for me. This is the correct application of technology.

The banks, on the other hand, have employed modern technology to reduce their overheads rather than to provide improved services to their customers. If we use ATMs instead of bank tellers, then the banks can close branches and retrench the staff needed to run them. In fact, the banking industry is a major beneficiary of digital communication. Its stock in trade, money, can now be transferred electronically. We are told in the banks' marketing campaigns that these advances are for our benefit. But the proof of the pudding is in the eating, or in this case, consuming. Having developed systems that meet their needs rather than the consumers', the banks are now facing a customer backlash.

My experience as a service technician was that problems also occur because of misrepresentation of the technology products. The secret is always to look for a low-tech solution first. If you look around you will often see technology being used to solve problems that don't exist. One of those is ordering groceries online. My grandmother had her groceries home-delivered in the 1960s, using a standard fortnightly order, and if she wanted to make any changes she simply picked up the telephone. The Internet would be at the top of the list when it comes to misuse of technology. Someone even dreamed up the idea of selling fish on the Internet, floated a company on the stock market and, not surprisingly, went broke without making a single sale.

Technology for Investors

This all relates back to us as investors. We have ready access to an ocean of market information, but we often don't make choices based on our needs. We soak up information without realising that it is doing us more harm than good by increasing the number of variables that we have to deal with. It might surprise some people to know that many professional traders still use full-service stockbrokers to execute their buy and sell orders.

In fact, virtually all of the traders I know use a mixture of full service and online discount brokers as there are advantages to both. An online discount broker will save me money whilst a full service broker will save me time by watching the market for me. And never forget that time and money are interchangeable resources. For example, it's poor economics to spend half a day in front of a computer screen in order to save $30 in brokerage fees. But having an online broker means ready access to online information such as fundamental research, company announcements,and so on. The point here is – never assume that the most technologically advanced or cheapest approach is the best and always make choices based on your needs.

Our attitude towards the marketplace is the difference between success and failure. The vast majority of people, with the encouragement of service and product suppliers, behave like children let loose in a lolly shop, indiscriminately buying up products and services. We must have a different perspective. Picture the products, services, information sources and educational courses all sitting up on the shelf in a hardware store. It's a shop full of tools that would make any tradesman green with envy. We will only purchase tools because we need them, not because someone else thinks it's a good idea. The first step is to examine what our needs really are.

The Appeal of Advice

Having read this far, you will have realised that there is plenty of advice to be had and that it's being offered by people who appear to be altruistically motivated. But you will also have picked up on the fact that many of the advice-givers are not being paid to give advice. They are, in fact, using the lure of advice to sell another product or service.

So what is the great appeal of advice to us, the consumer? It's being able to avoid the entire process that precedes a question as well as the resulting decision that is derived from an answer. In other words, if we act on other people's advice we save a lot of time and effort. Many people are under the misguided belief that seeking advice is a substitute for decision-making. Professional advisers do have a duty to ensure that the advice they give is correct, but they are not responsible for the resulting decisions that you and I make.

If we look around us we will see that successful people don't pay for advice, they pay for answers. What's more, they only pay for those answers if finding them would be too time-consuming to do themselves. The difference between successful and unsuccessful investors is that the former have got questions that need answering when most others don't have any questions beyond, "How do I make money from shares?" You can see this in the very first phone call that the newcomer makes to his stockbroker. He starts by acknowledging the broker's authority and admitting he doesn't even know what he wants. His opening line is, "I'm new to the stock market and I don't really know anything about it, so I'm open to whatever you suggest." The stockbroker has just secured the newcomer's patronage on the latter's false assumption that the broker is going to make his decisions for him.

Our Needs

People often come into the market with a desire to make money rather than the *need* to make money. This apparently subtle difference of approach means that they don't have needs or questions that require answers. Advice-givers will say en masse that the most difficult part of their job is identifying their clients' needs.

This brings us to the quintessential difference between those who succeed and those who fail. Our needs come from our responsibilities. The most powerful driving force in my life is my responsibilities. They are the foundation of all of my achievements and all the knowledge I possess. In my case, I need to make money because I need to provide for my family. And baby boomers are my most receptive students because they recognise the need to fund their retirement.

People who simply want to be wealthy will fail – people who perceive a need to be wealthy tend to do better, even if the need is just the result of wanting a bigger house and a new car. Those who are driven to achieve are motivated by real or perceived responsibilities, which the casual observer often mistakes for obsession.

Responsibilities beget needs, needs beget problems, problems (hopefully) beget answers and from an ocean of information we distil a precious drop of wisdom. Have you ever known someone who spent his or her life dodging responsibility only to get into a very tough corner at some point? Often, as if by a miracle, he or she emerges from the difficulties a different person. Once responsibility is forced upon them, the growing process begins. To have wisdom is to possess applicable knowledge, and it is only obtained by the need to solve problems born of our responsibilities. Give someone else your responsibility and you will not obtain wisdom – and that is what the

majority of people do in the marketplace. Being responsible for your decisions far outweighs the importance of being right. Unfortunately, though, responsibility can carry pain... the pain of failure.

In the stock market, as with life in general, most people try to avoid this pain by avoiding responsibility. If I'm not responsible for my actions then I'm not responsible for the failures. However, in the stock market, if it's your money then it *is* your responsibility. When you attempt to offload your responsibility to others you are only handing over the privilege of control.

When someone asks me how I learnt about trading and investing I reply, "With a very high pain threshold." I once lost over $30,000 in less than 48 hours. That's a lot of pain if you're prepared to accept the responsibility for it. If I could wind back the clock, however, I wouldn't change it, because I would only have made the same mistakes further down the track and probably on an even bigger scale. My knowledge in the marketplace is directly proportional to the pain I have suffered at the hands of my own losses. I am successful because I am prepared to fail.

What are the Stockbroker's Responsibilities?

Whilst I delegate tasks to others, I never abdicate the responsibility for those tasks. In contrast to the newcomer's initial contact with a stockbroker, an experienced market participant's first conversation will go something like this:

- I need you to give me advice, but *only* in response to a specific question.
- I need you to fine-tune my entries and exits so I can just place my orders in the morning.
- I need you to convert dollar amounts to shares as I will be giving you the position size.
- I need you to keep track of ex dividend dates and inform me of company announcements.

I hold the stockbroker responsible for carrying out these tasks. If he fails to do so competently, then I go shopping for another stockbroker. Next time you're talking to your broker, ask him to define the difference between the expectations of novices and those of experienced investors and then ask him which group he prefers to deal with. He will most likely nominate the latter group as he always knows exactly where he stands and what his obligations are, and also because experienced investors are long-term clients. Market newcomers, on the other hand, often attribute blame to their broker when they lose money. I actually send gifts to my broker, win, lose or draw. Guess who gets preferential treatment?

The blaming process is a pain-avoidance mechanism because it gives us the escape hatch of claiming, "Diminished or no responsibility". Victims of the 1987 stock market crash will often say, "It was just bad timing combined with poor advice from my broker". In other words, they lost money due to a random event coupled with the incompetence of someone else. Try to pin them down on a part of the situation for which they were personally responsible, and ask, "Why did you choose that broker?" and they will once again claim diminished responsibility by replying, "A friend recommended him". Psychologically we feel better when we can believe that it's not our fault, but by disassociating our actions from their outcomes we are shutting down the learning process. Time spent in the marketplace doesn't translate into market experience if we do not take responsibility for our losses.

One of the greatest moments I can recall as a trader is the first time I made all of my own decisions in executing a trade. I chose the share, I decided when to buy and when to sell. When I completed the trade I felt a surge of self-confidence similar to the first time I drove a car by myself. I now realise that my education behind the wheel of a car started from that first solo drive and my real education as a trader started from that first totally self-directed trade. You cannot learn how to drive by being chauffeur-driven, and you can't learn anything about trading and investing by relying on the advice of others. Besides which, there are no 'chauffeurs' in the marketplace as nobody is *directly* paid to give advice on equities. Even the research analysts are paid to research companies and then calculate, by inference, the value of the underlying equities.

An article that I once read in the financial section of a daily newspaper exposed a stockbroker's transparent efforts at claiming diminished responsibility. A stockbroking house had been very fond of a particular blue chip company for several years and had played an important role in the sale of large blocks of shares in this company. The stockbroker had also handled the sale of this company's holdings

in another publicly listed company. On the collapse of this company, the stockbroker forwarded a letter to all of its affected clients outlining its position in the matter. The article was centred around this letter and I have summarised what I believe to be the key points:

- The letter opens with: "I am writing to let you know that I share the concern of our clients regarding this company being placed in provisional liquidation and sincerely regret the position in which shareholders find themselves."
- "Our research was based on information provided by company officers of this company."
- "Standard & Poor's rating of this company gave no reason for concern."
- "There were assurances that its troubled US operations were turning around."
- "The industry watch-dog took no action against this company until a short while ago."
- "An independent audit of this company didn't uncover any discrepancies."
- "The company publicly refuted any media reports that impacted unfavourably on it."
- "We are hopeful that current investigations into the collapse of this company will shed more light on the events leading up to the appointment of the provisional liquidator."

Again we see dissociation with outcomes, diminished responsibility and the eternal search for someone else to blame. (All of that aside, I would like to know the name of the stockbroker's spin doctor.)

If we want to be successful in the marketplace then we must have a strategy that puts us in the driver's seat, where we have full responsibility and all the authority and control that this responsibility carries. We are now ready to have that initial discussion about how we are going to approach the marketplace. Our plan will be based on our needs and not on our wants.

3 | TRADER OR INVESTOR?

The only advantage of not having a plan is that you will never know when you've failed

The marketplace is dangerous ground for anyone who is wandering around without purpose. Even the most disciplined individuals can fall victim to the enticing products and services on offer. If we see ourselves as retail customers on a spending spree, then the lolly shop approach is the path that we are most likely to follow: a little bit of this, a little bit of that. Many people who go down this path will phone me and say that they are more confused now than when they began. This is because they have either lost sight of their initial objectives or they didn't have any to begin with. So, we must have a perspective that will focus on our needs and make us totally responsible for fulfilling those needs. The answer can be found by observing everyone else in the marketplace.

They are all behaving as though they are running businesses. Successful investors and traders act like the CEOs of their own little companies, rather than as retail customers who are protected by the guarantees or promises of others. We can now look at other participants in the marketplace with a clearer insight into their motivations: the primary purpose of being in business is to make a profit. The question is, why choose the stock market if you decide to run your own business? Here are some advantages:

- You can work from home and choose your own hours
- There are no advertising costs because you have readymade customers
- There are no staff to manage or pay
- There is no bricks and mortar infrastructure

- You have very low overheads
- You have no boss.

The benefits of running your own 'stock market business' are many, but there's a catch. If you make a mistake, the penalty is immediate financial loss. The stock market is often referred to as the school of hard knocks, and it pays to be a quick learner.

You can begin to understand why many of the service providers have structured their businesses in the way they have. They are arranging things so that their mistakes will have a direct impact on *your* bank account, and only an indirect impact on theirs.

If you're ready to accept the direct responsibility of running your own stock market business, then you need to determine the type of business you wish to run. Ask yourself two questions:

- Do I want to deal with shares, publicly listed companies or both?
- Do I want to be an investor or a trader?

We now have questions that require answers. However, to obtain these answers, we first need to define our terms.

Shares versus Companies

The difference between shares and the public companies which they represent is the market crowd. Market participants collectively place a value on companies via their share price. If there are 10 million shares issued for ABC company and the shares are trading at $2 each, then the market capitalisation (the value that the market places on the company) is:

10 million shares x $2 = $20 million

However, if the share price falls to $1, then the market has halved the value it places on ABC company, as follows:

10 million shares x $1 = $10 million

The point is, the share price may alter without any change in the performance of the underlying company, its management or future prospects. In theory, of course, the value which market participants place on a company and the *actual* value of the company in terms of its assets and earnings should be one and the same. In practice, though, the crowd may value the shares using factors that have little or nothing to do with the company itself.

Whilst this may seem to be an unwanted complication, it is the very reason for the marketplace's existence. If we all placed a value on shares using nothing but solid objective facts then the stock market would cease to exist. Items with a fixed value can't be traded in a marketplace. You wouldn't pay $60 for a $50 note, nor would you sell a $50 note for $40. Thus, although we own public companies by possessing shares in them, it is important to differentiate between shares and the public companies they represent.

The 43% collapse in the All Ords during October 1987 was due to the sentiment of the crowd and had little to do with the earning capacity of public companies, as shown in Figure 3.1:

Figure 3.1

Investing versus Trading

To understand the difference between investing and trading is difficult if you use the dictionary definition of investing – applying or using money to create profits, and/or devoting time and effort to a profitable enterprise. One could include under this definition *any* undertaking

that involves putting effort into realising profits or savings. Apart from making the expression 'passive investing' a contradiction in terms, this definition makes everyone present in the marketplace an investor of sorts. However, we can arrive at workable definitions for investing and trading by coming at the issue from the other end. 'Traders' are individuals who buy and sell products for profit. Most of us think of traders as the people who run retail stores selling tangible goods, but stock market traders are doing the same thing with intangible goods – shares.

If we eliminate everyone in the stock market who is buying and selling shares for profit – i.e. traders – then we are left with the people who invest in public companies as assets. We will label these individuals 'investors'.

Traders are generally perceived to be working in a shorter timeframe than investors, but this is a commonly held misconception as traders themselves are a type of investor. The time that a share is held for or the number of buy and sell orders executed by an individual in a given space of time has absolutely no bearing on whether they are a trader or an investor.

Our Options

Now that we have defined shares, companies, traders and investors we can look at the business opportunities that are available to us. The following four combinations are possible:

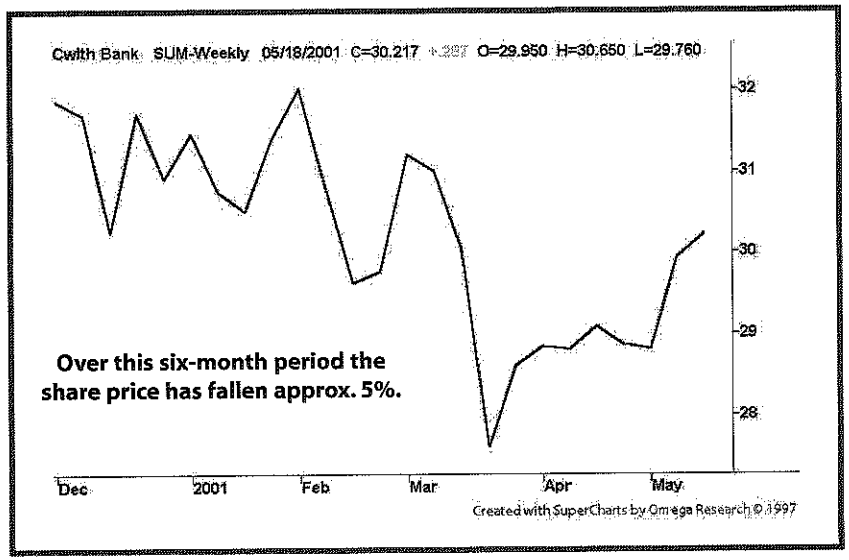
- We can invest in companies
- We can invest in shares
- We can trade companies
- We can trade shares.

Investing in Companies

If we are investing in companies, then our perception is that we own part of the company as an asset. The purpose of our assets is to produce passive income, which means that we don't have to work for it. Companies produce income for us by paying a share of the profits – an annual dividend. We may also have the bonus of tax credits, in the event that the company has already paid some or all of the tax owing on the dividends – franking credits.

The Commonwealth Bank of Australia (ASX code: CBA) is a good example of a public company as an income-producing asset. If we had bought shares in CBA around the time of its initial listing in the second half of 1991, we would have paid approximately $6.50 per share and would be receiving, at time of writing in 2001, an annual dividend payment of $1.30 per share. That's a very respectable 20% annual return on our original investment. Assets mature over time and CBA shares have matured very quickly thanks to the bull run (i.e. the rising market) of the 1990s. Let's now examine the share price by looking at a price chart:

Figure 3.2



We can see that during the six-month period shown, the value of CBA shares has fallen by approximately 5%. But, since we own the company as an income-producing asset, the share price is of little relevance to us. The current share price is only important to us if we wish to sell our shares. If we do choose to sell, we will incur Capital Gains Tax (CGT) *and* lose an income source. That's why it doesn't pay to sell assets.

Margin Lending

To realise any capital growth of the share price we can borrow against the equity. If we borrow against the equity, we won't have to pay capital gains tax and if we use the borrowings for further investment purposes then we'll even receive a tax deduction on the interest repayments. This is one of the tricks of the wealthy. When banks lend money against the value of shares in this way, it's called 'margin lending'. For example:

- Assume that you bought $10,000 worth of CBA shares at $6.50 each in 1991.
- At time of writing the share price is $29.50 so your CBA shares are worth $45,385.
- The bank will loan you up to 70% of the value of your CBA shares.

  Tip – Only borrow against 66% of your holdings (in this example, 66% of 45,385 = $30,000 approximately). By only borrowing against 66% of your holdings you will avoid a 'margin call' in the event of the share price suffering a significant fall. (A margin call is a request from the lender for additional capital to reduce the lending margin, which has increased because the underlying security has fallen in value.)
- You can borrow 70% of $30,000 which equals $21,000.

You don't pay tax on the $21,000 because it's money that you've borrowed. What's more you can use your dividends to pay off the loan, because you still own the shares.

You can use the $21,000 for any purpose, including buying more assets. If you use the $21,000 to buy more assets, then you are 'leveraging' your existing assets. Leveraging, or 'gearing', has been the central theme at every wealth-creation seminar that I've ever attended, whether on property or stock market investment. Whilst the concept of leveraging is totally valid, it is often used as a marketing tool to promote dubious investments. Unfortunately, people can become so blinded by the opportunity of, say, owning 100 hectares of land, that they take the agent's spiel at face value. Often it turns

out to be a swamp and the only likely tenants are native water fowl! The moral of the story is, always evaluate an investment on its merits and worry about how you're going to pay for it if and when you decide to acquire it.

One of the best ways to put the equity in our CBA shares to work is to buy more CBA shares just after a stock market crash. The mathematics of margin lending are slightly different in this case:

- Assume that CBA shares have dropped to $20 each in a crash. Your CBA shares are now worth $30,769 and you want to buy more.
- The bank will loan you up to 70% of your entire holdings of CBA shares. Therefore, you can borrow $70,000 from the bank to take your total holdings to $100,000.
- You borrow 66% of $70,000 (approximately $46,000) to avoid a margin call if the share price drops further.
- Your entire holdings are now $30,769 + $46,000 = $76,769.

The loan interest is tax-deductible because you are using it for investment purposes. The annual dividends are driven by the performance of the company and a stock market crash will have no direct impact on their value. However, in buying more CBA shares, you have averaged up your original purchase price and the income as a percentage of your original purchase price will have fallen as a result.

Asset Management

In summary, as active investors, we want to accumulate assets, not buy and sell them, and the teachings of Warren Buffett become extremely relevant. I won't go into great detail, but here are several of his points in summary:

1. You want to own your assets forever… you never want to be forced to sell.
2. You must very carefully assess the income-producing capabilities of your assets.
3. You must purchase your assets at the lowest price possible.

4. Your assets must be able to withstand the passage of time.
5. Have the attitude that you are buying the actual company itself.

These points apply to property as well as stock market investment. Bearing in mind that Buffett has the financial wherewithal to control the public companies that he buys and we don't, we must be very careful when choosing companies that will last us a lifetime. You can see how this single criterion rules out high technology stocks because of the volatility of their operating environment. This is why Buffett has a strong preference for companies that produce essential products, such as toilet paper manufacturers, etc.

Investing in either public companies or property could just as easily be called 'asset management' and good asset managers are anything but passive. Asset management, or investment, does therefore fall under the heading of active investing. However, this area of active investing is not the focus of this book, as it has been comprehensively covered by notable experts such as Warren Buffett and Robert Kiyosaki. (See Further Reading at the back of the book for more information.)

Investing in Shares

This is almost the shortest section in the entire book, and with good reason, as:

- The value of our shares reflects the sentiment of the crowd
- Shares don't pay dividends, the companies they represent pay dividends
- Shares are intangible.

Therefore, if you use shares as lifetime assets:

1. The value of your assets depends on the sentiment of the crowd at any given moment;
2. Your assets don't produce any income; and
3. You own intangible assets.

Whilst the difference between public companies and shares may appear to be semantics to some, understanding it can mean the difference between success and failure in the marketplace. When investing in the stock market it really does pay to see yourself as investing in public companies rather than in the shares themselves.

Trading in Companies

This *is* the shortest section in the entire book. Very few of us have the resources to trade in (entire) publicly listed companies. To buy and sell whole companies for profit obviously requires a huge amount of capital and even greater amounts of skill. Even trying to follow the exponents of this craft is exceptionally difficult. I speak from personal experience, having tried to ride Kerry Packer's coat tails on several occasions.

Trading in Shares

On the other hand, we can take full advantage of the intangible nature of shares by trading them for profit. To fully understand what share trading is all about, let's establish some basic definitions.

Shares	⇒	S-products
Stock Market	⇒	S-store
Information	⇒	E-products
Online Store	⇒	E-store
Tangible Items	⇒	T-products
Physical Store	⇒	T-store

The world is still trying to come to grips with the advent of the Internet and how it can be made commercially viable. A few are succeeding at e-commerce but, as I write, most are falling by the wayside. A successful e-store has the following obvious advantages:

- No physical infrastructure
- Automated transactions
- Few staff and/or overheads
- Reach (people can visit an e-store from anywhere in the world)
- Fan-out (thousands of people can visit an e-store every day).

But these advantages are only fully exploited if we trade e-products such as:

- Money
- Shares
- Information
- Music
- Newsletters
- Software
- Gambling.

In other words, e-products are those that can be transmitted on the Internet.

We still have physical infrastructure, manual processing, staff and higher overheads if we try to sell t-products, such as:

- Fish
- Toys
- Books
- Motorbikes
- Groceries
- Sporting goods.

T-products are tangible and can't be transmitted on the Internet.

Whilst those selling t-products gain the benefits of 'reach' and 'fan out', the back end of their business is still made of bricks and mortar. Many of the successes and failures that have already occurred in e-commerce bear witness to the superior strategy of trading e-products in an e-store. The lack of enthusiasm amongst the media magnates for embracing the Internet is also understandable, given that they largely use thin air to deliver their products and services anyway. Using the Internet would only improve the 'reach' of their products as they already have 'fan-out' through radio and television. As an aside, the Internet is, not surprisingly, following a similar evolutionary path to early broadcast radio, so we can probably expect to see a wave of national and global regulation in the near future.

The ultimate form of an e-store is an s-store (a stock market) because when you trade s-products you have the added advantages of:

- Ready-made customers so there are no advertising costs
- No website costs because your s-store only exists on paper
- Pre-existing s-products which you don't have to manufacture or create
- No delivery or supply problems.

As traders, we want to make money by buying and selling shares for profit as efficiently as possible. We only want to hold shares if the price of those shares is going up; that is, we don't want to have any dead stock sitting on the shelves. Dead stock ties up valuable trading capital.

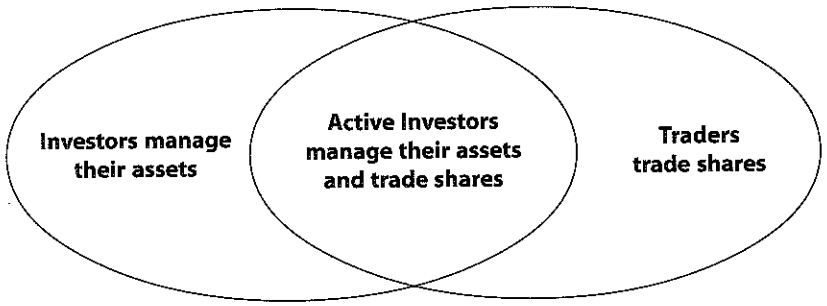
Trading shares comes under the auspices of active investing, and is the mainstay of this book, as it is a mystery to most individuals. Most people believe that traders are highly active in the marketplace. In fact, how people go about trading shares and how much time they spend doing it depends largely on their objectives. If you're trading shares like Cochlear, then all you have to do is glance at a chart each week to make sure that it's still going up. I hang onto s-products like Cochlear shares because I can probably get more money for them in the future if the share price continues to rise.

Figure 3.3

Active Investing

The definition of active investing is best illustrated by the following diagram:

Figure 3.4



We must be able to differentiate between our assets and the shares that are our stock in trade. Failure to do this is as foolish as trying to sell t-products in an e-store. I have seen portfolios where crashed dot-com stocks have been conveniently moved across into the asset column. Yet they don't even come close to being income-producing, lifetime assets. The bottom line is that we have to treat these shares like a shopkeeper would treat his dead stock – mark them down and get rid of them.

Whilst s-products can become assets, we must 'convert' them for the right reasons and not out of psychological convenience. As active investors we have many opportunities open to us, such as borrowing against our assets to buy s-products for our s-store. But, in the same manner as all other successful businesspeople, we must manage our assets and our s-store with purpose. If we don't, then we will go the same way as 95% of other small businesses in Australia.

4 | THE INVESTMENT BUSINESS

If it doesn't kill you... it'll make you stronger

Most people who start a small business will sit down and plan how they are going to get started. You find a shop, work out what stock and fittings will cost, calculate how long it will take you to start generating an income and then go and see your bank manager, title to the family home in hand.

After a year or two you're managing to draw a wage and still make some headway on the loan. From this point on, the business gradually goes from being a lifetime dream to being a millstone around your neck. You are completely at a loss as to why or how you got into this situation. After all, you planned the whole enterprise so carefully and things went almost perfectly to plan. The problem is, you ran out of plan.

For me, it took about 10 years in small business for the penny to finally drop. It only happened when I admitted that I didn't have all the answers and that I needed help. So I now have a business coach, Michael, who very deservedly gets a mention in the acknowledgments at the front of the book. Unlike successful businesspeople, for those first 10 years I was not only stubborn about asking for help but also a little foolish. I've spent years practising certain principles in one area of my life without realising that the same principles applied to another area. What Michael teaches me about business is directly parallel to what I teach other people about the stock market!

What many people do is plan to 'start' a business, but not to 'succeed' in business. Many end up working 50 to 60 hours a week, earning less or little more than the wage they'd walked away from. The worst part is, they become answerable to all of their customers instead of just one boss. Not much of a lifestyle improvement!

If we don't want to run off the end of our plan then we must set our sights on success and not just on getting started. Our strategies are designed to meet our individual objectives, but these objectives must themselves be directed towards achieving ultimate success.

This is another area of difficulty for many people, as the definition of success will differ for each person because people's goals in life differ. What is common, though, is that at the end of our working lives is retirement.

Lifestyle Freedom

Don't confuse retirement with images of old people sitting around retirement villages. Retirement is just another word for lifestyle freedom. I define retirement as the ability to maintain the lifestyle of my choosing without having to work for it. Today, I work because I choose to work and not because I have to generate an income from week to week. I have *lifestyle* freedom as opposed to mere financial freedom. Financial freedom just means that you have the money to do whatever you want. I ran a successful IT business for years that gave me the financial freedom to choose where I lived, what make and model of car I drove and where I wanted to go for holidays. The problem was that I had to work 50 to 60 hours per week to maintain this 'freedom', and I rarely wore a smile.

Today I see lots of others in a similar position. One weekday morning at 8.00 a.m. I was at the local milk bar with my five-year-old daughter. I was dressed in jeans, runners and a flannelette shirt, like I usually am on a weekday morning if I'm not meeting with anyone. A man driving a Mercedes, dressed in a three-piece suit, came rushing in to grab a paper and some milk. After he departed, having pushed in front of us, my daughter looked at me and asked, "Was he angry, Daddy?" The difference between lifestyle freedom and financial freedom is *time*... and a smile. So plan for retirement, rather than for 'success'.

As individuals we must decide on a lifestyle that we will be happy with, and then look at whether we have that lifestyle yet or whether we need more wealth to achieve it.

If you're happy with the house you currently live in, the car you drive, the amount of your disposable income, and so on, then all you really want is the ability to stop working for it. You then need to calculate how much income you need each year in order to achieve this.

If you want a bigger house or a newer car, of course, then you need to increase your wealth; that is, the value of your assets. In other words, you will be aiming for *wealth creation*, whereas those in the former category are only interested in *income generation*. Many people in the latter situation mistakenly implement wealth creation strategies, and I've spoken to many who've had the wheels fall off such an unnecessary strategy. They often lament the fact that they could have retired several years earlier had they chosen to stop trying to obtain more wealth.

In general, if you're 30 years old, then you will probably need to consider wealth creation strategies, but if you're in your 50s you may simply want to stop working for what you already have. You may even want to adopt a less expensive lifestyle. These are all questions that you must answer as an individual before you start your business.

The Time Factor

Once we have quantified our individual objectives, success in business is defined by meeting those objectives. However, there are factors that will affect our business strategies that are only partially under our control.

One of these factors is the amount of time it will take to achieve our success. The time it takes to achieve success will largely be determined by our lifestyle objectives and the extent of our current resources. Attempting to make a million dollars in one year is probably an overly ambitious and unrealistic objective! A good rule of thumb is to anticipate that our stock market business will return 20% on capital per annum. This is my minimum target, as anything less makes being in the stock market an inefficient use of my time and capital. I can either get a higher return on capital elsewhere, or achieve returns below this benchmark using fuss-free managed funds.

We all begin with varying levels of time and money. It is important that we accurately quantify these. I have taught hundreds of people how to trade but few actually do it for long, mainly because they choose to trade in a way which requires several hours per day of their time. If their lifestyle doesn't allow them to allocate the requisite hours per day to trading, they either lose interest in the whole process

or lose money. This type of mistake is largely due to a desire to get where they are going more quickly than their resources allow.

As an active investor, I am only prepared to work about one hour per week, and this has a large impact on my trading strategy. I don't want to be obliged to check the market each day. To achieve this, I need to employ the expertise of others. A full-service stockbroker is a handy employee because he or she can execute my orders during the day and save me the trouble of having to do it myself. Of course, if you are trying to minimise overheads to begin with, an online broker is cheaper. But, if time is scarce, a full service broker would be the way to go where he or she can also provide you with other benefits. My stockbroker fine-tunes my market entries and exits better than I can because he has spent more time doing it and has a better feel for the market... after all, that's his job.

When using a full-service stockbroker, you usually get a level of service that is proportional to the amount of money you have under management. This is no different from any other service provider in any other industry – if you were a stockbroker you would service your biggest clients first as well. Of course this behaviour doesn't apply to online broking services... thankfully.

So, do what retailers do. Join forces with other investors to give yourself bulk buying power. I refer ActVest newsletter subscribers (see the back page of this book) to a single full service stockbroker who I know is highly competent at his job. As a result, he now has millions of dollars under management from subscribers. So, when a new subscriber signs up with a capital base of, say, $10,000, he or she is treated as part of a much larger pool of funds under management. If the stockbroker fails to perform his function to our satisfaction, we will all move our money elsewhere. It is an employer–employee relationship, as it should be if we're running a business and we're the boss.

The Knowledge Factor

Many newcomers to the stock market drop out because vendors of ready-made trading systems make success look easier than it actually is. Then, when people realise how much knowledge and effort is required, they often give up. They have come into the marketplace seeing themselves as retail customers and are quickly disappointed and disillusioned.

We will need to acquire knowledge about the stock market in the same way that we would have to acquire knowledge about any business environment that we wish to operate in. However, there are a lot of people who are highly knowledgeable but unsuccessful. To avoid this situation we need to concentrate on acquiring only *relevant* knowledge, which can be converted into action. Think of your brain as only having a limited capacity and you will start to be highly selective about what you absorb. If you can't use it, lose it. In this age of technology, it is easy to become buried under a pile of useless information.

Leveraging and Gearing

If you wish to build wealth then you will need to look at how you can leverage your existing assets. However, be aware that any form of leveraging will not only increase your returns but will have an amplifying effect on your losses. That said, there is a great deal of misunderstanding about borrowing for investment purposes and the inherent risks. We are conditioned in this country to believe that we should only risk money in the stock market that we can afford to lose. This type of thinking is a hangover from a bygone era where financial security reigned supreme. If you had a roof over your head, food on the table and a shirt on your back then you didn't do anything to jeopardise the situation.

On the back of the Depression of the 1930s, this thinking was highly appropriate, but in the 21st century it is obsolete. Today, many highly qualified professionals who have been gainfully employed all of their working lives are realising that they can't depend on the government, their families or a company pension in retirement. Thirty years ago, all you needed to do was own your home and your retirement income came from one of these three sources. You didn't have to take risks in order to maintain your lifestyle. But times change.

The strange thing is, our society *encourages* borrowing for personal consumption. If you can maintain an acceptable living standard and meet the repayments on your debts, then it's okay to borrow money to improve your lifestyle. This is why only 1% of the population is financially self-sufficient. Most people convert their time to money, via a full-time job, and then convert their money into depreciating possessions and interest repayments! What's more, the house you

live in is not an income-producing asset. So owning your own home will free up your income if you continue to work, but it will be of little help in generating a retirement income.

The fact is, you can't lose all of your money in the stock market unless every share you own de-lists. As active investors, we are only going to trade in blue chip shares and, using the past few decades as a guide, a worst case scenario is a 50% loss during a stock market crash. So you can invest *twice* the amount of money in the stock market as you are prepared to lose. What's more, the tax office will also allow you to claim interest repayments on capital borrowed for investment purposes as a tax deduction.

Let's look at using leveraging in a sensible way, by going back to a simple small business scenario. We'll assume we are buying and selling widgets from home part-time:

- We can buy widgets for $10 and sell them for $13.
- We place an advertisement for our widgets in a local newspaper for $50.
- We sell 20 widgets as a result of the advertisement, giving us a gross profit of $60 (20 × $3).
- After we have paid for the advertisement, we have a net profit of $10. (Hence, our $50 advertisement has yielded a 20% return.)

Having tested and measured the sales from our advertisement and documented the whole process, we are ready to leverage our little part-time business.

- We *prove* to the bank, using the documentation, that our enterprise is profitable.
- We borrow $1,000 and place five $200 advertisements.
- Our gross profit each week is now $1,200, given a yield of 20% on the advertising.
- After we pay for our advertisements, we have a net profit of $200 per week.
- After repaying the loan, we decide to get someone else to run our business for $50 per week. By just monitoring the business we are now making $150 per week.

This is a simple example of how gearing can be used to 'grow' a business that has been proven on a small scale first. Compare this approach to that of people who leave their jobs, borrow against the family home and start a plant nursery, for example. If you ask why they're prepared to risk the family home on a business venture, they will probably reply that if another nursery down the road can do okay, so can they. Now there are two people working 50 to 60 hours per week running nurseries so they won't lose their family homes.

In the stock market, as elsewhere, you should only consider using gearing to 'grow' your business once you have established that it is profitable and you have minimised the risk. Unlike most other businesses, in the stock market you can even 'paper trade' to hone your skills, before risking any money.

Market Psychology

Once we've established our objectives and planned for success we must examine one of the most crucial aspects of trading or investing in the stock market – psychology.

Newcomers to the market will probably consider this section either trivial or irrelevant. I can assure you from personal experience that its relevance will increase proportionally with respect to the time you spend in the marketplace.

The most important reason for having clear objectives and an unambiguous market strategy is that our greatest problem is us. Our own emotions and instincts are going to work very hard at undermining our strategy. But if we don't *have* a strategy then our emotions and instincts will become our strategy.

The Herd Instinct

Imagine that you've just come home from work and as you pull into the driveway you notice that your neighbour has bought himself a new car. It has no great impact on you except that you wonder how someone in his position can afford it. Once inside, your partner tells you that his/her sister is going overseas with money that she made from the stock market.

After you've eaten dinner, you stroll down the road to the house of another neighbour, Peter, for your usual evening walk with him. Peter tells you that there won't be too many more of these walks, because he can now afford to move to a bigger and better house

thanks to his share portfolio. You look at him, slightly worried, and tell him that you suspect your neighbour must also have shares or something similar, because he's just bought a new car. Peter laughs and tells you that he gave your neighbour a tip some time ago on some hot biotech stocks. You both agree that the tip must be the source of his new-found wealth, and you begin to feel really anxious.

Later that evening, you and your partner discuss buying some shares, motivated mainly by the terrible thought of being left behind as your entire social circle moves up the wealth ladder without you. Anxiety and fear drive you into buying shares and joining in the latest stock market frenzy because being left behind is worse than the risk of losing money.

The crowd mentality that drives stock markets up often has little to do with greed and much to do with our desire to stay with the pack. Fear of separation will keep a herd of animals together as they stampede off a cliff – its effect on human beings is much the same. The idea that crashes are precipitated purely by greed is a fallacy.

Knowledge

Knowledge will not protect us from losses if we're going to participate in the stock market. Knowing is not the same as doing in many human endeavours, and investing is one of them. Imagine if a surgeon were going to operate on you and told you that he had never performed an operation before. Would you feel any better if he told you that he had been studying for 20 years and there wasn't anything that he didn't know when it came to this medical procedure? But we feel comfortable about a subject if we are highly knowledgeable about it. This is why many people start out in the stock market by acquiring all the knowledge they can. Hence the 'prison of knowledge' that many newcomers find themselves trapped in.

Self-Righteousness

I have met people who know far more about the stock market than I do, but have never bought a single share. They have invested so much time and money in learning about the stock market that they are unwilling to take the plunge and risk suffering a loss, and being, as they perceive it, wrong. Similarly, some people will not sell and cut their losses, because to do so would be to admit that they were wrong in buying the share in the first place. Their mantra is, "But the price of this share *should* go up." These people put the share in the bottom drawer and become passive share investors in order to protect their self-esteem.

As well as taking psychological comfort from being right, we also feel protected in being right. Some years ago while driving to my doctor's surgery, I turned left at a large intersection. I had failed to look for drivers doing a right-hand turn into the same road. When it was almost too late, I saw that I was on a collision course with just such a vehicle. I slammed on the brakes. As I was travelling at 70km per hour, it was a fairly dramatic situation with the two cars on a collision course and all four wheels on my car locked up.

It suddenly dawned on me as I was watching the other car that the other driver wasn't taking any evasive action. Had we collided I would have t-boned him with enough impact to kill anyone sitting on the left-hand side of the car. Yet, as I came to a halt just inches short of his car, and looked at the other driver, he was looking back at me with a smug expression on his face. Usually when I'm about to kill someone through incompetence they are inclined towards being angry with me rather than feeling smug! The other driver was being smug and not taking evasive action because he was technically in the right. He came very close to being dead right.

Many people will lose money on shares as long as they can be self-righteous in doing so. Inevitably, these people leave the marketplace with resentment towards those of us who remain in it, because they see us as being collectively wrong and acting irrationally and irresponsibly with our money.

Status

As adults, we live in a world where social status is often judged by how much money we have, and how knowledgeable we are. Children don't have the same values as adults and, for this reason, they make excellent share traders. Every time a teacher undertakes a pretend share trading project with a class of children, the results are highly successful. This is because children latch on to a trading strategy and are not thwarted by their own psychology. If one child walks up to another and says his share is going down and the other child recommends a different share then the first child will act on the advice. Now imagine you're standing at a barbecue and you meet someone who tells you he owns a share that is going down in price. You say that he should look at shares in XYZ Ltd instead of what he

is currently holding. Odds are he will dismiss your advice by telling you that he's in it for the long term.

Greed

Greed also plays a part in the stock market and has cost me thousands of dollars over the years. You enter the marketplace with a plan to achieve an annual return of between 20% and 50% per annum. Then you have a share in your portfolio that goes up by 20% in a single month. This share is showing an annual rate of return of 240%, which is approximately six times greater than your original objective of 20% to 50%. The rational thing to do would be to take the money and run, but greed kicks in and the internal wealth calculator goes to work. If you compounded 20% per month then you would achieve an annual return of 892%! Multiplying that by the original purchase of $3,000 worth of shares, you will have a profit of $23,760. Then you start spending the profits, and before you know it, you *need* the share to keep going up at this rate. Hopefully surgeons don't think about how they're going to spend the fee, which we're paying, while they're operating.

Because you are dealing directly with money in the stock market, your greed can surface very easily and blind you to the task at hand. Most people only become aware of their greed when they begin to trade.

Let's Play a Game

In any type of small business the owners undertake several roles. In my previous business, for example, I was the CEO, the sales manager, the administrator and the storeman. I was constantly switching hats as I moved from one task to the next.

In a lot of small businesses, the owner will focus on a favourite activity and neglect other areas which are just as vital to success. We face the same difficulty in the active investing business, as we have to:

1. Set the objectives (CEO);
2. Design the strategy (Strategist); and
3. Execute the strategy (Trader).

It is very easy to become overly focused on the role of strategist, forget or change our original objectives to suit the strategy and try to tweak our strategy as we are executing it. As a result, we lose focus and fall victim to our emotions as they overrule our original purpose. Many investors and traders are unable to accurately assess the viability of their basic market strategy because they have never executed it fully and precisely.

One way in which we can prevent this from happening is to role play. We must separate the three functions of CEO, strategist and trader.

So, let's play a game called 'Monkeys in Space'. We can use this simple game to separate the three functions and overrule our emotions. The three roles are:

1. The US Government (CEO)
2. NASA's Chief Engineer (Strategist)
3. The monkey that orbits the earth (Trader).

The purpose of this game is to put a monkey in space, have it orbit the earth and then return safely, which parallels buying, holding and selling a share. The success of the game has absolutely nothing to do with making money, so we should be able to overcome our greed. We'll go through each role separately and identify the function of each role as well as looking at who may take the role other than ourselves.

The US Government

The US Government is you or yourself and your partner, if you have one. The Government's job is to set the ultimate goals for the NASA space program. In other words, it's your job to determine the ultimate objectives of your investment business. You will need to consult with the chief engineer at NASA to ensure that your objectives are realistic and achievable, if the space program for the next, let's say, three years is to be successful.

Once you have established the objectives of the space program (your investment objectives) you will hand them on to the Chief Engineer. It is the Chief Engineer's job to establish and implement a program that will meet those objectives in the time specified. The Chief Engineer must also report back to you regularly with progress

reports. You must monitor the Chief Engineer's performance to ensure that his or her program is on target to meet your objectives because, if it doesn't, you're not going to be re-elected.

As the Government, you want to monitor the space program constantly to make sure that the Chief Engineer doesn't get carried away with his/her job and take unnecessary risks. You definitely don't want one of your space capsules crashing down in Beijing because some rocket scientist at NASA started fast-tracking the program. To meet your responsibilities as Government you have control over the funding for the space program and you also have the authority to dismiss any of the staff at NASA if you deem it necessary (i.e. your partner might want to replace you as the Chief Engineer). It's also up to the Government to insist that NASA proves the feasibility of any program that it wants funding for. That is, you decide the question of risk in your investment business, whether gearing is appropriate and/or the amount of starting capital. It is perfectly reasonable for you to decide on paper trading until there are proven results on the table before undertaking any level of risk. This role is best undertaken by at least two people – US Governments run by Presidents who are not answerable to a Congress have a tendency to crash-land space capsules in foreign countries. What's more, they try to cover up these tragic events by not telling anyone about it.

NASA's Chief Engineer

The Chief Engineer's job is to develop and implement a space program that will meet the objectives that are set down by the Government. The Chief Engineer will be consulted by the Government when it sets these objectives, and must ensure that the objectives are achievable and realistic. The Chief Engineer can also make a decision on whether further research and development is necessary prior to undertaking space missions.

In other words, as the strategist it is your responsibility to ensure that you have the ability, the appropriate knowledge and the necessary tools to implement your chosen market strategy. Tragically, Chief Engineers have a nasty habit of turning into mad scientists who are driven by their emotions and personal ambitions. For this reason, you must ensure that your Chief Engineer is answerable to others and that he or she doesn't try and fly missions personally. That's the job of your trained monkey.

The Monkey

The monkey preferably will be played by someone other than the person who is playing the Engineer. Failing this, the monkey's role should be played by both partners, to ensure that it sticks to the mission orders. You don't want to implement a market strategy only to have it altered midway by the monkey's greed, fear or anxiety.

The monkey has what appears to be the easiest job of all. He or she must follow the instructions set out by the Chief Engineer to the letter and not use any personal discretion in implementing those instructions. That is, if the green light comes on then the monkey presses the red button, etc. If your monkey has to exercise discretion to make the strategy work, the Engineer hasn't done his or her job properly and the strategy needs to be altered so that it is less ambiguous. Too often people will choose a share, buy it and then rely on their personal judgement the rest of the way. You must have a complete strategy that covers share selection, when to buy and when to sell.

Whilst the monkey's job sounds easy, it is another role in which your emotions and anxieties will be trying to take over. If the monkey does the job well, regardless of whether you see profits or losses at the end of the day, the Chief Engineer will have solid data from completed 'missions' to help adjust and improve the strategy. You make changes to your market strategy away from the market, not when you are in the midst of executing your trades.

So, putting the whole process in chronological order, you must:

1. Set your objectives.
2. Develop your strategy and acquire knowledge which is relevant.
3. Implement your strategy with total discipline.
4. Adjust your strategy as results dictate.
5. Periodically review your advancement toward your objectives.

The Company You Keep

The final area that we need to look at in relation to our investment business is the effect that others can have on our attitudes.

Our personal viewpoint can be derailed by those around us, as well as by ourselves. People who underachieve often actively try to bring those around them down to the same level, in order to make themselves feel better. If outside influences do undermine us, we must isolate ourselves from them. There's a saying that goes: "Negative people hang around with negative people – successful people hang around golf clubs and beach resorts."

In a similar way, people will often use comparisons to justify underperformance. Investors do this by comparing their performance to the All Ordinaries Index. But using the All Ordinaries as a benchmark is simply a way of justifying being average! My personal benchmark as an active investor, as I mentioned earlier, is 20% per annum or better. We need to focus on ourselves and work at improving our own performance just as highly successful athletes do. World-class golfers worry about their own scorecards and champion swimmers focus on beating their own personal best times.

5 | FOOLS, FACTS AND FACTIONS

Seek profits... not perfection

Once we've set our objectives, we must develop an understanding of the stock market itself and the forces that move share prices. Share price movements are the result of many variables working together to give what appears to be a random outcome. But true randomisation only occurs where there is a complete absence of organisation, so whilst share price movements approximate randomisation, they are not truly random. The big question is whether we can find, and exploit, patterns in share price movements to obtain profits. If we are successful, then we should beat the performance of the All Ordinaries Index every time.

As it would be impossible to examine *all* of the variables that influence the market, we will look only at the major factors which affect the crowd's behaviour. Some of these have little to do with logic, but if they have an influence over all or part of the crowd then they are worth examining. Remember, the stock market is a capitalist democracy where one dollar equals one vote... be it a fool's dollar or otherwise.

Fundamental Analysis

'Fundamental analysis' or 'financial analysis' is the oldest and largest school of thought when it comes to evaluating the price of shares. 'Fundamentalists' place a value on a public company based on its underlying financial situation and then value shares in the company by inference. A fundamentalist will decide whether a share price is too high or too low compared to the value of the underlying company and act accordingly. If the market is undervaluing a company and its performance by pricing its shares below their fair value, then the

fundamentalist would buy the shares. On the other hand, if a fundamentalist owns shares that are priced a long way above their fair value then he or she would sell the shares. Ben Graham is widely considered to be the father of financial analysis, and his teachings have produced modern giants of the investment industry such as Warren Buffett.

Ben Graham's philosophy for success centres around the following points:

- An enterprise should only be judged profitable based on factual information, not on optimism.
- A portfolio should contain a minimum of 10 to a maximum of 30 holdings.
- Companies should be financially large; i.e. high market capitalisation, or blue chip.
- Companies should be managed in a financially conservative manner; i.e. with low debt.
- Companies should have an unbroken history of paying dividends for the past 20 years.
- The ratio of the company's market value to its earnings (its 'P/E Ratio' – see below for more information) should not exceed 25.
- The company's market value should not be greater than 1.5 times its net tangible assets (see below).

Ben Graham bought or held companies which met these criteria and sold when the companies ceased to meet these criteria, either because of a rising share price or changes in the financial position of the company.

Fundamental analysis is so widely used and accepted that service providers such as stockbrokers and fund managers can legally justify the advice they give to clients on this basis alone. Fundamental analysis is the mainstay of both individual and institutional investment strategies. As I mentioned earlier, if it were the only factor used by the crowd then shares would always track the value of the underlying companies. Modern fundamentalists use an ever-increasing range of techniques to assess the financial status of public companies. Some of the more widely used are worth examining.

Market Capitalisation

Virtually all of the techniques employ the 'market capitalisation' of a company. The market capitalisation is the current share price of a company multiplied by the number of shares issued. Therefore, a company whose share price is $10 and has one million shares on issue would have a market capitalisation of $10 million.

P/E and P/A Ratios

The market capitalisation can then be used to compare the share price to the earnings and asset backing of the company. 'P/E Ratio' is an abbreviation for 'Price/Earnings Ratio' and defines the relationship between a company's market capitalisation and its annual net earnings after tax. Investors look for lower P/E Ratios when buying shares and will sell shares with higher P/E Ratios. Whenever the share price of a company changes or a new financial report is issued, the P/E Ratio must be recalculated.

So, for example:

- A company has a total market capitalisation of $10 million.
- Its annual net earnings after tax are $1 million.
- Therefore, it has a P/E Ratio of 10 ($10 million / $1 million).

'P/A Ratio', on the other hand, is an abbreviation for 'Price/Asset Ratio', and defines the relationship between a company's market capitalisation and its net tangible assets:

- A company has a total market capitalisation of $10 million.
- Its total net tangible assets (i.e. property, plant and equipment, etc.) are $2.5 million.
- Therefore, it has a P/A Ratio of 4 ($10 million / $2.5 million).

Investors prefer a low P/A Ratio. It is possible to find companies with P/A Ratios of less than one, which means that a $1 share represents more than $1 of value in net tangible assets. However, this usually occurs when the future prospects of a company are poor and the marketplace is more focused on earnings rather than asset backing. To be safe, fundamentalists look for companies with both a low P/E Ratio and a low P/A Ratio. The fundamentalist then believes that he or she has found a truly undervalued share.

Dividend Yield

The earning capacity of a company is reflected in its ability to pay a good dividend as well as its P/E Ratio. Investors, particularly those who see themselves as asset managers, are always very interested in the 'dividend yield' of a company. The dividend yield is the proportion of a company's share price that is paid to investors annually in the form of dividends. It is expressed as a percentage and is often compared with bank interest rates. So, if a share is trading at $10 and it pays an annual dividend of 50 cents, the current dividend yield would be 5%.

Assuming that dividend yields track interest rates, and the price of your shares goes up, the annual dividend payment should rise. Therefore, over time your initial investment should mature. You can monitor this growth by calculating the dividend yield using your original purchase price, as follows:

- You bought the shares at $10 each, and each share pays a dividend of 50 cents, so the dividend yield is 5% ($0.5/10 \times 100 = 5\%$).
- The share price has risen over time to $20 and the dividend yield is still 5%.
- Therefore, the *current* dividend payment is now $1 per share ($1/20 \times 100 = 5\%$).
- The dividend yield, using your purchase price of $10 per share, is 10% ($1/10 \times 100 = 10\%$).

A modern derivative of these financial yardsticks is to study the change in a company's financial performance over time. This can be done in a variety of ways. For instance, we might compare the earnings of the current financial year with those of the previous year, to see if there is any improvement. If a company's earnings have increased from $1 million to $1.2 million over the course of one year, then it is said that the company has achieved earnings growth of 20% ($100 \times [1.2 \text{ million} - 1 \text{ million}] / 1 \text{ million} = 20\%$).

We can also look at the quality of the management of the company by comparing gross and net earnings from one year to the next. If a company has achieved gross earnings of $5 million for two years running but has reported net earnings in the second year higher than those of the first year, then we can infer that the financial management of the company has improved. It has managed to reduce either overheads, its tax bill or both.

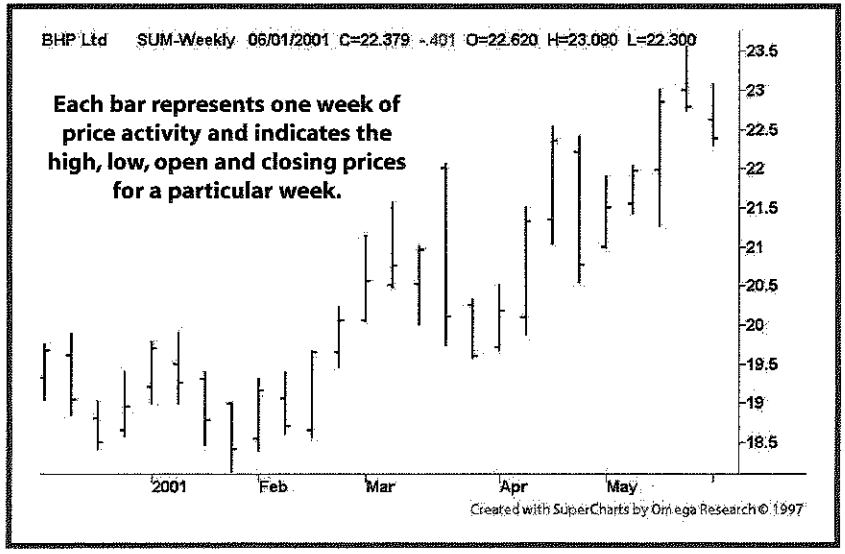
Fundamental analysis, being the mainstay of the private and institutional investing fraternity, has a major influence on share price movements.

Technical Analysis

'Technical analysis', or 'charting', is the study of price activity itself. Chartists, using either pattern recognition or mathematical indicators, observe historical price activity. Charting purists believe that all the factors which affect price movements are present in charts, and that these factors can be studied without having to look beyond the price charts themselves.

The weekly bar chart below shows six months of BHP (now BHP-Billiton) share price activity. The vertical scale is the share price in dollars and the horizontal scale is time.

Figure 5.1



In the chart, each week is represented by a bar, which has a tick on the left and another tick on the right. Note that there are approximately four bars to each month, with each bar representing

five days, as shares are not traded during the weekend. The top of the bar and the bottom of the bar represent the price range of trading for the week (i.e. the highest and lowest price). The tick on the left of the bar is the opening price of the week and the tick on the right represents the closing price for the week.

As you can see, BHP was trending upwards in early 2001 (Figure 5.1). A trend trader (who buys shares which have a rising share price) would have bought shares in BHP on this basis alone. Trend traders have no interest in why the crowd is buying up the share price, only that it is, in fact, going up.

Charting has been used for centuries to analyse price movements in a variety of markets. Before the age of computers, charts would be drawn using graph paper, pencil and ruler. However, although technical analysis has existed for as long stock markets have, it has only come into wide use in the past several decades, thanks to the advent of computer-aided drawing and personal computers. The majority of individual investors do not use charting at all, while institutional investors who have adopted it still place greater importance on fundamental analysis. Charting is frequently seen as the mainstay of short-term traders only, and is often unfairly equated with crystal-ball-gazing and fortune-telling.

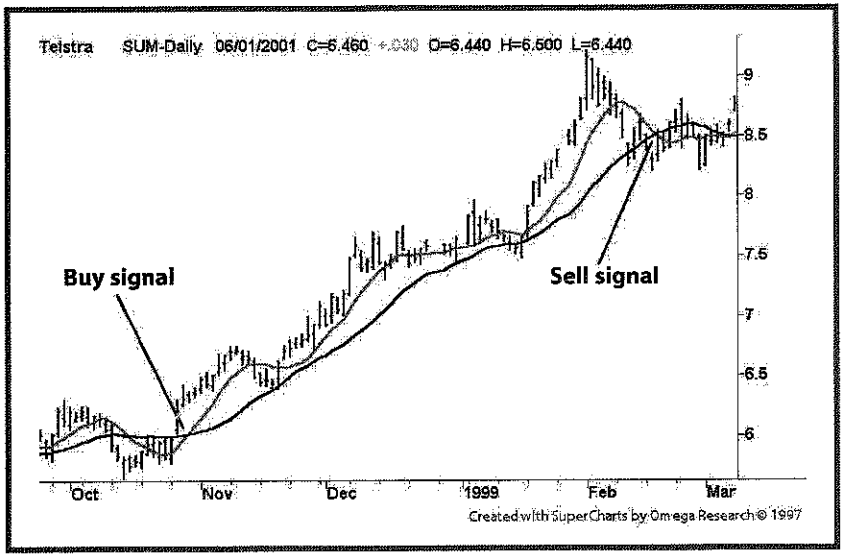
A simple method of using charting to trade shares is by applying a nine-day and a 21-day Simple Moving Average (SMA) to a daily price chart. A simple moving average is created in the following way:

- Calculate the average closing price over a given number of days and plot it on a price chart as a dot on the current day.
- As each day occurs, recalculate the average price and plot a new dot on the current day.
- Draw an unbroken line connecting the dots of each day.

A nine-day SMA is calculated using the closing price from the previous nine days and a 21-day SMA uses the closing price from the previous 21 days. The nine-day SMA tracks the current price activity more closely than the 21-day SMA.

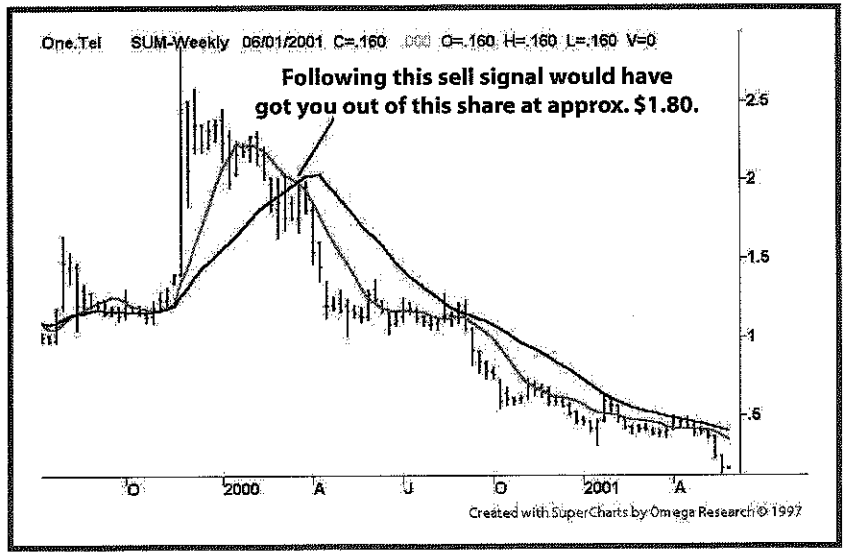
When the nine-day moving average crosses above the 21-day moving average, a buy signal is generated, as price activity must be trending up. Similarly, when the nine-day moving average crosses *below* the 21-day moving average, a sell signal is generated. This technique is shown in the following Telstra chart. The grey line is the nine-day moving average and the black line is the 21-day moving average.

Figure 5.2



This simple trend-following technique can help you avoid buying or holding shares that are falling in price. Take a look at the following One.Tel chart as an example:

Figure 5.3



Cyclical Analysis

'Cyclical analysis', as the name implies, is the study of market cycles. This form of analysis is an extension of technical analysis. Patterns can occur over time that are predictable, and chartists who use cyclical analysis will attempt to predict price movements on the assumption that these patterns are repetitious. Cyclical analysis is largely responsible for charting's bad reputation.

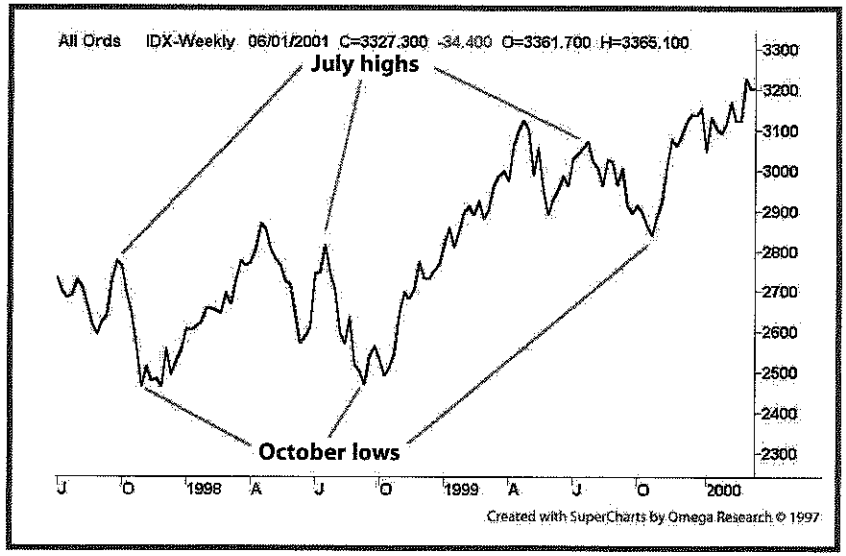
Many market gurus have used cyclical analysis over the years to 'predict' forthcoming crashes and bull markets. Whilst it has given many of these gurus notoriety, the accuracy of their predictions is highly questionable. These gurus make many predictions about stock market crashes but only jump up and down in the media when one of their predictions comes true. A recent example of this was the NASDAQ correction of April 2000 – a noted disciple of cyclical analysis claimed to have predicted it. A fact little known to the general public is that he had predicted the correction to occur in February and March as well!

One simple and more legitimate application of cyclical analysis, however, is identifying annual market cycles, an example of which is the occurrence of October lows. Global stock markets will often form lows during October, because it is the month when most historical stock market crashes have occurred, and so people sell the market down in the months leading up to it. The crowd also becomes more prone to panic at this time in the market cycle. Let's look at this in practice. Figure 5.4 (opposite) shows how the All Ordinaries made highs in July followed by lows in October for three years running.

Using this market cycle, traders would proactively sell down their positions in July and buy back into the market in late October. Long-term market participants, on the other hand, will often use the October low to buy shares, on the basis that it is often the lowest point in the annual market cycle. Note how the All Ordinaries ran up sharply after the October low each year. This fourth quarter rally often provides derivatives traders, who deal in futures contracts and so on, with increased trading opportunities.

The key difference between general charting and cyclical analysis is that the former only relies on increased probability of outcomes, whereas the latter can lean heavily on prediction. The crowd's use of both these techniques is a factor which influences its opinion and actions.

Figure 5.4

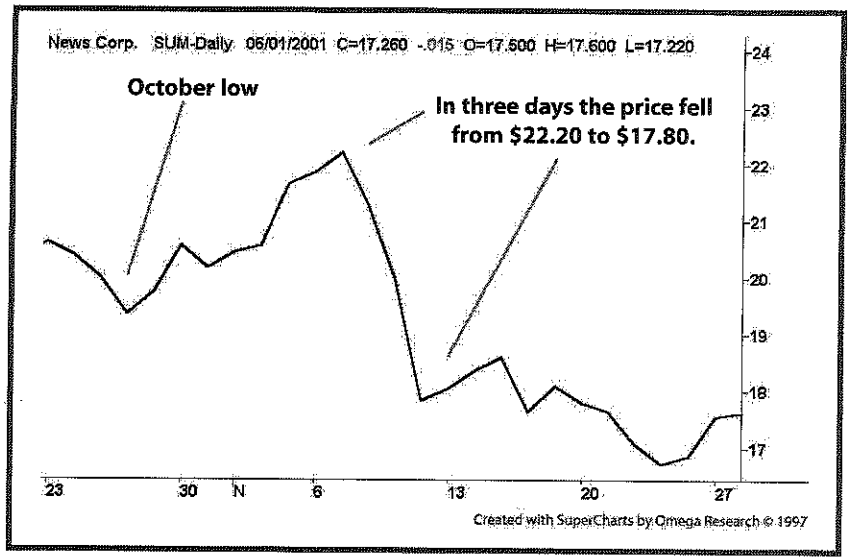


Analysts and Gurus

Logic aside, many members of the crowd will follow the opinions, teachings and predictions of market gurus. What's more, the gurus are virtually impossible to avoid. Many popular market commentators who write for newspapers and magazines become gurus of sorts without ever intending to do so, due to the crowd's desire to be led, rather than to have to think for themselves. It also provides the escape hatch of blame-shifting, should something go horribly wrong. I have known several investors who, over a long period of time, have based all of their investment decisions on the opinions and advice of others. Over the years they have moved their focus from one market analyst or guru to another. When one market expert falls off his or her pedestal, they appoint another who, sooner or later, also follows his or her predecessor into the abyss.

As a result of the guru-worshipping phenomenon, the opinions of market analysts, commentators and experts influence the crowd and move share prices. I personally suffered at the hands of a US market analyst who brought out an unfavourable report on News Corporation in early November 2000. Figure 5.5 (overleaf) shows the effect of his report.

Figure 5.5



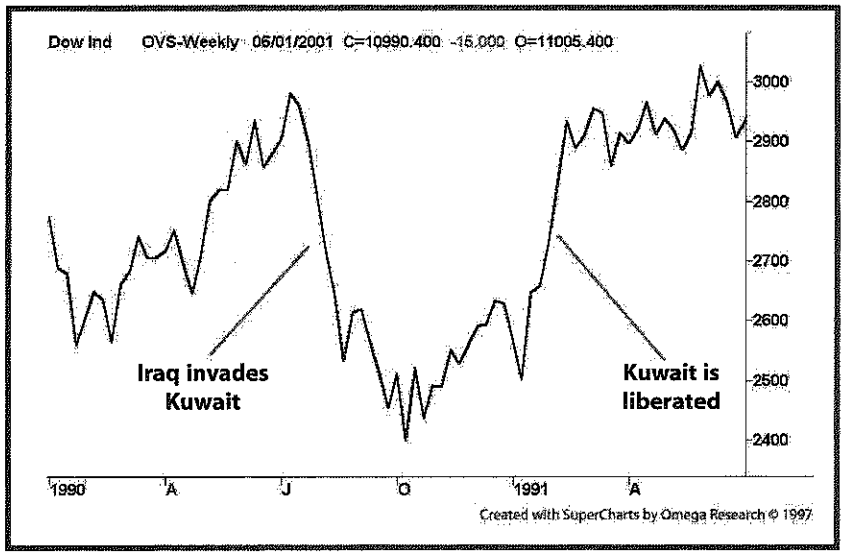
I was using derivatives to trade News Corp during what I anticipated to be the fourth quarter rally following the October low of 2000. Everything was going exactly to plan until the analyst brought out his report, in which he downgraded the share price by nearly 30%. His reason for doing so was the conviction that News Corp's efforts of the time at setting up a spin-off company to concentrate on satellite communications were doomed to failure. He believed his downgrading of the share price was justified given this reduction of future prospects.

I woke up the next morning to find this analyst's report all over the Internet and CNBC. The net result was that News Corp's share price fell nearly 20% over the next three days. This analyst's opinion wiped billions off News Corp's market value. Debating whether he was right or wrong won't change the effect it had on the crowd and the resulting impact on the share price of News Corporation.

News and Events

The unpredictable events that occur around the world can also have a massive impact on the crowd and how it behaves in the marketplace. A classic example of this is the effect on world equity markets of the commencement of hostilities in the Middle East, in mid-1990. Saddam Hussein's actions threatened world oil supplies and the market crowd feared a return to the runaway inflation of the 1970s. World equity markets dropped dramatically and stayed down until Operation Desert Storm took place in early 1991. Figure 5.6 shows the drop in the US Dow Jones Industrial Average, from approximately 3000 to a low of 2400 – a fall of 20%.

Figure 5.6



It would have been a good time to own shares in oil exploration companies. News and world events such as this have a powerful and unpredictable influence on the sentiment of the crowd and hence on share prices.

Macro Economics

There is often debate over who is the most powerful man in America: is it the President of the United States or is it Alan Greenspan, chairman of the United States Federal Reserve? The US Federal Reserve controls official interest rates in America and can indirectly influence world stock markets by adjusting these interest rates. Thus, Alan Greenspan, as its chairman, can move world stock markets just by uttering statements that indicate his displeasure at rising share prices. For example, in 1996 he used his now-famous expression, 'irrational exuberance', to refer to stock market investors' behaviour at the time. World stock markets immediately reacted and came to a virtual standstill for the remainder of 1996!

The effect of macro economics on the market crowd is complex and most economists struggle to understand it. The most predictable link between macro economics and share prices is the lever which Alan Greenspan controls – interest rates. If interest rates go up, then share prices generally go down, because the dividend yield tracks official interest rates. The opposite is also true. Falling interest rates will usually cause share prices to rise.

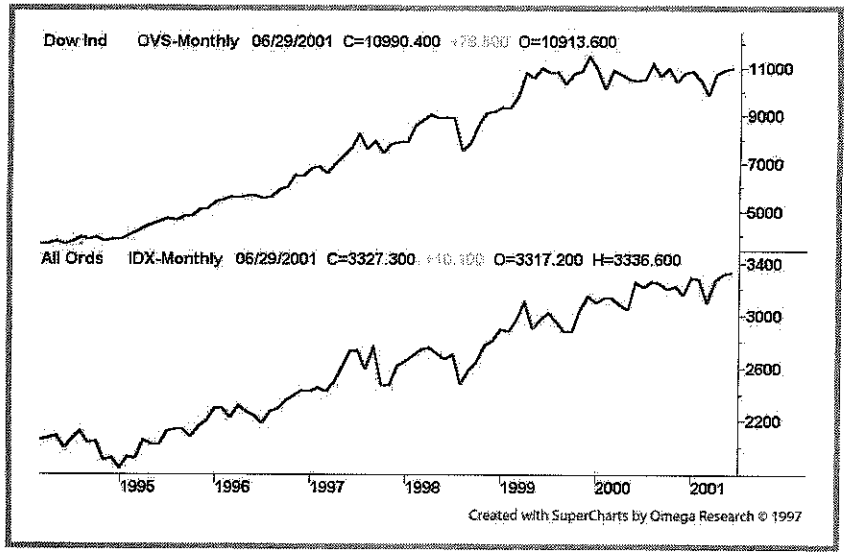
Global Factors

The US financial markets represent 50% of world stock markets in terms of market capitalisation. The market capitalisation of Microsoft Corporation alone rivals the value of the entire South Korean stock market. The Australian stock market, on the other hand, represents only 1% of world financial markets. The Australian stock market is often said to be the tail while the United States is the dog.

To a lesser extent, we are affected by the Asian markets as well, of which we are considered to be part. Asian markets have an influence mainly because our resources sector, which has long been considered the mainstay of our stock market, sells the bulk of its output to manufacturers in Asian countries.

The crowd will often blindly react to any changes in these foreign markets. Figure 5.7, a comparison between the All Ordinaries Index and the Dow Jones Industrial Average, highlights this fact:

Figure 5.7



If the US rallies then we rally... if the US falls then we fall. It should be noted that the effect of foreign markets on the Australian stock market is greatly exacerbated by the fact that our fund managers follow their offshore cousins. These fund managers control large blocks of capital and have a powerful influence over share price movements.

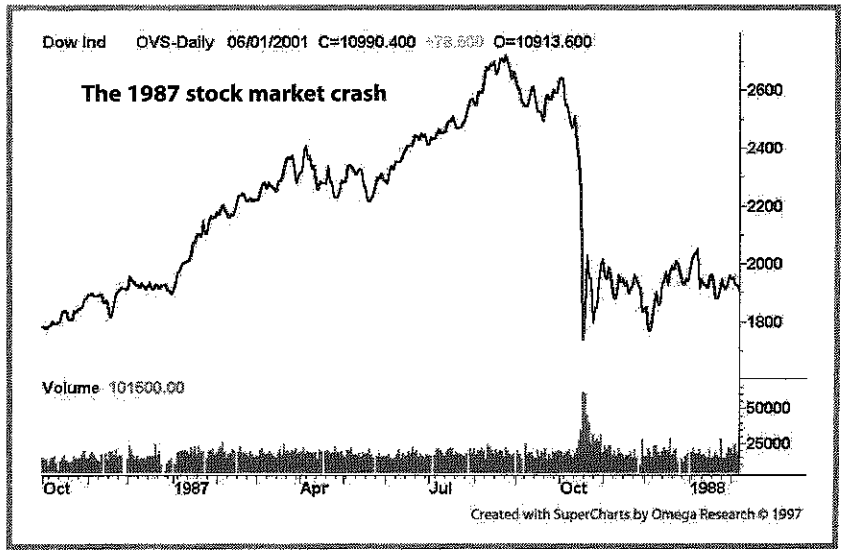
Gambling and Speculation

Any member of the market crowd with money to buy and sell shares has some degree of control over share prices. Speculators and even those who gamble in the stock market have influence. This influence is generally unpredictable, short term and has a much greater impact on smaller capitalisation shares than it does on blue chip shares. Speculators' actions are largely dictated by factors such as tips, rumours, astrological charts, hunches, etc.

Crowd Behaviour

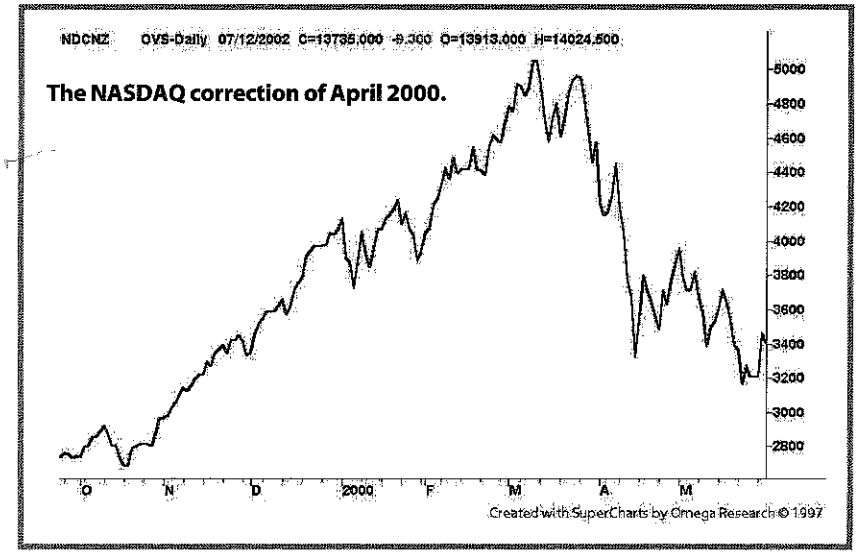
The best way of showing the effect of crowd or herd behaviour on stock markets is with charts. The following chart of the Dow Jones shows how the US market ran up from 1900 to a peak of 2700 in the first eight months of 1987and then fell all the way back in a matter of days. Note the spike in the volume histogram at the bottom of the chart (representing the number of trades being executed for each trading period) during the panic selling that took place in late October.

Figure 5.8



From October 1999 to March 2000 the NASDAQ climbed from 2600 to a peak of 5000. The index virtually doubled in the space of only five months. The subsequent correction in April 2000, shown in Figure 5.9, is hardly surprising in hindsight. The crowd was behaving like a herd and logic was replaced with the anxiety, fear and greed that was to collectively cost those in the market billions.

Figure 5.9



Facts or Fiction?

Over the years, factions have formed around different types of analysis and trading techniques. Fundamentalists typically believe in analysing markets from a purely factual perspective, whilst many speculators trust their feel for the mood of the marketplace. There are countless books and mountains of information available on any individual investment technique or form of analysis ever invented. This information is the quicksand that most of us end up sinking into during our early forays into the marketplace. A typical reaction, not surprisingly, is to choose a single technique, which then becomes our one and only truth.

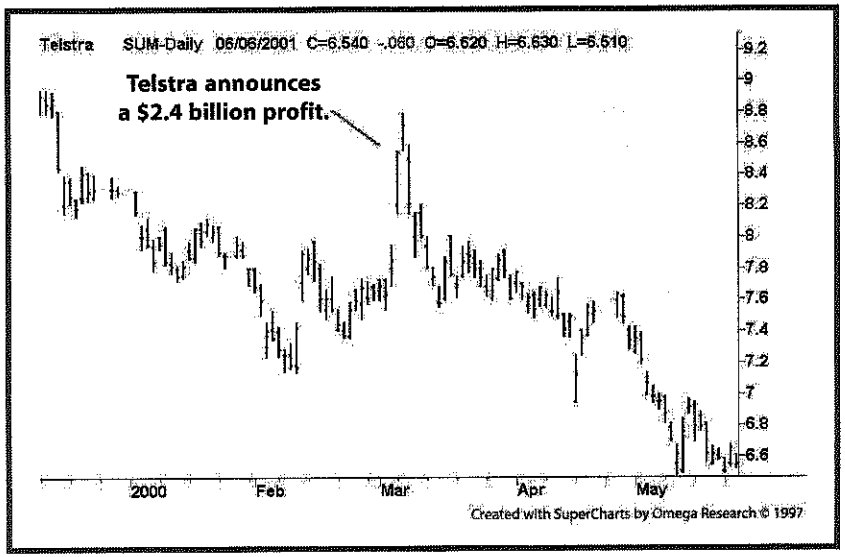
Camping on a single truth is a shortcut we all use to cope with the pressures of busy modern life. If we can intellectually justify our truths, then we become inseparable from them. Go for a walk around your neighborhood and look at the cars in the driveways. Members of the same family will often take the shortcut of buying the same make, and often model, of car as one another. If a particular make of car is reliable and meets the needs of dad, mum or big brother, then why look any further?

Whilst your motoring needs can be satisfied this way, it is a bad philosophy when it comes to the stock market. Disciples of one investment technique will often denounce other market strategies because of the apparently opposing logic. Fundamentalists consider chart reading to be a form of astrology, whilst chartists like to use annual financial reports to line the bottoms of their birdcages. All this conflict arises from the inverse relationship between share price movements and financial ratios. If a share price is falling, then sentiment must be negative and a chartist will recommend that you sell. But a fundamentalist will advise you that the lower the share price is, the better the financial ratios are and therefore it is probably a time to buy.

If both techniques are based on common sense and sound concepts, why is there so much difficulty in reconciling the two approaches? Unfortunately, being able to justify one's thinking is not a guarantee of making money in the stock market. Logic doesn't move share prices… opinions do.

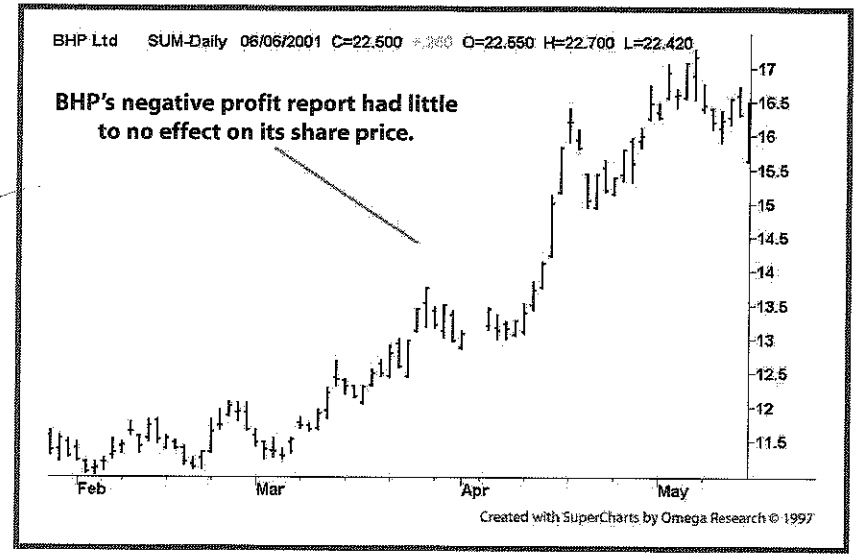
There are many instances where share price movements have defied logic. Figure 5.10 shows what happened to Telstra's share price when it announced an Australian corporate record profit of $2.4 billion. The market was disappointed with the announcement for reasons other than the actual profit, and so it caused little more than a hiccup in the downward slide of Telstra's share price.

Figure 5.10



Conversely, when BHP announced a record loss of over $2 billion in 1999 it had no noticeable negative impact on the share price. People were more interested in the appointment of a new company CEO and the Asian recovery that was driving up commodity prices at the time, as you can see from Figure 5.11:

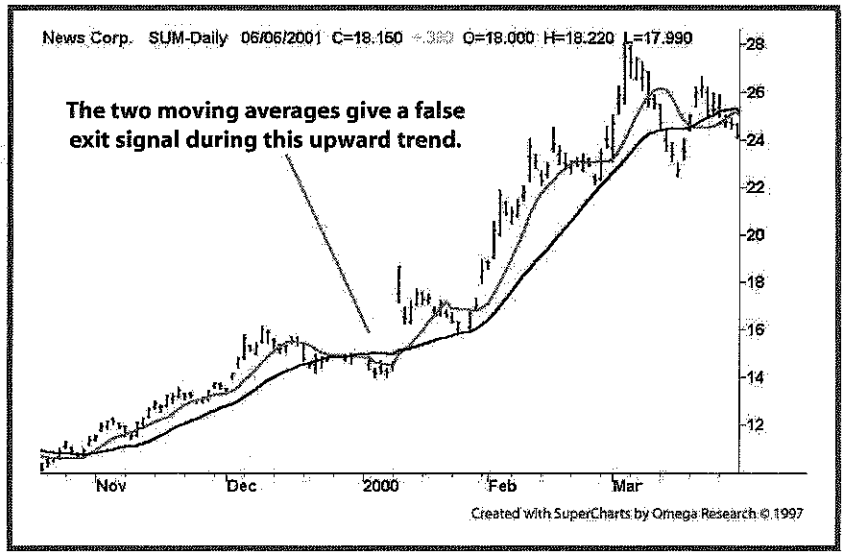
Figure 5.11



If there are no absolutes in the marketplace then it also follows that there is no single, perfect technique for buying and selling shares. For example, using the nine-day and 21-day moving average crossover method to trade this uptrend in News Corporation (Figure 5.12 opposite) would have resulted in a loss of profits because of a false sell signal or, as a chartist would say, a 'whipsaw'.

The reality is that the marketplace is a melting pot of many truths, techniques, strategies, attitudes and emotions. We cannot perfectly untangle and track every single variable which affects share price movements. The best that we can hope for is to put the balance of probability in our favour and fortunately, that is all we have to do in order to achieve profits. Personally, I would use tea-leaf reading if someone could prove to me that it will increase my bank balance.

Figure 5.12



What we need is a way of analysing the market which takes into account as many variables as possible.

6 | INTRODUCING DYNAMIC ANALYSIS

Bad advice: "Buy low… sell high"

The simple dynamic that drives share prices either up or down is shown below in diagram form. Note the use of the word 'factors' as opposed to the word 'facts' in the first square.

Figure 6.1

This diagram summarises the whole process that moves share prices and is the foundation of dynamic analysis. We can place most of the techniques described in the previous chapter into the square on the left hand side of the diagram. Fundamentals, market cycles, macro economics, and so on are all factors that affect people's opinions. Investors who rely on fundamentals, therefore, are coming at the market dynamic from the left-hand side. Chartists, on the other hand, are coming at the market from the opposite direction by simply measuring the output of the whole dynamic process.

As active investors, we will approach the market dynamic from both ends by employing 'dynamic analysis'. That is, we should search for blue chip shares with both good fundamentals *and* rising share prices. Such shares can be located by testing and measuring the entire market dynamic. The following charts (Figures 6.2, 6.3 and 6.4, overleaf) show the results that can be achieved.

Figure 6.2

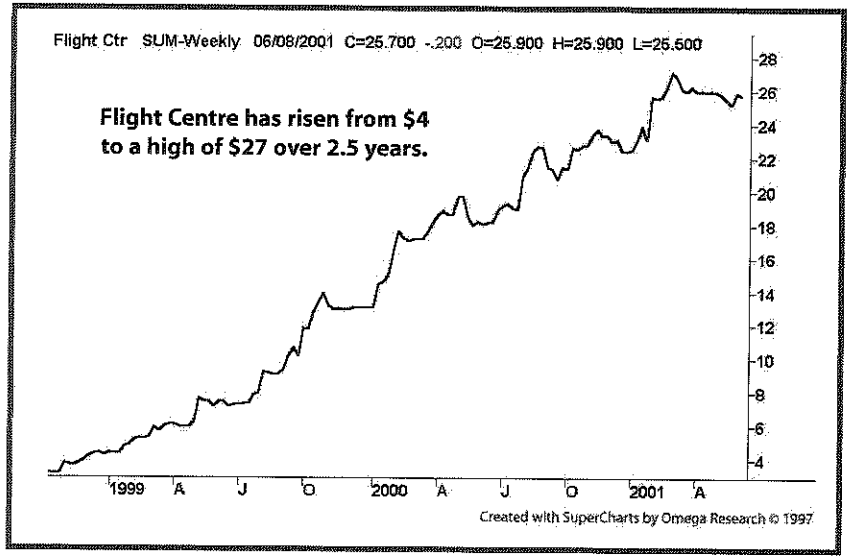
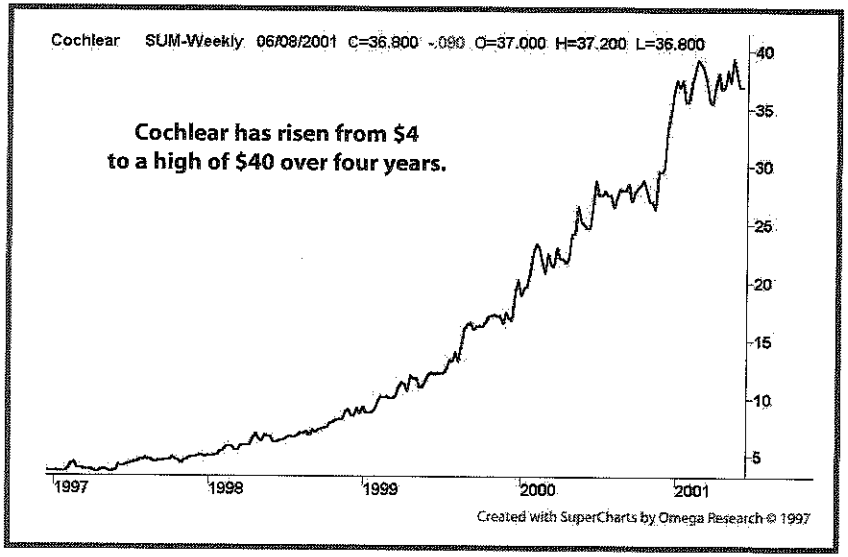
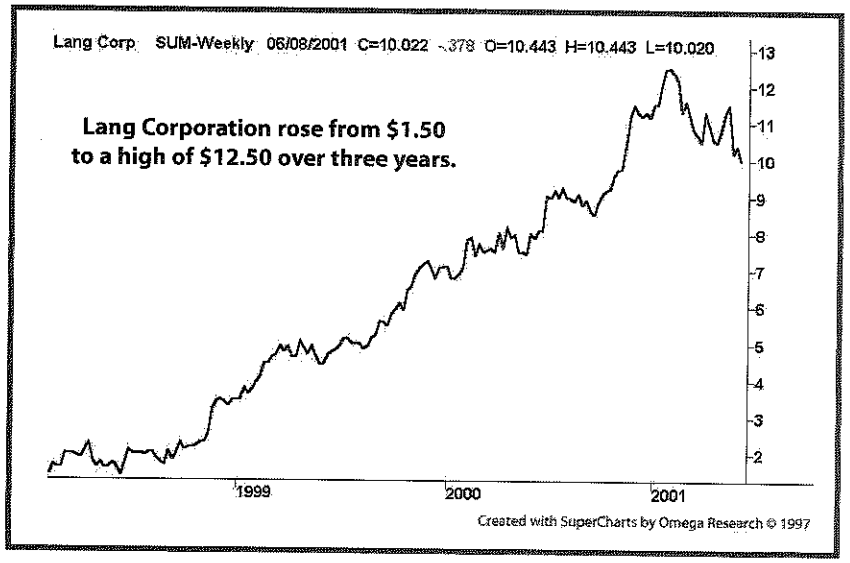


Figure 6.3



These are the types of shares we want to own, because we only make money trading shares when the share price is rising. Whilst we want to constantly monitor the financial facts relating to our lifetime assets, in the stock market we buy and sell share prices, not fundamentals.

Figure 6.4



Testing and measuring blue chip shares with good fundamentals leads us to reject the following shares (Figures 6.5, and 6.6 overleaf). Whilst some of these may be considered by some people to be good lifetime assets, they make poor stock-in-trade shares. No trader, regardless of what he or she sells, wants to be sitting on depreciating stock.

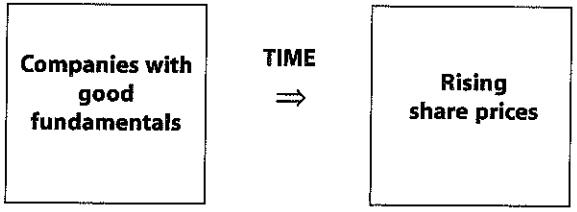
Figure 6.5

Figure 6.6

Both of the above companies were (or are in Telstra's case at time of writing) considered to have good fundamentals and future prospects. However, when we look at their share prices we see that they are falling and therefore market sentiment towards these shares is, by inference, negative.

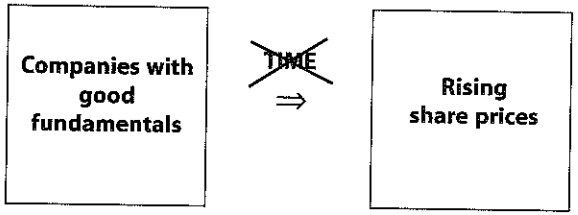
Let's digress and look at how fundamentalists view the market dynamic. Conventional investment wisdom ignores sentiment and assumes that if the financials and future prospects of a company are good, then positive market sentiment can be assumed. This is absolutely true... given time (Figure 6.7). Hence the age-old reliance on patience when it comes to investing.

Figure 6.7



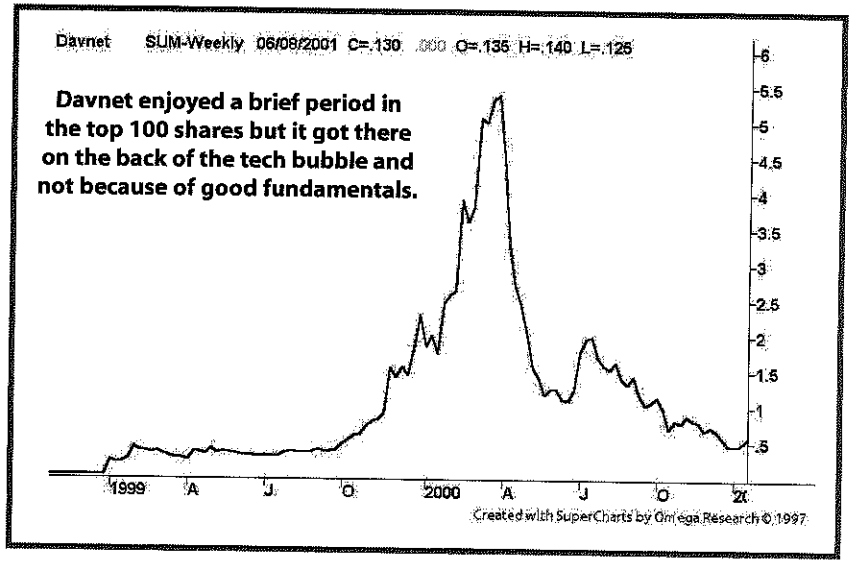
I *do* exercise patience with regard to my lifetime assets reaching maturity and generating a positive cash flow, but there is no need to wait when I'm buying and selling shares for profit. By testing and measuring the entire market dynamic as an active investor I can eliminate the time factor:

Figure 6.8



But if I were to ignore fundamentals and just look for rising share prices then I should be prepared for some nasty surprises... and I would need to watch the market every day. Look at Davnet for example:

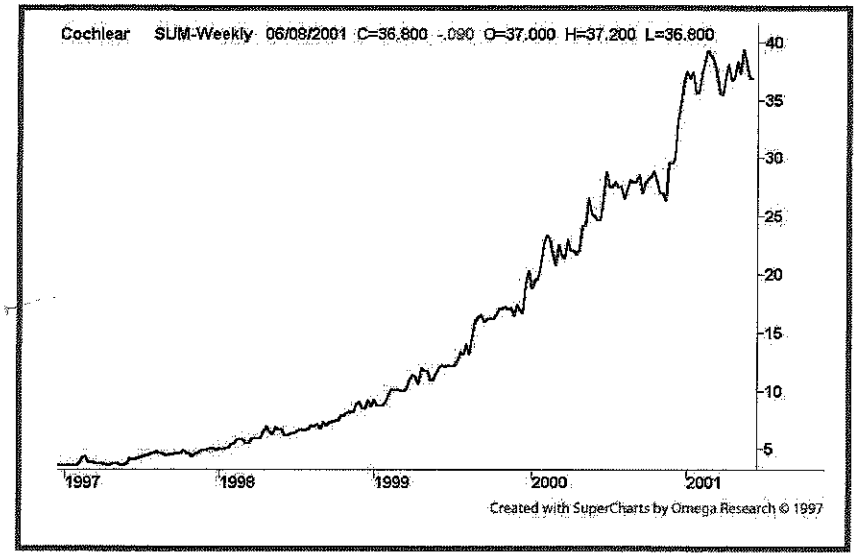
Figure 6.9



Dynamic analysis employs both fundamental analysis *and* technical analysis. There is good reason for this. My primary objective in business is to make more money with less effort. Dynamic analysis is the most efficient use of my time. I want to achieve my objective of only working about one hour per week, so buying and selling shares like Davnet, which require daily monitoring, is too much hard work. On the other hand, waiting around for shares in Telstra to start rising

is a grossly inefficient use of my time and money as well. Let's take another look at the chart of Cochlear:

Figure 6.10



The price of Cochlear shares didn't rise steadily over the course of four years because of takeover rumours, market speculation or any other unpredictable short-term factors that affect people's opinion. It rose because of sound fundamentals and good future prospects. The above chart is a weekly one and so only requires checking on a weekly basis. Owning Cochlear for the past several years, therefore, would have meant spending about 10 seconds per week glancing at this chart.

What we are doing as active investors is riding on the coat tails of the fundamentalists. Cochlear is a perfect example of a share that is being driven upwards by its own fundamentals. Note how the correction of October 1997 and the tech-wreck of April 2000 had virtually no effect on the share price. The trend in Cochlear has also remained immune to annual market cycles.

By choosing to operate in a weekly timeframe, we go a long way towards filtering out the short-term, unpredictable factors which affect the crowd's opinion. In the table opposite, the various factors which affect opinion are categorised and prioritised by their timeframe and degree of significance. Although the list is by no means comprehensive, it includes the major factors we should take into consideration.

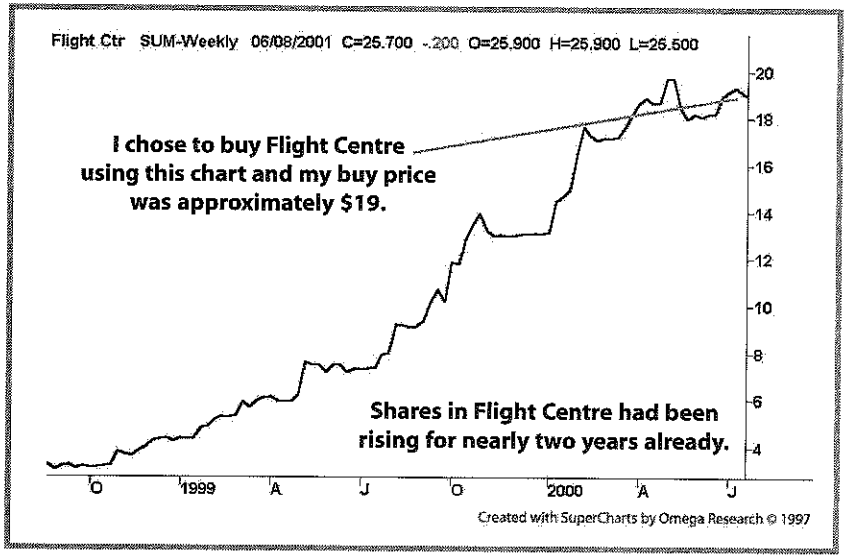
	Factor	Timeframe
1.	Fundamentals	Long term
2.	Global Factors	Long term
3.	Macro Economics	Long term
4.	Market Cycles	Medium term
5.	Herd Mentality	Medium / Short term
6.	News and Rumours	Short term
7.	Gambling and Speculation	Short term

Using dynamic analysis, we can systematically test and measure each of these factors, in order of priority, to ensure that the balance of probability is working in our favour.

Buy Low, Sell High

Active investing flies in the face of the common advice of 'buy low, sell high'. This advice causes the majority of market participants to own shares which are NOT rising in price. During a Live Trading night that I held in July 2000, I chose Flight Centre for my blue chip portfolio, using the following chart. My choice met with wide disagreement from the audience of 50 people, who thought the share price was too expensive.

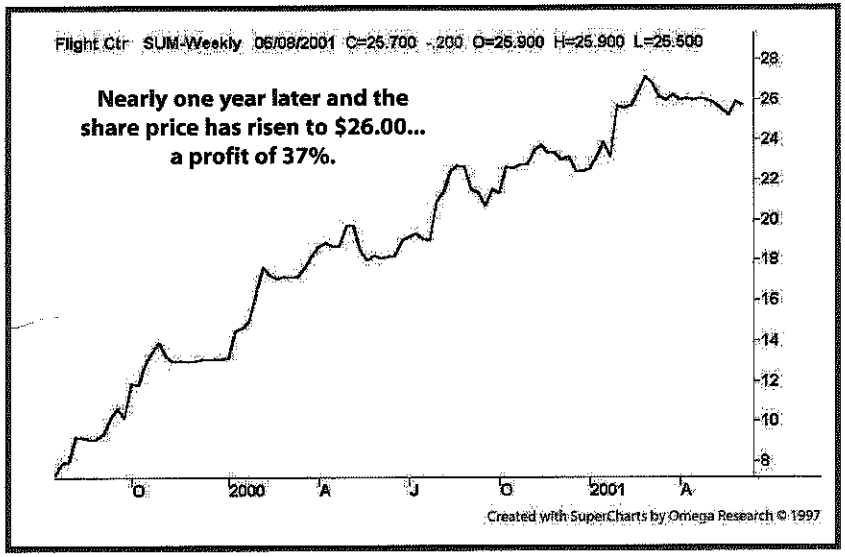
Figure 6.11



But Flight Centre was enjoying double-digit profit growth, good fundamentals and a rising share price. The result was a share price

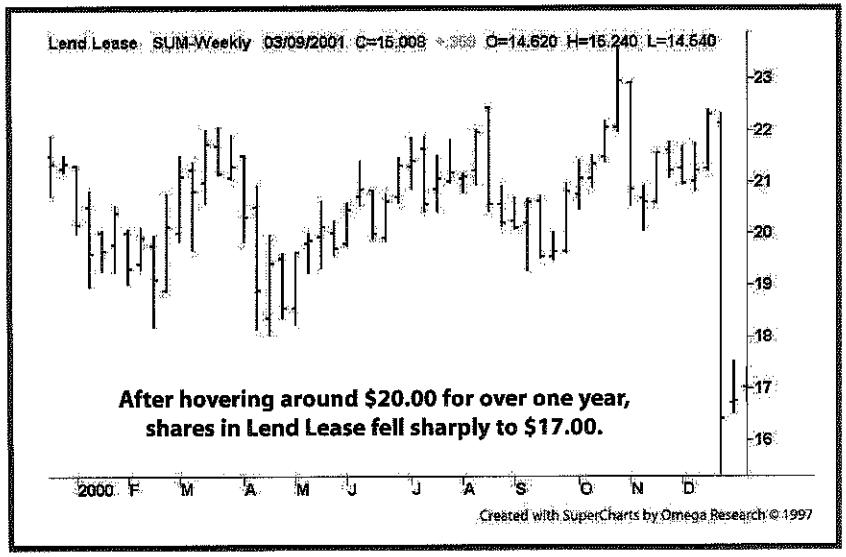
that continued rising, as the balance of probability had suggested. The price I had paid initially was largely irrelevant:

Figure 6.12



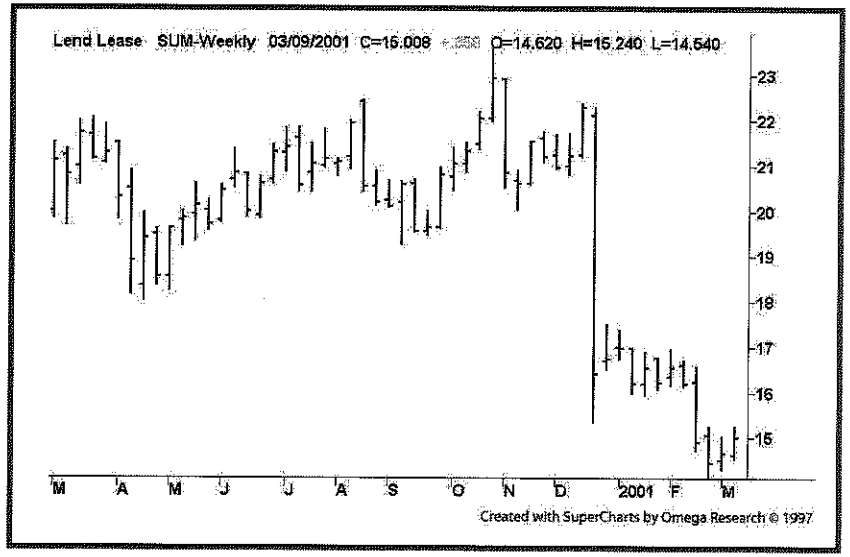
Stockbrokers will often recommend buying shares when prices fall. I received a phone call from one of my brokers when Lend Lease fell out of its tree in early 2001, suggesting that the current price of the shares was very cheap:

Figure 6.13



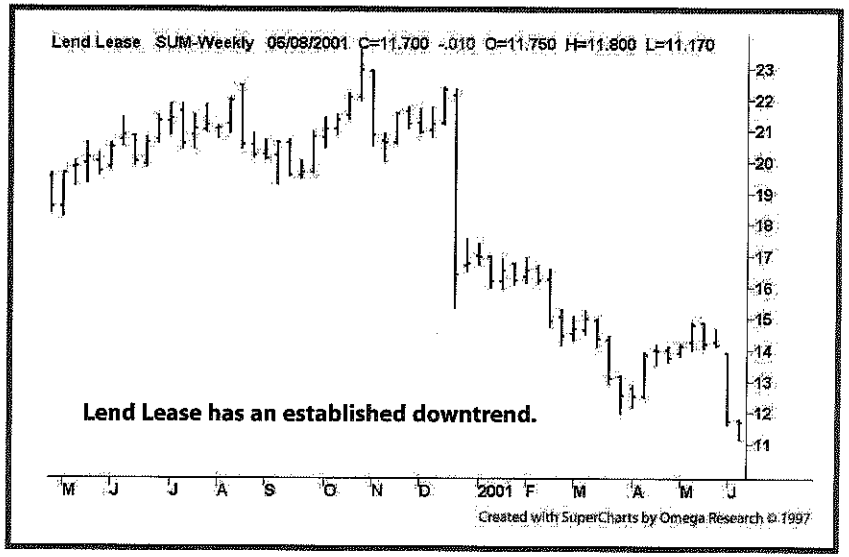
It was his opinion that Lend Lease shares were a bargain and I should buy *now*. The share price had dropped from just over $22 to $17 on the back of bad news. Was this a low? Nearly three months on (Figure 6.14) and 'Oops'... the price slips down another $2:

Figure 6.14



Well, surely $15 is a low and I should buy now. Lend Lease will surely rise from this price. Wrong again (Figure 6.15):

Figure 6.15



There is no such thing as a 'bargain-priced share'. The price of a share is always the precise value that market participants collectively place on it at any particular moment in time. What the broker was really saying was that market sentiment was abnormally low and should have improved from that point. The problem with this approach is that there is no telling when sentiment is likely to improve. The broker has engaged in a guessing game of predicting market sentiment. Is the stockbroker advising me to buy now because it would be in his best interests?

If a share price is rising then market sentiment is positive, and if the share price is falling then market sentiment is negative. Hence, buy a rising share and sell a falling share. The broker's recommendation to buy because Lend Lease was at a low price is clearly flawed in its logic. I can only spot highs and lows with the benefit of hindsight. When employing dynamic analysis, however, I am observing historical data and dealing with facts. I want to benefit from having the balance of probability working in my favour.

I am not seeking perfection... only profits.

7 | LET THE HUNT BEGIN

Ignorance: "It's time in the market, not market timing"

Now that we have the conceptual side of our market strategy locked down, we must put the whole process into practice. Always bear in mind, though, that the most critical part of the process is already behind us. A market strategy based on sound concepts but with poor or inaccurate execution always beats a market approach that is based on flawed concepts but executed with high precision. In other words, even crawling in the right direction beats running in the wrong direction.

How we employ dynamic analysis will depend largely on our personal resources and skills. Whilst some people will go out and spend thousands on the latest charting software and happily pay $50 per month for ASX data, others who are less computer literate will feel more comfortable just using the daily newspaper. To level the playing field for everyone, I distribute a weekly newsletter that contains all of the necessary information for anybody who wants to be an Active Investor (see the back page). Throughout the next several chapters, I will refer to the techniques and indicators which I use in the newsletter, as well as other simpler alternatives. But always bear in mind that understanding the concepts behind the techniques we use is far more important than mastering the finer technical details.

1. Blue Chip Companies with Good Fundamentals

Our search for trading opportunities begins with looking for blue chip companies with good fundamentals. When I needed to use a precise definition of 'blue chip' for my last book, I was astonished to discover that few people agreed on what it was. I thought it was the top 150 companies by market capitalisation; one of my brokers thought it was the top 200 companies and there was no precise definition in my personal library of over 50 books on the stock market.

After I'd rung about 10 people and spent half a day thumbing through my book collection, common sense prevailed – my publisher rang the Australian Stock Exchange and put the question to them. According to the ASX, the answer is the top 500 companies by market capitalisation. So, in one fell swoop we have narrowed the number of trading opportunities down to 500.

The next step is a little more tricky, and definitely more involved, as we start to pick out those companies which have good fundamentals. By good fundamentals, I mean companies that have good financials, sound management, a sustained track record of profits and promising future prospects. We now come up against the problem of defining a set of acceptable fundamental benchmarks. If the experts can't agree about what constitutes a good Price/Earnings Ratio, then how are we supposed to do it? Ben Graham, the father of financial analysis, insisted on a P/E Ratio no higher than 25, and asset backing of at least 66% of the market valuation of the company. Do we adopt his benchmarks or do we look to present-day financial analysts, who are more in tune with today's economic conditions and industrial climate?

What's more alarming is the realisation that if we are to individually assess the fundamentals of 500 companies and monitor them on an ongoing basis, our one-hour working week is looking like a pipe dream. Thinking as a businessman, my answer is to delegate the task to somebody else. Remember the mountain of information that our friend Douglas from the Trader's Club was buried under? Amongst it is the fundamental company research of others who know a lot more about reading financial reports, interpreting financial ratios, and so on than I am likely to learn during the next 10 years. So we'll let them do the hard work for us and concentrate on our own knitting, i.e. dynamic analysis.

There are programs, books and websites which contain, in summarised form, the precise information we're after. One such source is Martin Roth's *Top Stocks* book, which is published annually by Wrightbooks. Each *Top Stocks* contains around 100 of the most fundamentally sound blue chip shares for that year. The stocks are selected using Martin's personal fundamental criteria, explained in the preface of each edition. Martin is a financial analyst with over two decades of experience, and every year he saves me thousands of hours of work by compressing everything I want to know into a book which costs me the measly sum of $24.95 (at time of writing). If his book sold for 10 times that price, I'd still buy it... and happily.

Another source I recommend is a very powerful computer program called STOCKdoctor, an Australian product developed and distributed by Lincoln Indicators. This program uses financial benchmarks developed by Dr Lincoln, a financial analyst, to sift out what the program calls 'Star Stocks'. Star Stocks are public companies that are expected to outperform other, similar stocks. By filtering out Star Stocks which are in the top 500 companies by market capitalisation, we have another list of approximately 100 trading possibilities.

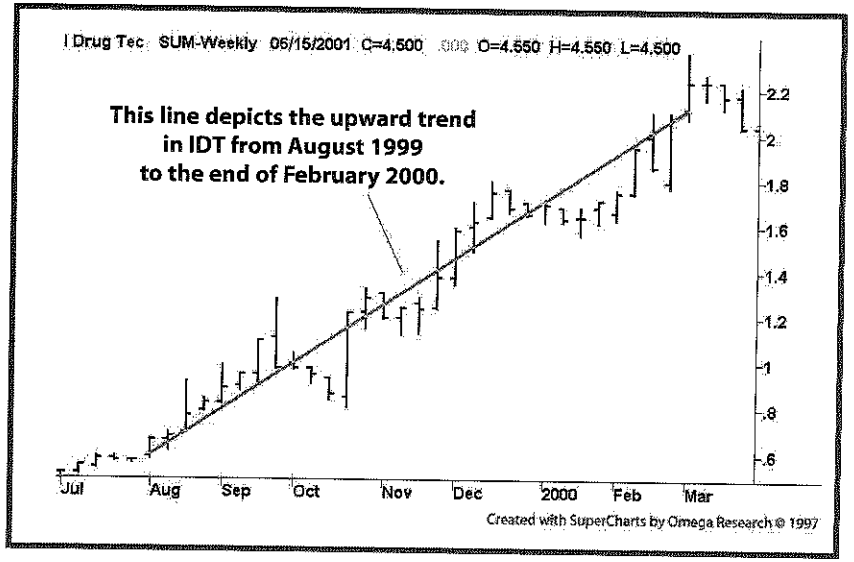
You can shop around for other products similar to *Top Stocks* or STOCKdoctor, or do some research yourself if you are so inclined. At the end of the day, you should have somewhere between 150 to 200 fundamentally sound blue chip companies to subject to further scrutiny.

2. Rate of Return

Out of this pool of 150 to 200 blue chip companies, we want to extract only those which have a rising share price. We also want to compare the rising shares by quantitatively analysing how fast their share prices are rising over time.

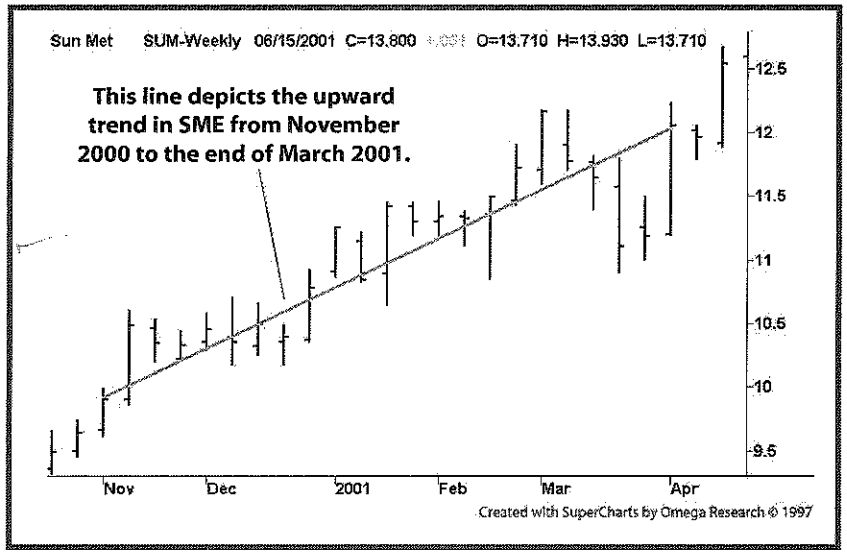
Consider the following chart of the Institute of Drug Technology (IDT). At the beginning of August 1999, the share price was 60 cents; at the end of February 2000 it was $2.10. The line covers a time span of seven months, during which time the share price rose $1.50.

Figure 7.1



Now consider the following chart of Suncorp Metway. At the beginning of November 2000, the share price was $10.00; at the end of March 2001 it was $12.00. The line covers a time span of five months, during which the share price rose $2.00:

Figure 7.2



On the face of it SME appears to have performed better than IDT, given that its share price rose $2.00 in five months, while IDT's only rose $1.50 over seven months. But in fact, the trend in IDT was far more profitable because there was a greater proportional increase in the share price over time. To see this we have to analyse the proportional change in price rather than the actual change in price.

Proportional increase in the share price of IDT:

- Assume that you bought IDT at 60 cents at the start of August 1999.
- Seven months later the share price has risen to $2.10, an increase of $1.50. Therefore the proportional increase on 60 cents is: 1.50 / 0.60 = 2.5.
- Converting 2.5 to a percentage we get: 250%.
- Therefore the share price rose 250% in seven months.

Proportional increase in the share price of Suncorp Metway:

- Assume that you bought SME at $10.00 at the start of November 2000.
- Five months later the share price has risen to $12.00, an increase of $2.00. Therefore, the proportional increase on $10.00 is: 2.00 / 10.00 = 0.2.
- Converting 0.2 to a percentage we get: 20%.
- Therefore the share price rose 20% in five months.

We must look at the *proportional* change in price if we are to compare the profitability of upward trends in different shares of varying prices. We must also standardise the timeframe we are using, or we will suffer distortions in our results.

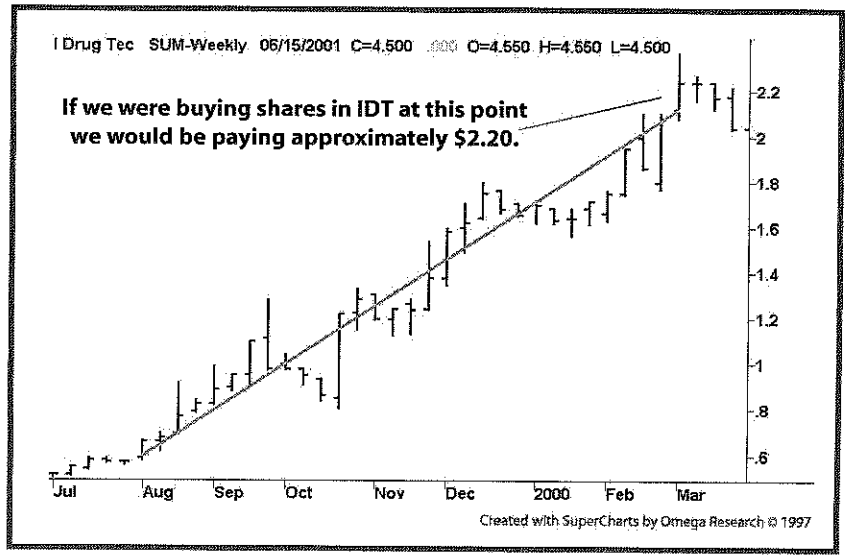
Converting the previous results to annual figures we get:

- 250% in seven months = 429% per annum (250 × 12 / 7).
- 20% in five months = 48% per annum (20 × 12 / 5).

At this point we are *almost* comparing apples with apples. The annual figures given above for IDT and SME are called the annual 'rates of return' and are based on the beginning of their respective trends.

Unfortunately, we now have to accept the reality that we can't travel back in time. IDT's annual rate of return of 429% would only have applied to us if we had bought shares in IDT at 60 cents in August 1999. Let's take another look at the chart of IDT:

Figure 7.3



We can only buy IDT using the price on the right-hand edge of the chart, and this higher purchase price will have a negative effect on our annual rate of return:

- Increase in the price of IDT over the previous seven months is $1.50.
- Proportional change in price over seven months, using $2.20 as the purchase price is: 1.50 / 2.20 = 0.68.
- Converting to a percentage we get: 68%.
- Converting to an annual rate of return we get: 68 × 12 / 7 = 117%.

Therefore, based on the current trend in IDT and the current share price, the annual rate of return that we can expect if the trend remains constant is 117%. To sum up, whenever we measure and compare the rate of return of share prices we must use:

1. The proportional increase in share price over time.
2. A standardised timeframe for comparison, i.e. one year.
3. The current share price as our frame of reference, i.e. our expected purchase price.

Only when we have applied all of the above criteria are we able to compare apples with apples.

Curves and Bends

A further complication, however, is that not all of the shares that we want to analyse will be progressing in a straight line. In the case of both IDT and SME the trends could be defined using a straight line. Unfortunately, we will encounter a lot of shares which will have banana-shaped trends, such as Lang Corporation in Figure 7.4.

If we were to measure the rate of return of Lang Corp by using the price change over one year, we would come up with a different answer than if we had only used the price change over the previous three months. To solve this problem, we must employ a method that is a compromise between these extremes. Figure 7.5 of Lang Corp shows a line of 'linear regression' that is generated using one year of price activity. In other words, it is a line of best fit over the one-year period.

It is not necessary to understand the mathematics behind linear regression, but simply to understand that it is used to calculate a 'line of best fit' over a given period. (Most popular charting programs have a linear regression function.)

Figure 7.4

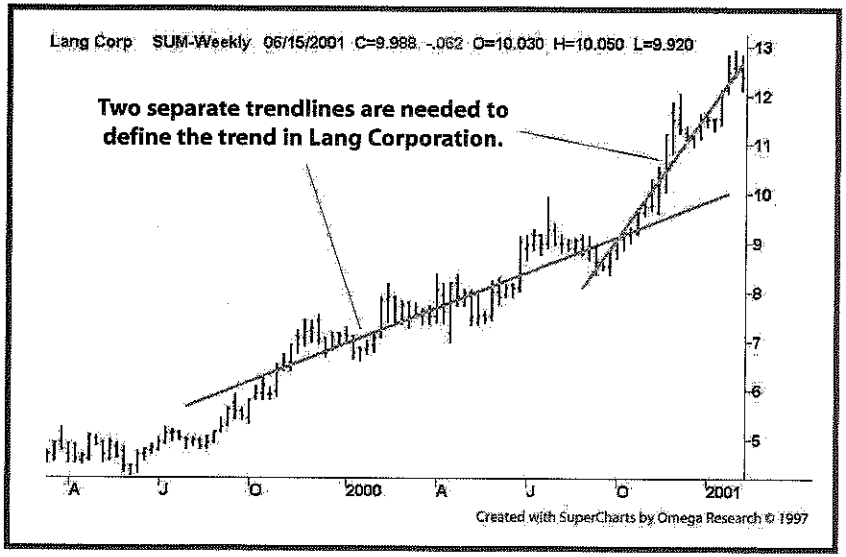
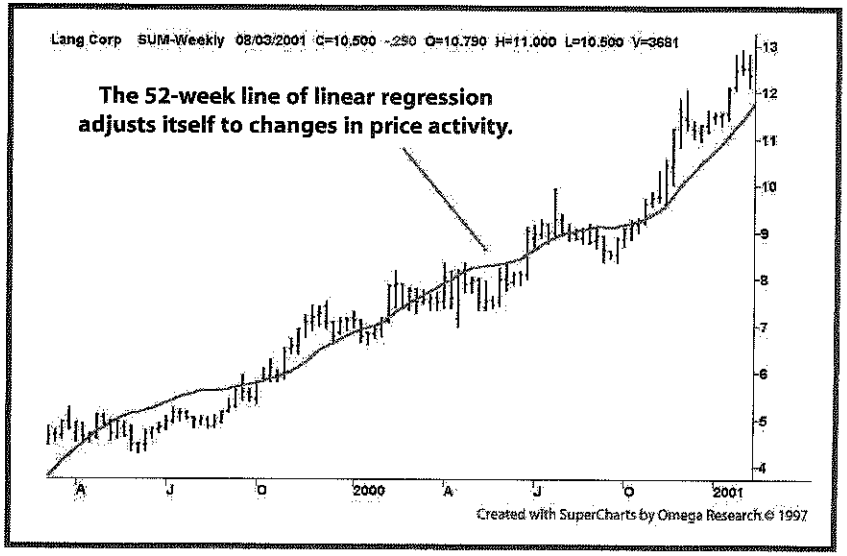


Figure 7.5



Now that we have a smooth unbroken line that depicts the change in price over the previous 12 months, we can use it to calculate the

annual rate of return. We can measure the change in price, over a given period, of a 52-week line of linear regression to find the annual rate of return, as follows:

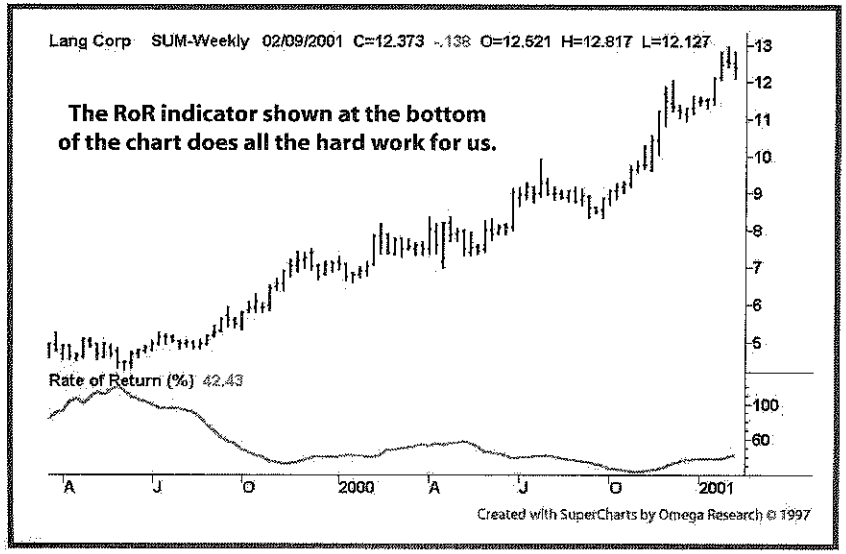
- Value of the 52-week line of linear regression today = $11.67.
- Value of the 52-week line of linear regression six months ago = $9.06. (Six months is a compromise between three months and one year.)
- Current share price = $12.37.
- Annual rate of return = (11.67 – 9.06) / 12.37 = 0.21.
- Annualised and converted to a percentage = 42%.

This is a somewhat convoluted solution to the problem. Fortunately, thanks to the advent of charting software, we can simply convert our calculations into a formula which can be understood by a computer, and have it calculate the rate of return for us.

Rate of Return Indicator

The 'Rate of Return' or RoR indicator can be used to automatically calculate the annual rate of return of shares. It is a classic example of how technology can be employed to make our job easier... it is the product of our needs. If we use the method described above to build our indicator it would look like the following:

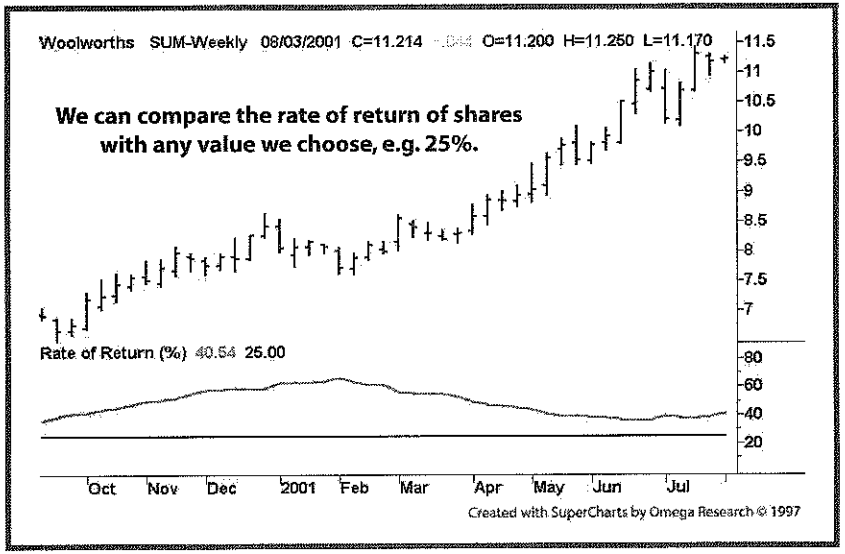
Figure 7.6



The RoR indicator pictured above gives a figure of 42.43%, which coincides with the result we reached with our manual calculations. Although we can achieve different results by sampling the change in price over different periods, it is only imperative that we adhere to our original concept of rate of return and that we are consistent with respect to the sampling period. We are interested in comparing trends rather than trying to come up with a perfect method that gives us perfect answers.

Thanks to the RoR indicator, we now have the ability to analyse all of our 200 fundamentally sound blue chip shares by simply pressing a button. Most charting programs have a search capability which allows us to filter out shares that don't meet our criteria. The following chart shows the RoR indicator with a horizontal line set at 25%:

Figure 7.7



By setting our horizontal bar at 25% we can search through our blue chip shares and eliminate any which have an annual rate of return of less than 25%. After performing this search, our list of 200 shares will be trimmed down to approximately 40 to 50 shares. So, we now have 40 to 50 fundamentally sound blue chip shares which are rising in price by at least 25% per annum.

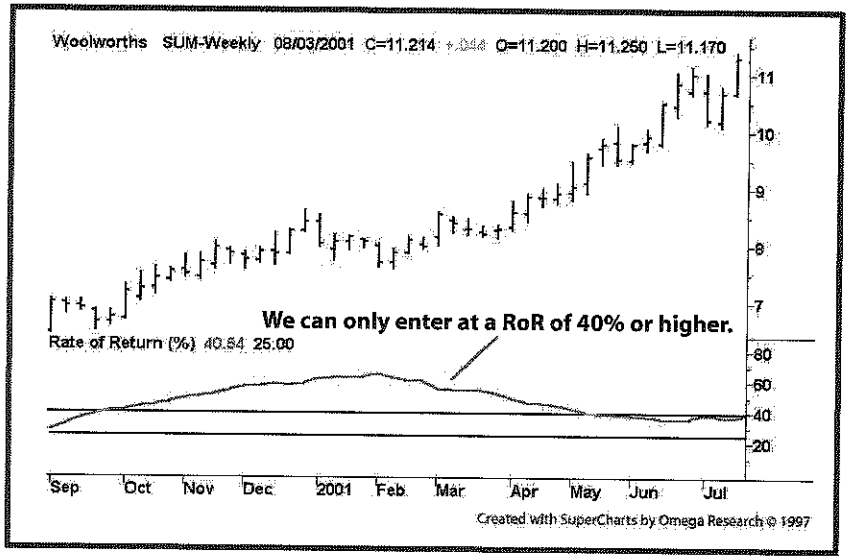
Hence, we have set the benchmark for our portfolio at 25%. We can adjust this benchmark to control the number of shares found by our search – about 40 to 50 shares is ideal, as we can handle this number on an individual basis.

From this point forward we are effectively fine-tuning the whole operation. If we were to try and *lose* money over time using our pool of 40 to 50 fundamentally sound blue chip shares which are rising in price, we would find it very difficult. The balance of probability is now weighted in favour of us making money.

New Trends and Old Trends

Looking back at the chart of Lang Corporation (Figure 7.6) we can see that the rate of return is highest during the early part of the trend and diminishes as the trend progresses. So, although it is not essential, we want to try and get on board trends while there is still some mileage left in them. In other words, if we set our search criteria at 25% and accordingly bought a share with a rate of return of 27%, its rate of return might fall below our cut-off point of 25% in a very short space of time. We need to set an 'entry' rate of return, to ensure that we don't buy into a tired trend. The following chart of Woolworths shows a second horizontal bar – our entry rate of return – set at 40%:

Figure 7.8



Using the 40% rate of return entry level, the highest price we could have bought into Woolworths at would have been approximately $9.00, still giving us a decent bite of the cherry. At a rate of return of less than 40% but greater than 25%, we would *hold* Woolworths but would not be prepared to buy it unless the rate of return increased.

If the rate of return fell *below* 25% then we would sell, because if our money isn't earning at least 25% per annum, we want to find a better home for it. Note that the rate of return will also fall below 25% if the trend simply moves sideways for a prolonged period – another situation which is unacceptable to us. However, blue chip shares may well move sideways for several months at a time. When Woolworths moved sideways in price for nearly four months in early 2001, the rate of return fell but remained comfortably above 25%. We must rely on the RoR indicator to monitor this sideways price movement rather than making decisions using our gut feelings or fallible instincts.

3. A Readymade Market – the Liquidity Issue

Earlier I stated that running an s-store business meant having readymade customers and no supply problems. By this I meant that there are always shares available for me to buy and there will always be someone prepared to buy my shares from me when I'm ready to sell. However, this is only true providing I ensure that the marketplace has plenty of actively involved market participants buying and selling the particular shares I choose. Unfortunately, not all of the top 500 companies – i.e. blue chip shares – enjoy active trading.

Each week shares are bought and sold and the Australian Stock Exchange reports the number of shares which are turned over as well as the price information. The number of shares which are bought and sold each week is referred to as the 'volume' of shares traded. Trading volume is listed in the share price tables of all daily newspapers and appears as a histogram at the bottom of price charts.

Before buying a share we need to check the volume to ensure that there is a good supply of shares for us to purchase and that there are plenty of customers for us to sell to when the time comes for us to do so. Figure 7.9 (overleaf) shows a share with plenty of trading volume – a share with good liquidity. On the other hand, Bidvest, (Figure 7.10, also overleaf) is trending up at over 25% per annum but has very poor liquidity. Note how there are weeks when the price doesn't move at all and when it does, it moves very suddenly. In contrast, BHP's price activity in Figure 7.9 is much more fluid in behaviour. If we were trying to buy shares in Bidvest, we would find a shortage of sellers; and when we were ready to sell there would probably be a shortage of willing buyers. We would find ourselves in the same situation as a store owner with no customers! Store owners say, 'Location, location,

location'. Our equivalent is, 'Liquidity, liquidity, liquidity'. We must ensure that there is plenty of passing trade for our s-store.

Figure 7.9

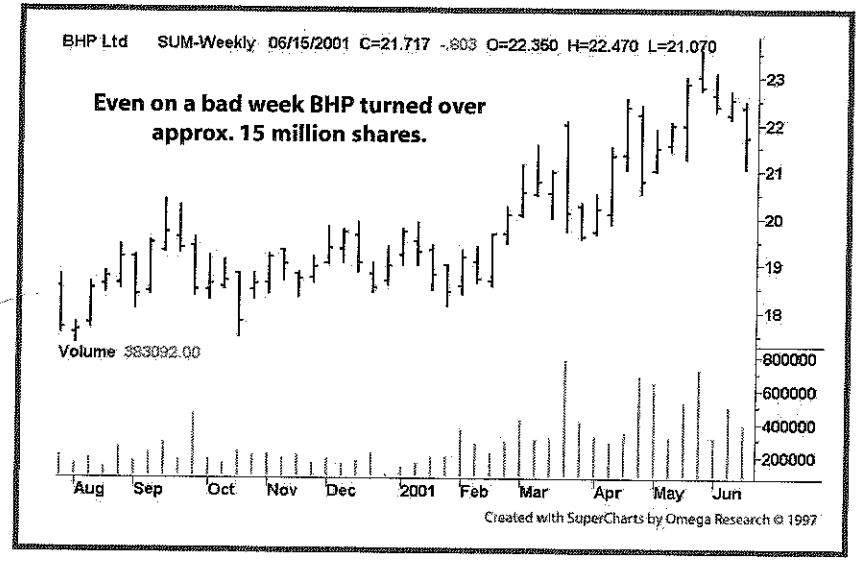
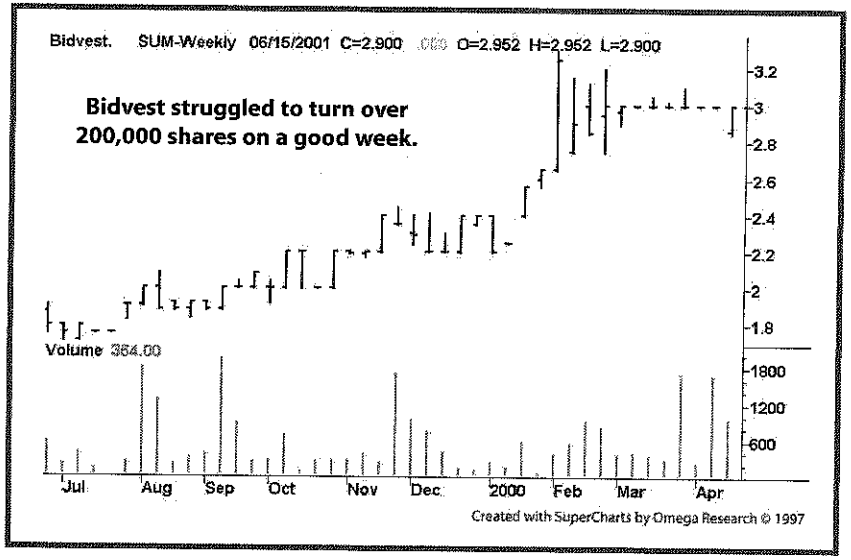


Figure 7.10



So, once again we must establish a benchmark, this time based on 'money flow', which is directly proportional to the trading volume. The money flow, or 'dollar turnover' of a share is calculated by multiplying the trading volume by the current share price. There are two ways of going about the calculation – one is a shortcut of the other, more valid method. We can either: 1. Select a single week which we believe to be typical of the shares' overall behaviour and use it for our calculations; or 2. Calculate the cashflow over the past several months. Whilst the second method is superior, it is a time-consuming and tedious undertaking. Using the shortcut approach, we arrive at the following comparison:

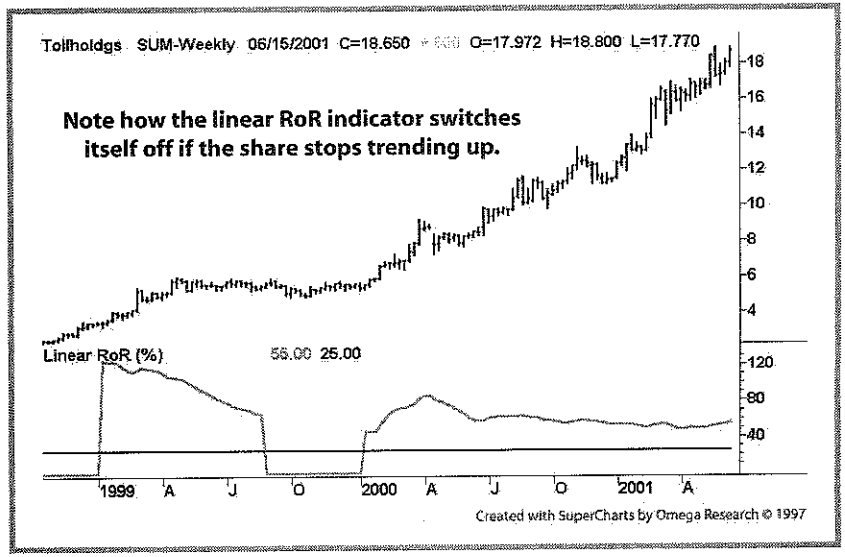
	BHP	**Bidvest**
Trading volume:	20 million	75,900
Price:	$20.00	$2.30
Money flow:	$400 million/week	$175,000/week

A good benchmark for money flow is $1 million per week. So, the liquidity or money flow of BHP is totally acceptable, whereas that of Bidvest is not.

Bringing It All Together

The following chart shows the linear RoR indicator which is used to generate the data in the ActVest weekly newsletter. It tests and measures all of the criteria we have covered in this chapter, excluding fundamentals and market capitalisation (see Appendices A, B and C for more information on how to generate the indicator).

Figure 7.11



The linear RoR indicator makes the whole task of searching for shares much faster and easier, by incorporating all of our search criteria for rates of return and liquidity into a single indicator. It checks for an annual rate of return equal to or higher than 20%, and money flow of at least $10 million per quarter (i.e. 13 weeks). It switches itself 'off' if either of these conditions is not met or if the price activity moves sideways for a prolonged period of time, i.e. four months or more.

As I stated earlier, there is no single correct approach for employing Dynamic Analysis but, rather, a range of different ways in which its concepts can be applied. Similarly, the benchmarks I have used in this chapter are not set in stone. Although they are the result of comprehensive backtesting, they will become obsolete at some point, when market conditions change. If the market slows down over time then we will have to lower our benchmarks in order to find enough trading opportunities. The opposite applies if we enter a bull market. Realistically, we accept that we'll see periods of both bull and bear markets in the future. It is the concepts on which we base our strategy which remain constant.

8 | SEPARATING THE WHEAT FROM THE CHAFF

Cut your losses and let your profits run

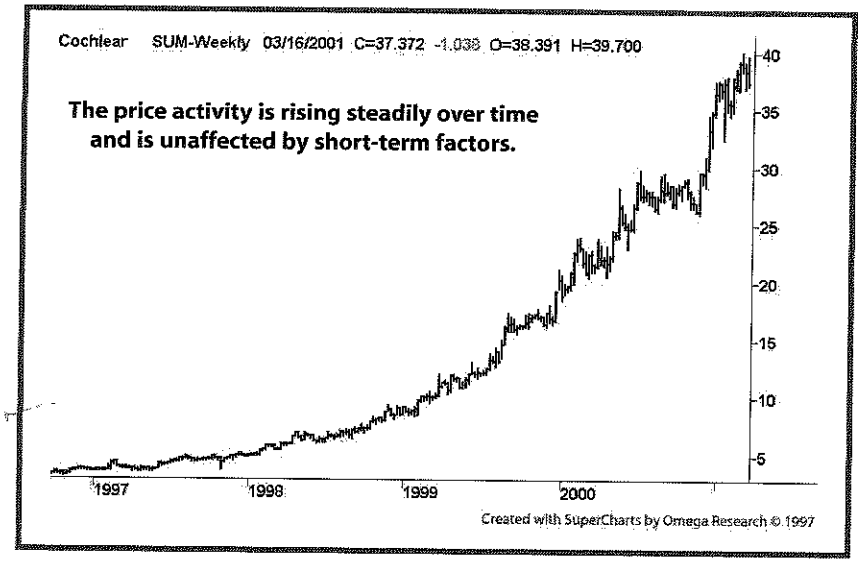
The previous chapter dealt primarily with quantitative analysis and produced a short list of 40 to 50 trading candidates by testing and measuring price and volume activity. If this is all that is required of us, then we should be able to automate the entire process and live happily ever after. However, in order to lessen the impact of short-term factors which affect opinion on our portfolio – rumours, market cycles, speculation, etc. – we need to ensure that a company's fundamentals are the main driving force behind the market dynamic. The specific market dynamic we want to isolate is depicted by the following diagram.

Figure 8.1

The fact that our blue chip companies have good fundamentals doesn't necessarily mean that those fundamentals are the sole cause of rising share prices. We must perform qualitative analysis to eliminate as many of the unpredictable short-term factors which affect opinion as we possibly can. Once again, consider the chart of Cochlear (Figure 8.2, overleaf).

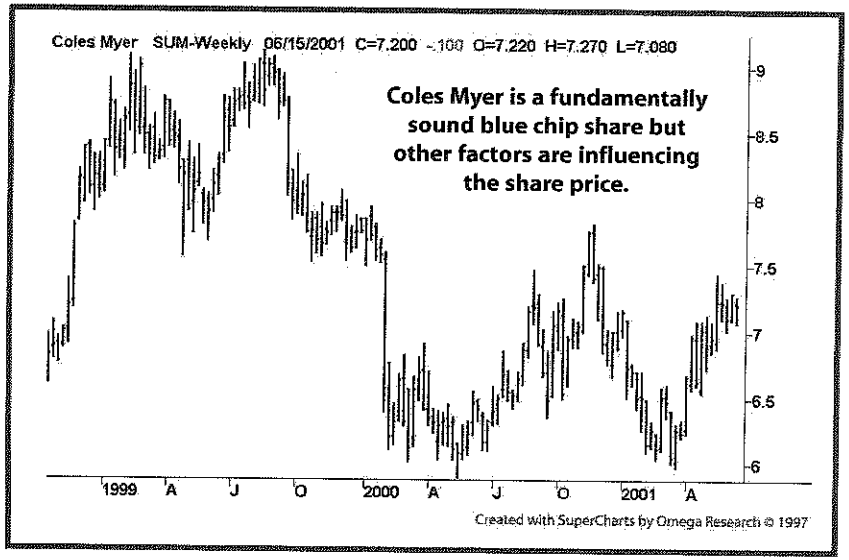
We want to pinpoint shares like Cochlear that will keep us smiling for years and doing very little work to manage our portfolio. Therefore we must seek out shares which are similar in nature to Cochlear, insofar as they are devoid of volatility. The key phrase here is 'shares which are rising steadily over time' where 'steadily' is the key word.

Figure 8.2



Our arch enemy is volatility. Fundamentals are a factor that affect share prices over the long term and don't cause price activity to behave violently. The following chart is also of a blue chip share with good fundamentals, but its share price is being influenced by other factors. This is evident in the short-term, erratic price activity:

Figure 8.3

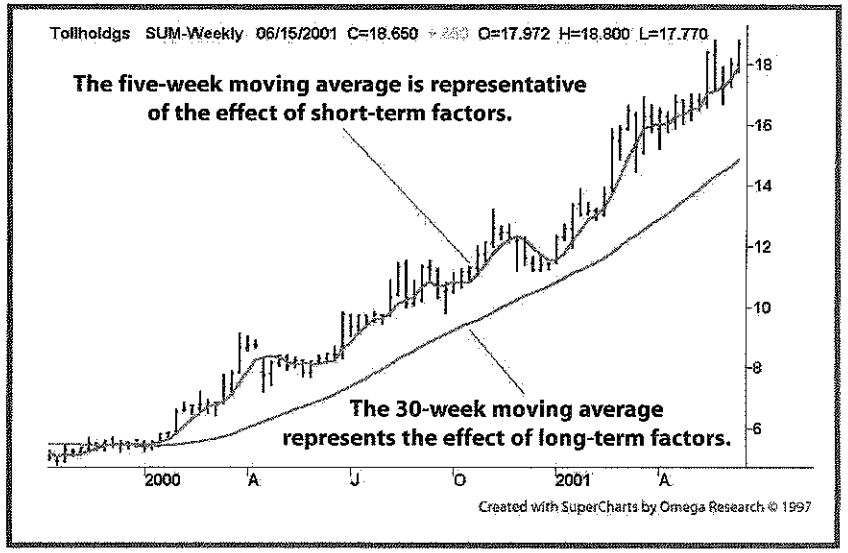


Technically, Coles Myer fits all of our search criteria, but its price chart bears scant resemblance to Cochlear's. At this juncture we can either indulge in endless debate with exponents of other market disciplines about the probable future direction of the share price, or we can simply accept that it is not conforming to our particular market dynamic. I choose the latter option because I'm here to run a business and make money rather than enter into fruitless and time-wasting debate. As you will shortly see, there are usually plenty of shares which do conform to our specific market dynamic.

Multiple Moving Averages

Our assessments of Cochlear and Coles Myer are based wholly on our interpretation of their respective price charts. We can make the job of examining our 50 shares a lot easier by using a charting method which will visually isolate the effect of short-term and long-term factors on shares. The following chart has two moving averages – a short-term average of five weeks and a long-term average of 30 weeks.

Figure 8.4

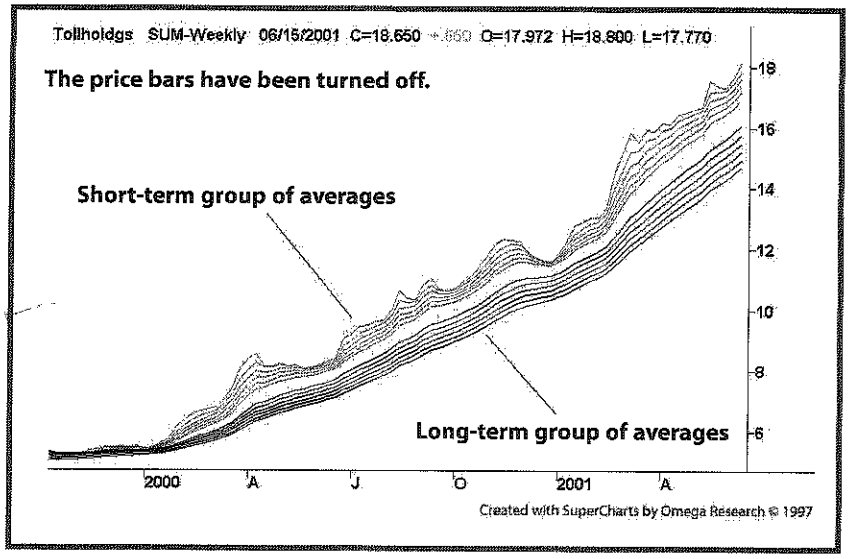


On a short-term basis, we can see that Toll Holdings' share price is repeatedly rising and falling. But in the long term, it is rising steadily.

To enhance this picture even further, we can add more moving averages with different values, and switch off the price bars. The following chart shows Toll Holdings with a group of six short-term

moving averages and a group of six long-term moving averages. (See Appendices A and B for more details on how to generate these.)

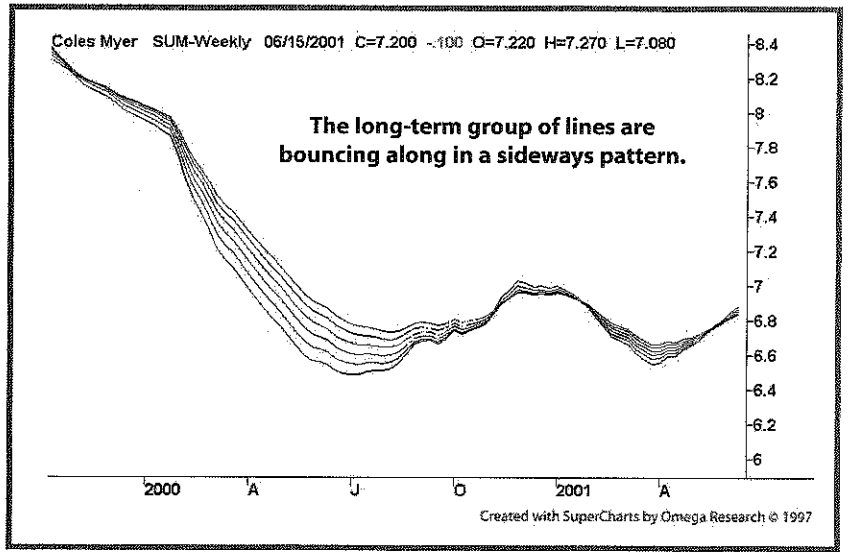
Figure 8.5



Chartists refer to this type of chart as a 'Multiple Moving Average' or MMA chart. The technique of having two groups of averages to represent the effect of short-term and long-term market factors was originally developed by Daryl Guppy. By employing this method we can clearly see the behaviour of price activity in both the short term and in the long term. We are primarily interested in the long-term group of lines because this is the timeframe which is influenced by a company's fundamentals. Note that the long-term group of lines on the Toll Holdings chart is spread apart and running upwards in a parallel pattern. Compare this to the MMA chart of CML (long-term group of averages only) opposite.

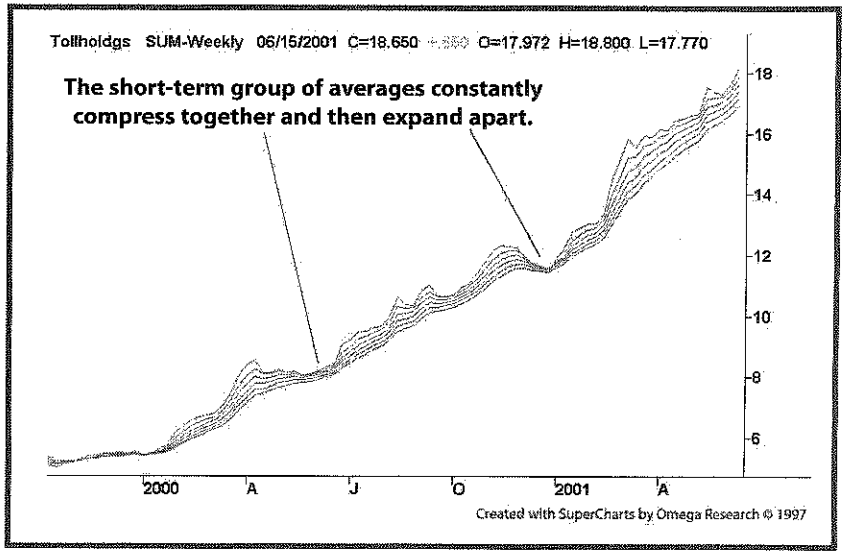
In the case of Toll Holdings, the fundamentalists are in control and are steadily moving the share price up over time. In contrast to this, Coles Myer's good fundamentals are not the key factor influencing its share price. Short-term factors, whatever they may be, are having a large impact. Note how the averages are constantly compressing and expanding as the price activity moves up and down. If price activity moves in the same direction over time, then the long-term group of lines will separate and eventually establish themselves in a parallel formation as they have with Toll Holdings. This is one of the characteristics we are looking for when we observe MMA charts. The long-term group of lines must be either spreading apart or moving parallel to each other, but not be compressing and coming together.

Figure 8.6



Once we're satisfied with the behaviour of the long-term group, we can turn our attention to the short group of lines. Figure 8.7, of Toll Holdings, shows only the short-term group of lines.

Figure 8.7



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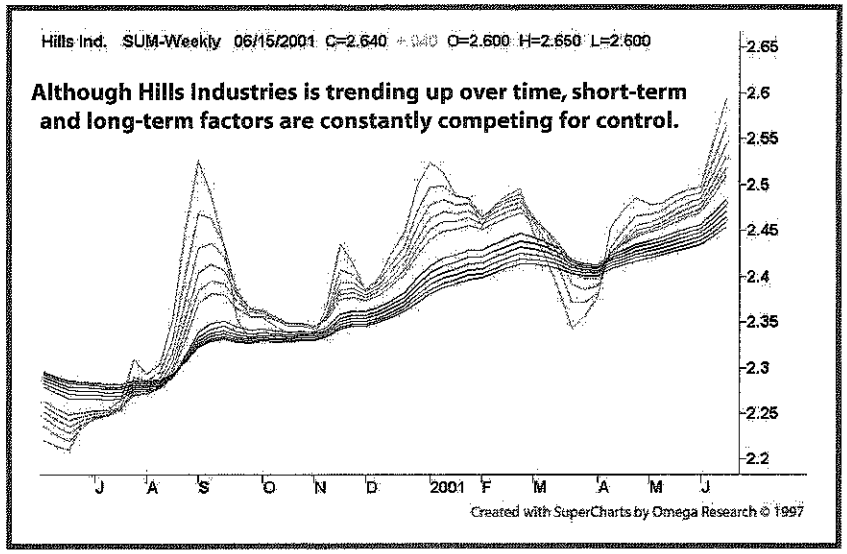
We expect the short-term group of lines to compress and expand repeatedly over time. This is normal behaviour for any share and is indicative of the influence of short-term factors and frequent profit-taking by short-term market participants. We want to ensure that short-term factors are having little to no impact on us and that they never become strong enough to overpower the longer-term factors, namely good fundamentals. To this end, we want to see the short-term group of averages bouncing along in a consistent and uniform pattern.

If short-term factors are capable of taking control of the share price then we will be able to observe this on an MMA chart in crossovers between the short-term and long-term groups of lines. This type of extreme volatility in the short-term group of averages indicates that the balance of control between the short-term and long-term factors is fairly even. The following MMA chart shows an example of this. This is not a situation we want to buy into... literally.

Figure 8.8



To summarise the qualities that we are looking for:

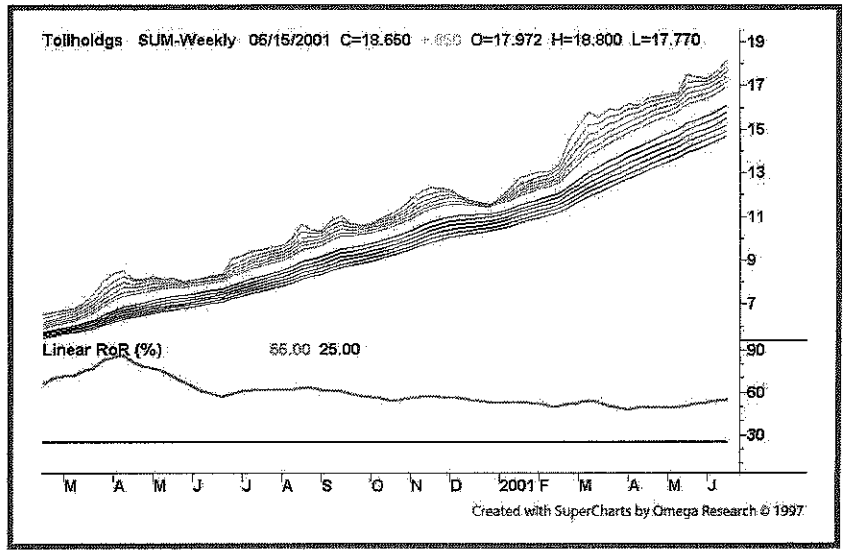
- The long-term group of averages must be spreading apart or running parallel with each other.
- The long-term group must be trending upwards.
- The straighter the long-term group of lines, the better.
- The short-term group should be behaving in a consistent, repetitive manner.
- The short-term group must not cross into the long-term group.

If we seek out shares which have the above qualities, then we should enjoy long-term trends like the ones shown over the following pages. If we work hard today on finding these kinds of shares, we won't have to work tomorrow.

This is the final phase of the hunt, and we should be able to narrow the number of shares down from our pool of 40 to 50 shares to a portfolio size of about 10 using the MMA charts. This part of the selection process should be considered more important than choosing shares with high rates of return. Having good fundamentals in the driver's seat is of primary concern and it should take precedence over optimising profits. I happily own shares which *don't* have sky high rates of return, because they *do* have smooth, gradually rising share prices.

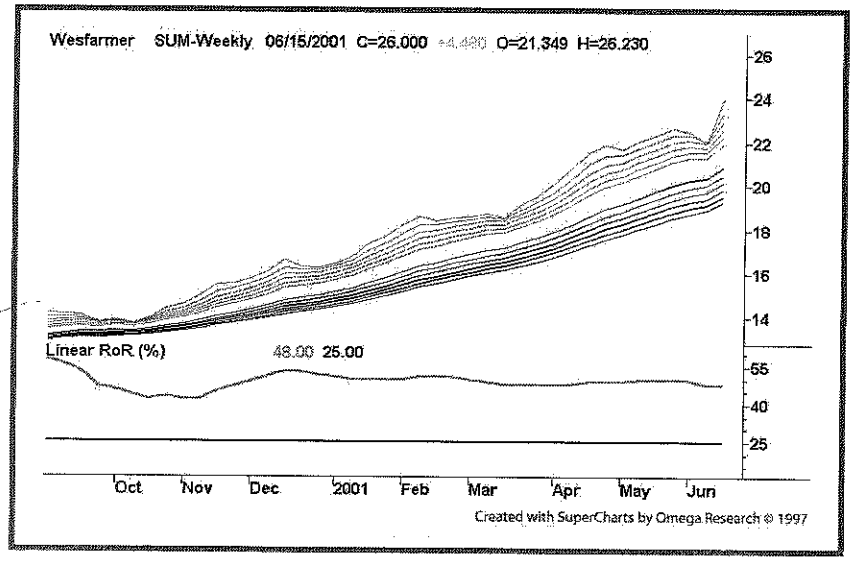
Toll Holdings had been trending up for 17 months and in June 2001 had a rate of return of 55%:

Figure 8.9



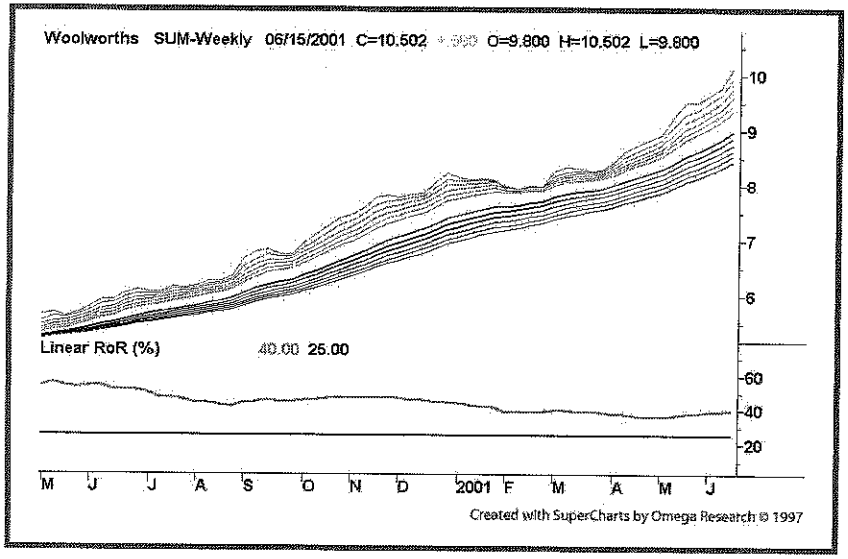
Wesfarmers had been trending up for nine months and in June 2001 had a rate of return of 48%:

Figure 8.10



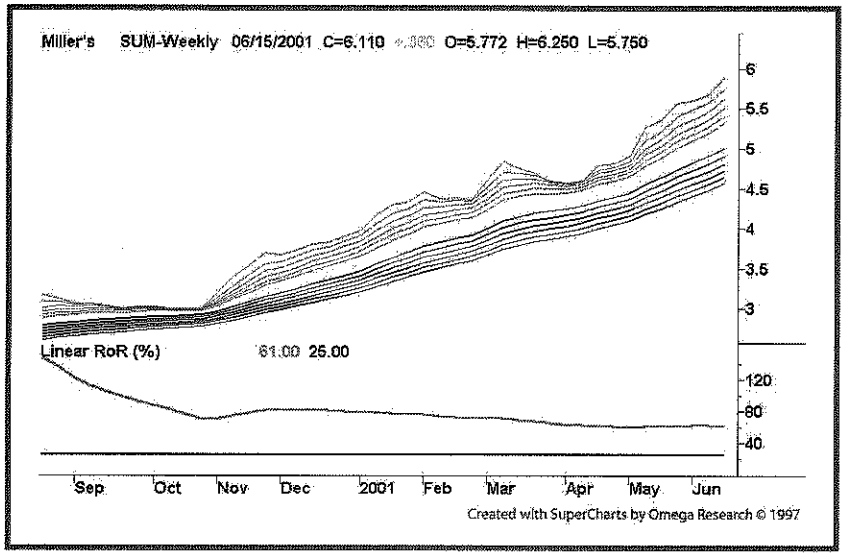
Woolworths had been trending up for 13 months and had a rate of return of 40%:

Figure 8.11



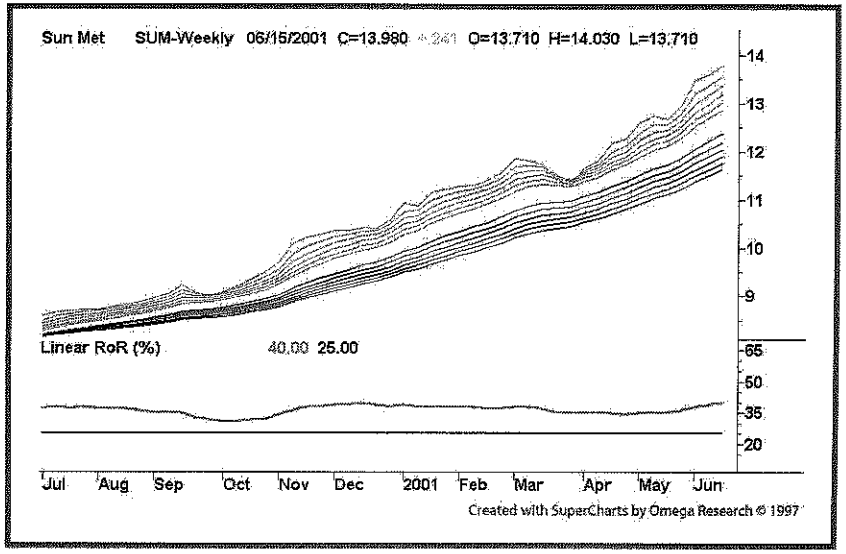
Miller's had been trending up for 10 months and had a rate of return of 61%:

Figure 8.12



Suncorp Metway had been trending up for 12 months and had a rate of return of 40%:

Figure 8.13



Assessing MMA charts is a subjective process and the guidelines given here, mixed with plenty of practice, will help make your opinion profitable. However, unlike the rate of return discussed in the previous chapter, MMA charts do not provide us with any exit signals – they are only used for selecting shares to buy. There are better and less ambiguous techniques for knowing when to sell. Interestingly, knowing when to sell is where most of us get into trouble, as we'll see in the next chapter.

9 | BUY, HOLD OR SELL ..? THAT IS THE QUESTION

No one ever went broke taking profits

Every decision we make is based on faith – our faith in the methodology we're employing to make the decision and in the information we are using. If we lack faith in either of these areas, then we lose confidence in our decisions or even become incapable of making decisions. So, when I walk away from a debate about trading shares, it is a defensive action I take to protect my faith. Some may say that I should try to alter the opinions of others so they can be better traders. But from my own experience in life I know that people who genuinely want help, and are open to new ideas, will ask questions, not give opinions couched as advice. Those who enter into debates are trying to pass their views onto others and this is essentially a waste of time – I rarely meet people over the age of 30 who are prepared to change their thinking radically, unless they are in the midst of a life crisis.

I am an indecisive person at the best of times, so when someone else presents me with more options and variables to deal with, my ability to make decisions is hampered even further. To illustrate, let's look at a simple maths problem with only one variable:

$$2 + X = 5$$

The answer to a one-variable equation can be found simply and easily. As we introduce more variables, the process becomes more difficult:

$$2X + 3Y - Z = 5 \qquad X - 2Y + 2Z = 3 \qquad 3X + Y + Z = 8$$

The more variables, the more difficult the task becomes. This is true in any decision-making process. A mathematician would solve the above problems by eliminating the variables one by one. In the marketplace,

we are presented with a minefield of variables and, rather than eliminate them, most of us actively seek them out! Once again we see the 'prison of knowledge' rear its ugly head.

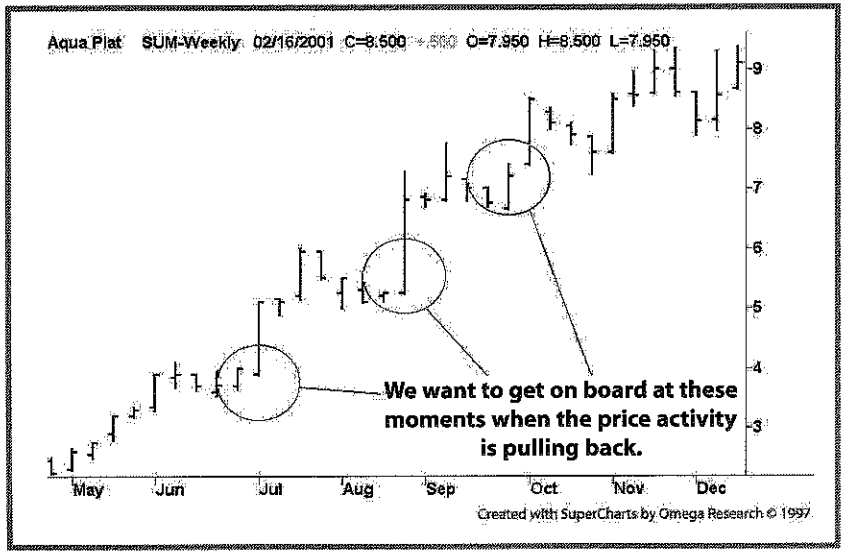
Dynamic Analysis, without ignoring any variables, goes a long way towards narrowing down the number with which we have to deal. To use dynamic analysis effectively we must have faith in the concepts behind it and maintain that faith. If the underlying concepts are brought into question then we can lose our faith.

As a stock market participant I am trying to make profits and run a business, and I don't want to waste my time guarding my faith. I overcome my indecision by automating as much as possible the decisions that I have to make when buying and selling shares. My faith is then constantly reinforced by the profits I make.

When to Buy

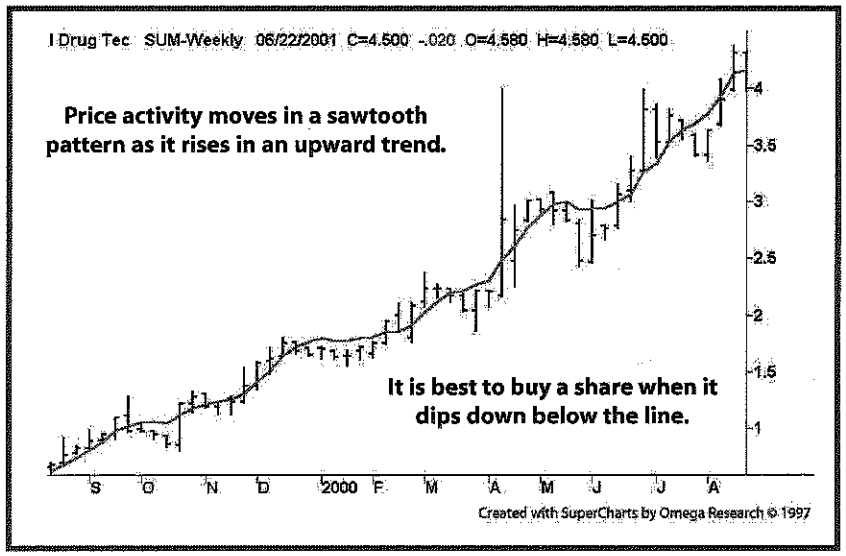
Now that we've chosen a portfolio of approximately 10 shares, we are at the final stage of making the command decision to enter the market. This is where our 'Space Monkey' is going to climb into the driver's seat. He or she must have a set of very simple and completely unambiguous instructions to follow. Our aim is to optimise our market entry by buying into the market during a pullback in the price activity, as indicated on Figure 9.1, but we don't want to rely on guesswork.

Figure 9.1



We must ensure that the process is completely mechanical and there is no room for personal discretion. This is not the moment to question our strategy or be faced with unknown variables. Consider the following chart, which has a 13-week line of linear regression on it:

Figure 9.2



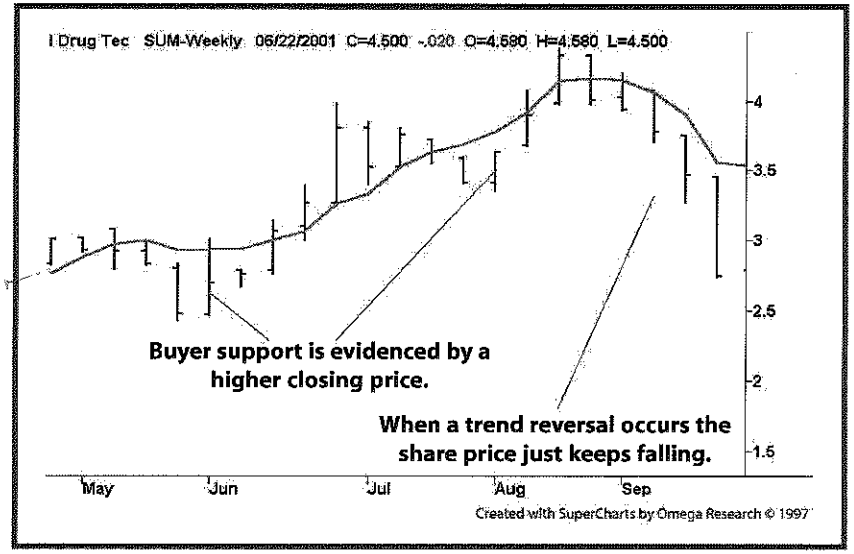
We could just as easily create the above chart with pen and paper and draw a straight line right through the middle of the price activity. The purpose of the exercise is to separate the peaks from the troughs. The peaks are moments in the short-term cycle where the 'bulls', or optimists, are in control and buying the share price up in a rally period. The troughs are created by short-term profit-taking. We want to enter the market when the price activity drops below the line of linear regression during a period of profit-taking.

Psychologically, most of us are more inclined to chase a running market, and we lose interest in the whole exercise when the price activity retreats. That's why we need our monkey in the driver's seat instead of us. From this point on, our personal psychology will be in direct conflict with our actions.

However, we're not going to buy the share when the price activity is actually falling. After all, any period during which the price activity is falling could, just as easily, be a break in the long-term trend as opposed to a period of short-term profit-taking. We need a way of differentiating between a trend reversal and a short-term trough.

The difference is the reappearance of buyers in the marketplace and the resulting price support they provide. Consider the following chart, where we can see several pullbacks and a complete trend reversal:

Figure 9.3



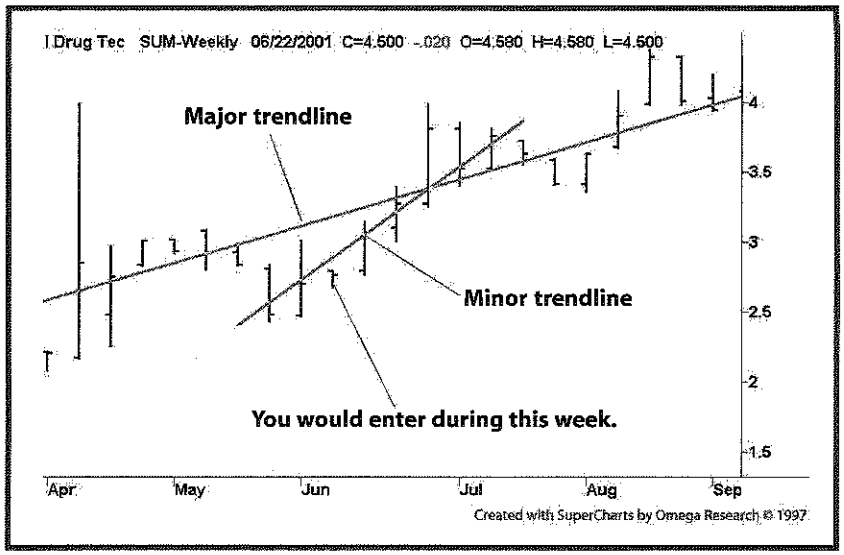
Buyer support can be detected by looking for a week where the price has closed up on the previous week's close. In a trend reversal, this is far less likely to occur and by waiting for it to happen we can avoid buying into a trend at the start of a major reversal.

Once we have witnessed buyer support, we then want to make our move and buy the share during the following week. We are fine-tuning our entry by hopping on board at the start of a minor uptrend within a major uptrend, as shown in Figure 9.4 (opposite).

When to Sell

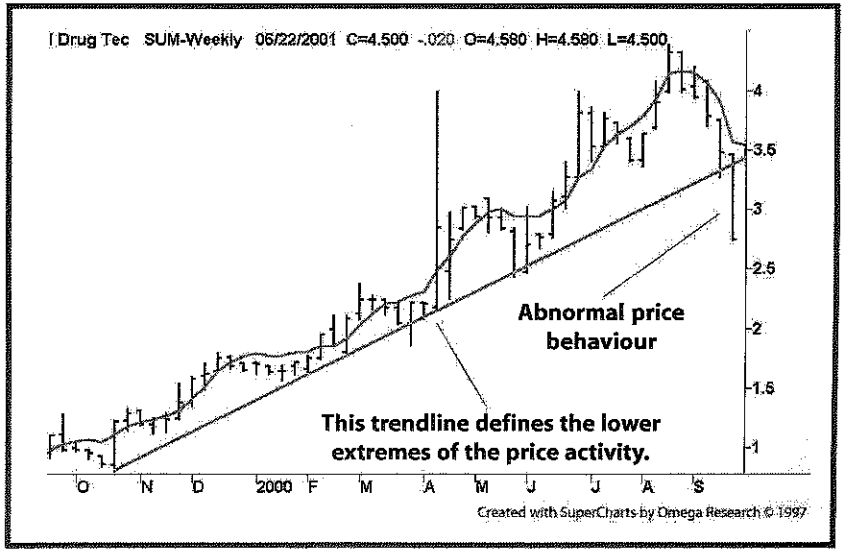
Probably the toughest question for most of us is when to sell our shares. Whilst logic often tells us to cut our losses, either our self-esteem doesn't want to cope with a crystallised loss or we have become emotionally attached to the share. As a result, we seek reasons to justify hanging on to a falling share, rather than working on improving our self-esteem or becoming more objective. Once again, our success will be dependent on our make-believe monkey and a set of clear and unambiguous instructions.

Figure 9.4



Our purpose is simple enough. We want to hold shares which are rising, and sell shares which are falling. This time we need to identify the point at which a falling share price becomes a trend reversal as opposed to a short-term pullback in price due to profit-taking. Looking again at the chart of IDT below, we can observe the overall trend to get an idea of the difference between a trend reversal and a garden variety pullback.

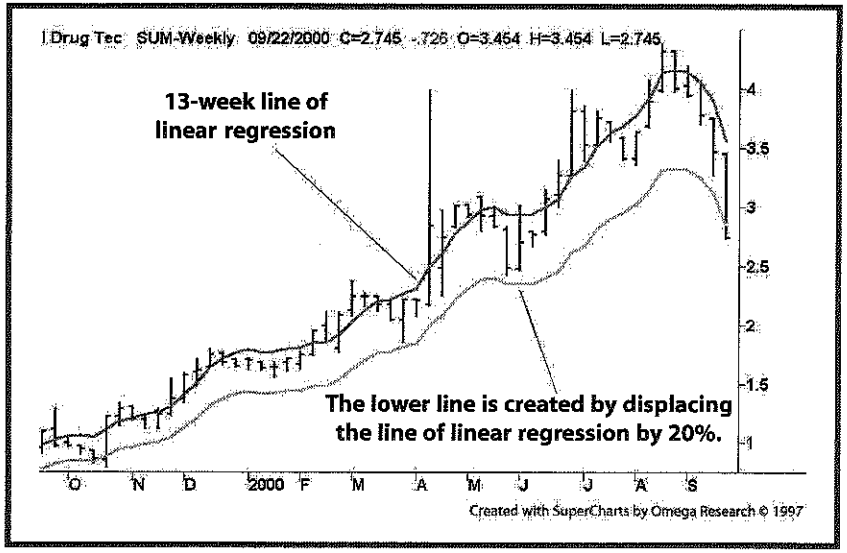
Figure 9.5



By simply drawing a trendline that touches the lower extremes of price activity, we are able to see that the final break in the trend is very much out of character with earlier price behaviour. (I have included the 13-week line of linear regression in the above chart as well, so that the 'Buy Zone' can be clearly seen.) This supportive trendline, set according to the behaviour of previous price activity, is representative of our tolerance towards a falling share price. We can use it as a 'stop loss', which means that should the share price close below this line, we sell the share during the following week. There is no ambiguity in this statement, but the door is still open for naughty monkeys to tinker and reposition the trendline. This is not an uncommon occurrence if our monkey is also the Chief Engineer who placed the trendline in the first place.

An alternative to using a movable trendline is to create a lower line, based on the 13-week line of linear regression. This is achieved by displacing the line of linear regression by a proportional factor, the result of which is shown in Figure 9.6:

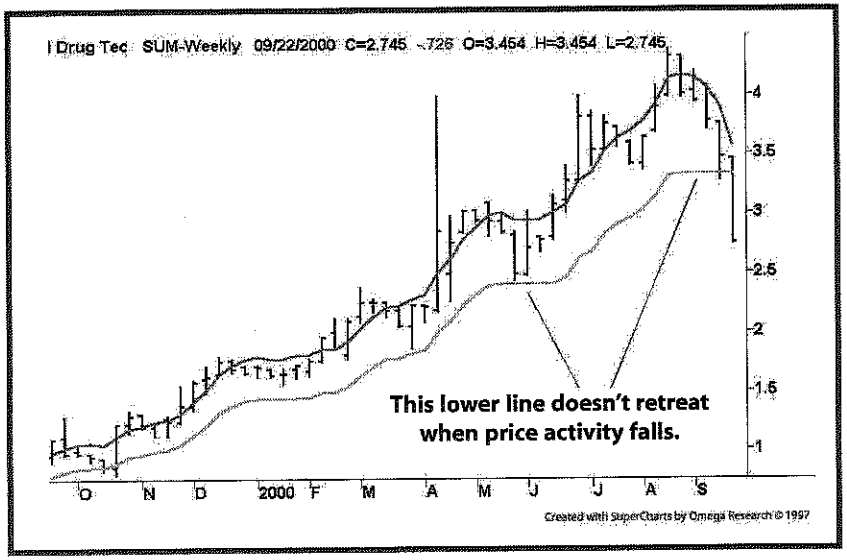
Figure 9.6



However, there is a problem with this approach. Notice how our lower line is retreating in sympathy with the falling share price? We can move a stop loss price up as the trend progresses, but we must *not* allow it to retreat as price activity falls. One of the golden rules of trading is 'never lower your stop loss price under any circumstances'.

The lower line in Figure 9.7 is prevented from falling in sympathy with the price activity. This causes the lower line to 'flatline' during pullbacks in the price activity.

Figure 9.7



We now have a monkey-proof stop loss, which provides us with a totally unambiguous selling signal. When the closing price, the tick to the right of the bar, is below the lower line, we must sell our shares during the following week.

Now it's time to deal with our greed.

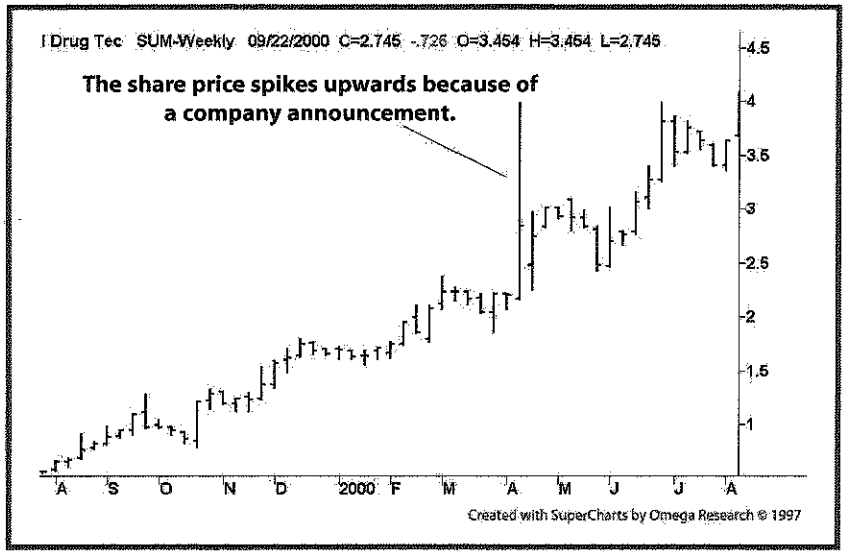
When to Hold and When to Take Profits

In Figure 9.8, overleaf, we can see a week where the price activity was completely out of character and spiked upwards. This happened in reaction to an announcement by the company.

This is a classic example of how news can have a short-term impact on price activity. Most experienced traders avoid using the sophisticated and complex indicators which have come into being over the last decade or so, because they can glean all the information they need by just observing the raw price data. I totally agree with this philosophy of minimising the use of 'rocket science'. In the chart of IDT, I can clearly see the long-term crowd at work, gradually moving the share price upwards over time. In stark contrast to this,

the price suddenly spikes up in early April 2000, out of its normal trading range, and almost doubles in price in the space of one week. But the longer-term market participants quickly regain control and the price activity promptly returns to its earlier trading range.

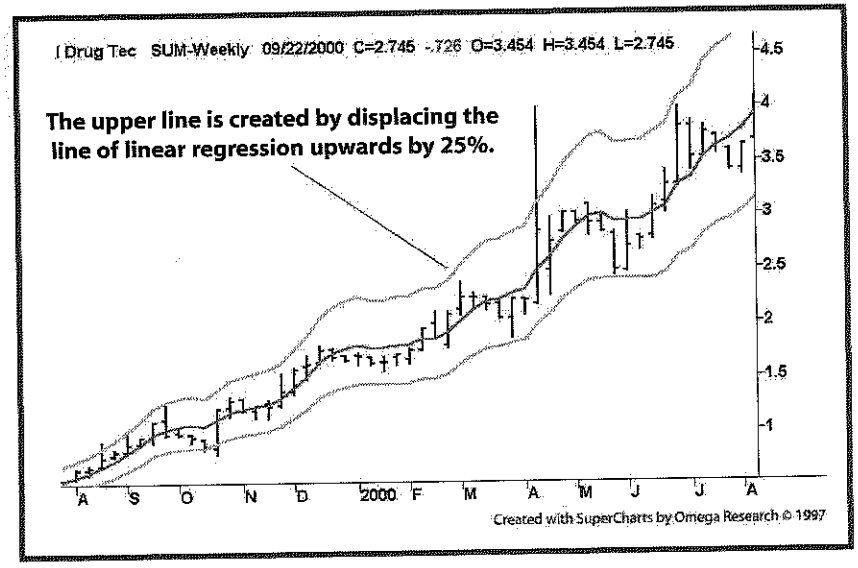
Figure 9.8



We can equate this sequence of events with the steadily deteriorating behaviour of a group of rowdy youths at a football match. At some point, this group oversteps the limits of the larger crowd's tolerance, and is pulled back into line. The market participants who reacted to the company announcement by suddenly buying up the share price don't have the same monetary force behind them as the longer-term market participants. So, in the capital democracy of the stock market where one dollar equals one vote, the long-term view, which controls the bulk of the money, wins out over the shorter-term view. The short-term crowd, though, have left their mark – you can see how the price activity takes on a slightly steeper gradient following the announcement spike. The smaller crowd has been absorbed by the larger crowd. Price activity can be shifted suddenly either up or down but it will, if the larger crowd doesn't disperse, remain within that crowd's tolerances.

Knowing that the larger crowd, who form their opinions using long-term factors, will probably overpower those using short-term factors, we can exploit this type of situation. The upper line in the following chart is created by displacing the line of linear regression upwards by a proportional factor of 25%:

Figure 9.9



The upper and lower lines define the tolerance of the larger, long-term crowd. In a similar way to our stop loss technique, we can use the upper line to tell us when to sell our shares and take profits. If price activity moves above that line then we know, on the balance of probability, that it will return to its earlier trading range. So, it is the ideal time to take quick profits by selling our shares. We always have the option of re-entering the market when price activity dips back below the central line of linear regression.

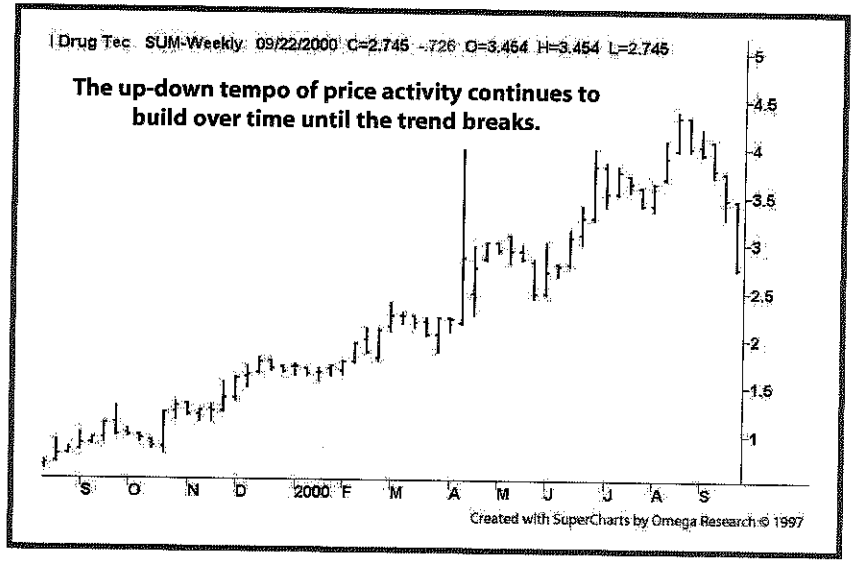
Let's revisit our business objectives for a moment. We are aiming for an annual return on our total capital of at least 20%. We can refine this objective by also defining an upper limit. Being realistic, and bearing in mind that the higher the return, the higher the risk, I am more than content with 50% per annum as an upper limit. By setting an upper limit before entering the market, we are far more likely to make realistic decisions which won't be based in any way on short-term market performance or on any degree of 'irrational exuberance'.

Whilst it is nice to watch shares we own double in price in a period of a few short weeks, it is dangerous to base our longer-term expectations on this type of market behaviour. A 100% increase in price over two weeks is the equivalent of a 2,600% increase per

annum, which is well in excess of our objectives and totally unrealistic! Therefore, we must give our monkey clear instructions to follow which are not dictated by our greed. Remember, designing a good market strategy is about overcoming our personal weaknesses.

Greed is particularly dangerous in this situation because there is an increased probability that the share price will reverse and fall through the stop loss if it has managed to cross the upper line. The sawtooth or zigzagging behaviour of price activity has a strong tendency to accelerate and increase with the passage of time. It rarely builds in tempo and just slows down again. In Figure 9.10, we can see the increasing amplitude in the short-term oscillations of IDT's share price prior to the final break in the trend.

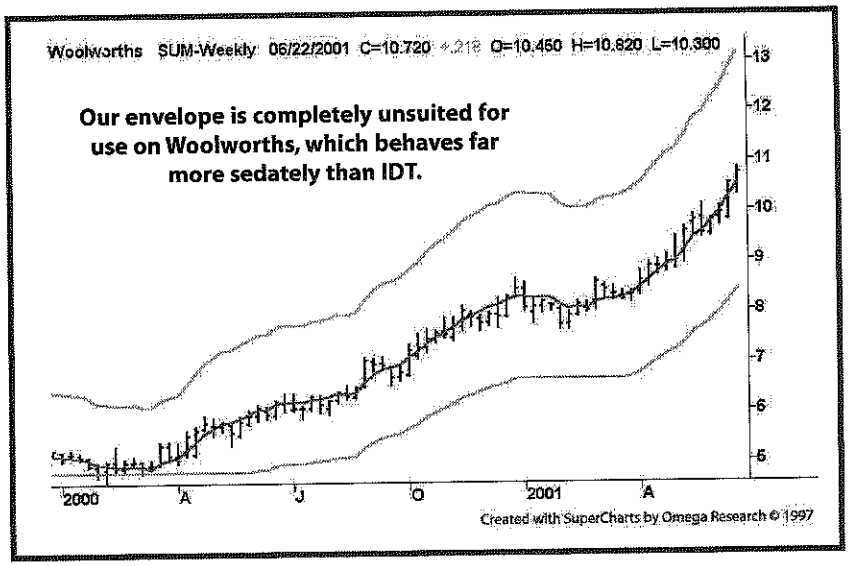
Figure 9.10



Price Volatility

Our market strategy, as well as overcoming our psychological tendencies, must always work in harmony with the normal behaviour of price activity and the forces driving it. Trying to work against these forces is the equivalent of stepping in front of an express train. Every trend, whether it is up, down or sideways, is driven by a specific crowd which is unique in personality. So far in this chapter I have used the example of IDT. I displaced the upper and lower lines by amounts which suited the behaviour of one particular trend in IDT. Figure 9.11 shows the result of using the same upper and lower lines on Woolworths.

Figure 9.11



'Silly' is a word which springs to mind, when looking at the width between the lines on this chart. The crowd behind this trend has a totally different personality to the crowd driving the upward trend in IDT. Unless we want to 'curve fit' our upper and lower lines for every trend we decide to trade, we will have to find a more universal method of positioning the upper and lower lines.

The difference in price behaviour between these two upward trends is their volatility. Putting it simply, the price movements in the trend of IDT are proportionally greater than the price movements in Woolworths. We can also see, by re-examining the charts of IDT and Woolworths, that the weekly trading range of IDT is proportionally greater. The displacement of the upper and lower lines needs to be based on the proportional price movements and trading range of each individual share. Luckily for us, an American trader and author, J. Welles Wilder, has already tackled and solved the problem of how to do this.

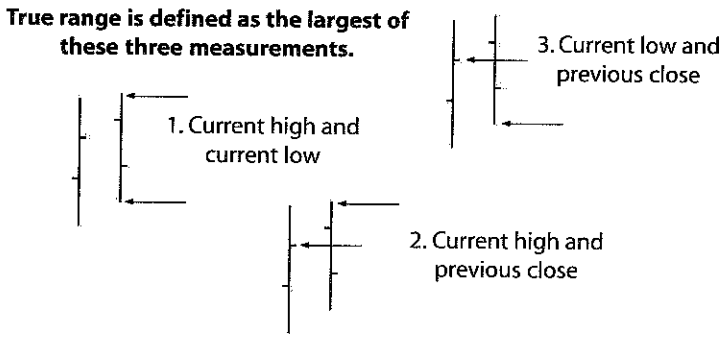
Wilder developed the concept of 'true range', which defines the volatility of price activity, taking into account both the price range during any given trading period and price movements between trading periods. He defined 'true range' as being the largest of three measurements:

1. The difference between the highest price and the lowest price of the current trading period.

2. The difference between the highest price of the current trading period and the closing price of the previous trading period.
3. The difference between the lowest price of the current trading period and the closing price of the previous trading period.

Looking at these three measurements as they appear on a chart will give us a better understanding of them:

Figure 9.12



True range is based on the two most recent trading periods (i.e. in a weekly chart, the previous two weeks) and so is of little use to us if we are trying to measure price volatility over a longer period of time. We have to calculate the average true range in order for us to put the true range concept to practical use. We can select any period of time we like on which to base our calculation. However, since our line of linear regression is based on 13 weeks, we should be consistent and use the same period for calculating the average true range.

The following charts of IDT and Woolworths have upper lines which are displaced by three times the 13-week average true range and lower lines which are displaced by two and a half times the 13-week average true range. The reason for displacing the upper line by a slightly larger proportion than the lower line is that the line of linear regression tends to lag behind the most recent price activity. In an upward trend, this causes it to be displaced slightly downwards.

Figure 9.13

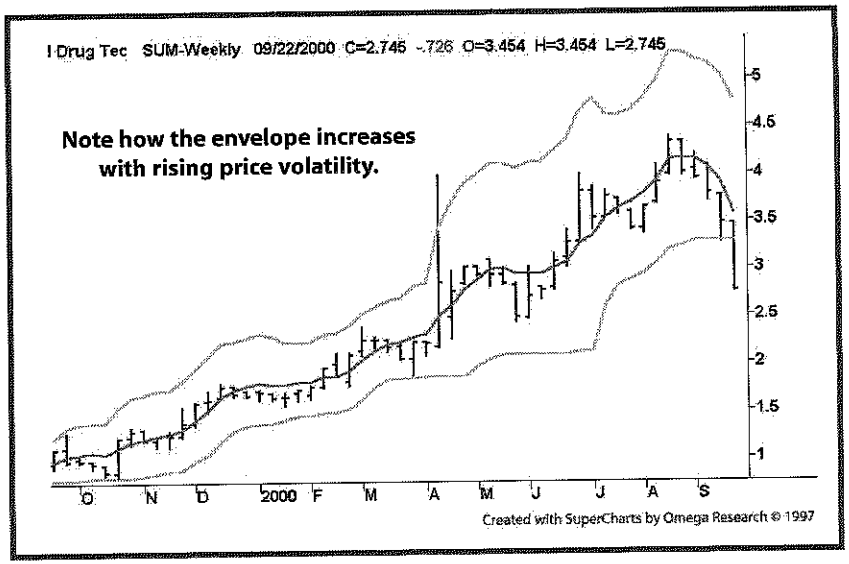
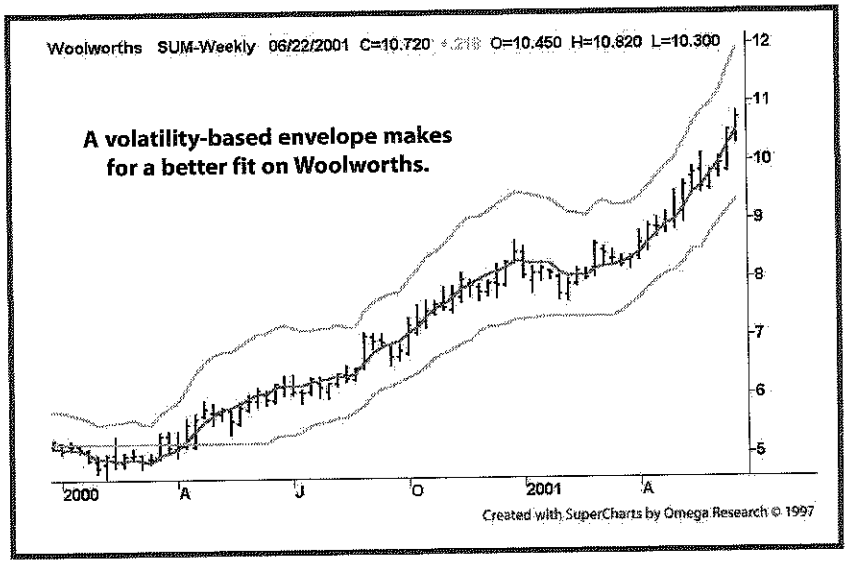


Figure 9.14

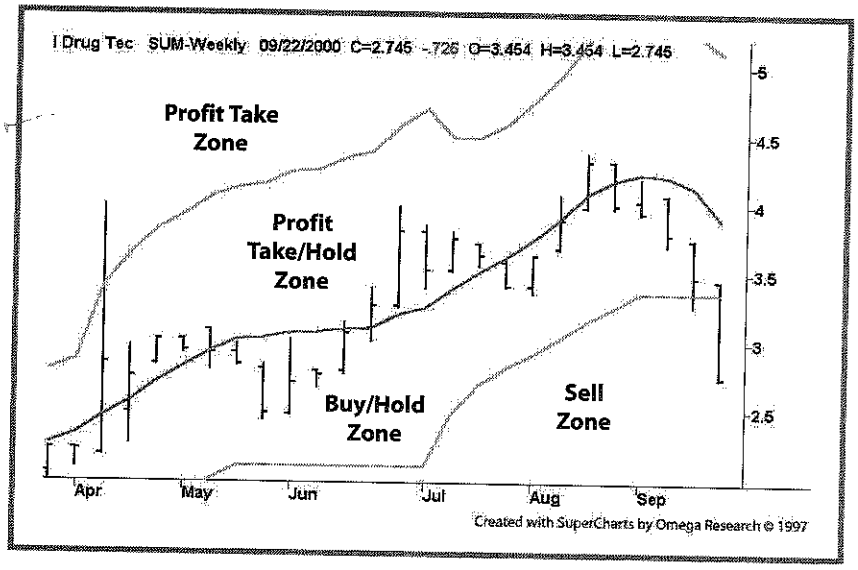


The Range Indicator

The three lines we have discussed create what I refer to as the 'range indicator'. It defines four distinct areas or zones. Our actions will depend solely upon which zone the price activity is in. Although the

construction of the indicator incorporates some rocket science, it virtually removes the need for our Space Monkey to make any discretionary decisions. The following chart shows the range indicator used to generate the data tables in the ActVest weekly newsletter. It uses some complex calculations to smooth the 13-week line of linear regression (see Appendix A). Compare this chart of IDT to earlier ones and you will see the difference.

Figure 9.15



I refer to the three lines as the central cord, the upper deviation and the lower deviation.

The rules I use for the four zones are:

Sell Zone (Stop Loss)

Mandatory **Sell** if the share price closes at the end of a week in this zone.

Optional **Sell** if the share closes at the end of a day in this zone.

Buy/Hold Zone **Buy** the share if it has closed at the end of the week in this zone and the closing price is higher than the previous week's closing price. The share must be purchased during the following week at a price between the lower deviation and the central cord. **Hold** if already owned.

Profit Take/Hold Zone **Hold** if the share price is in this zone or you may elect to **take profits** if the position is up by 10% per month or more (10% in four weeks, 30% in 13 weeks, etc.).

Profit Take Zone

Mandatory **Take profits** if the share price closes at the end of the week in this zone.

Optional **Take profits** if the share price is in this zone at any time.

The key to being successful relies on having a set of rules. If there is a problem with our rules then we can always change them. But a monkey without a set of rules will inevitably get up to mischief.

10 | IT'S MANAGING THE LOSSES THAT MAKES YOU PROFITABLE

Diversification is the result of risk management... not vice versa

Risk management could just as easily be referred to as loss management. Successful market participants are successful because they focus on, and manage, their losses. Whilst fixating on profits is an enjoyable pastime, it will do little more than make you feel good. A survey in the United States showed that 20% of people in the stock market succeeded in making money over the long term and this coincided with the fact that only 20% of people used risk management techniques. It has also been proven, on more than one occasion, that risk management combined with random share selection can generate profits.

On this basis, we shouldn't have to make any assumptions about the performance of our market strategy in order to manage risk. There are three elements that we can manage when we are buying and selling shares and they are:

1. The balance of probability.
2. The scale of payouts – i.e. the value of winning versus the cost of losing.
3. The size of our positions – i.e. the size of our wagers.

Although I don't want to in any way confuse buying and selling shares with gambling, it is useful for the purposes of illustration to compare share trading with simple games of chance. Most of us at some point have played the game of tossing a coin. One person wins if heads comes up and the other person wins if tails comes up. Let's look at how the three elements apply to this game.

1. The balance of probability: even or fifty-fifty.

   Tossing a coin is considered to be a fair game as both players have an equal chance of success. For every toss of the coin where heads wins there is an equal number of tosses where tails wins.

2. The scale of payouts: typically one to one.

   Both players wager the same amount of money on each toss of the coin, and the winner takes back his or her original wager and the corresponding wager of the other player.

3. The size of the positions, i.e. the size of the wagers or bets.

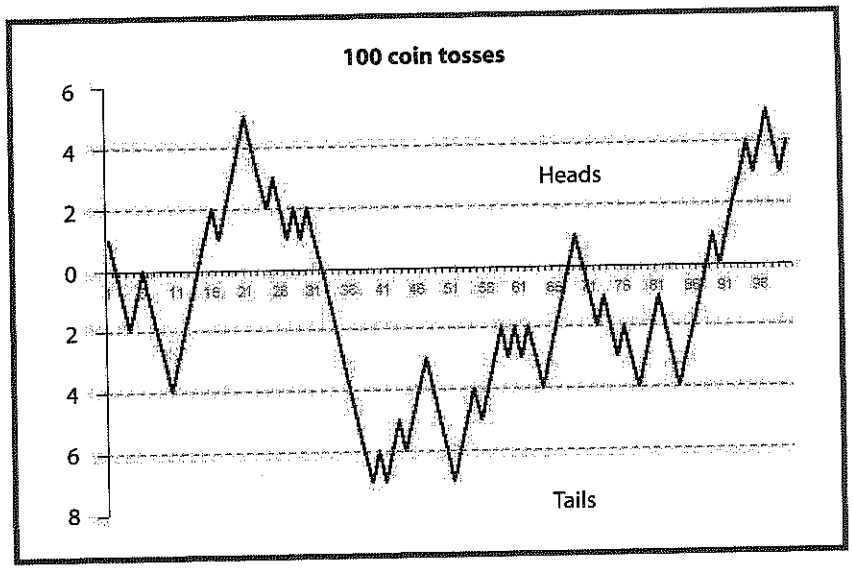
   Typically in a friendly game of coin toss both players will use the same size bet for every toss of the coin. This means that for each toss of the coin they will always wager a set amount of money and not increase nor decrease the size of the wager as the game progresses.

This harmless game of chance is often played by children who wager for matchsticks or some similarly innocuous commodity. If the game is played in the manner I have described, then the chances of winning or losing are equal and it is considered to be a fair game. If you play for long enough you should always break even, and ultimately there will be no winners or losers. We can now look at how we can increase our chances of winning by managing the three elements of the game.

We cannot alter the probability of the outcomes (the first element), and our chances of winning each toss of the coin will always be fifty-fifty. Of course, if our opponent is silly enough we can set an uneven payout scale (the second element), where in the event we win our opponent pays us two dollars, and if we lose then we pay our opponent one dollar. But it is highly unlikely that our opponent would be agreeable to such an unfair arrangement.

However, it is imperative that the size of our wager (the third element) allows us to remain in the game long enough to win. If we are losing the game, we can continue to play until we return to the break-even point. But the moment we are in front, we should quit. We may walk away with a black eye, as many have done when playing two-up, but we will be in profit. The chart opposite shows the balance of outcomes of tossing a coin 100 times.

Figure 10.1



Over the course of our 100 tosses the balance of outcomes swung around the break-even point of zero. At specific moments during the process either heads or tails had the balance tipped in its favour. Having performed this experiment we can conclude that the balance of outcomes can reasonably be expected to deviate by four in either direction and can peak as high as seven during the course of 100 coin tosses. Using this information we can now establish a set of rules for managing the risk of a simple game of tossing a coin:

- We must be prepared to play the game 100 times.
- We must be able to sustain a maximum of seven losses.
- We must quit as soon as we are winning by four tosses.

  (NB: The experiment of 100 tosses is inconclusive and has been used for illustrative purposes only.)

Thus, tossing a coin, although a fair game of chance, can be managed to increase our probability of success. The risk of loss is virtually eradicated providing the probable outcome of a game is, at worst, break even and providing we can continue to play the game for as long as we like.

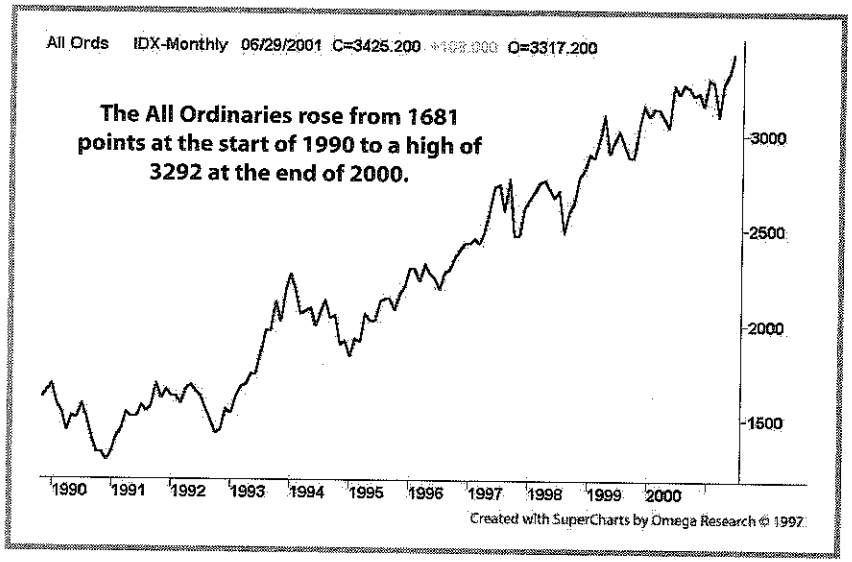
Surprisingly, in the stock market the probability of success is actually tipped in our favour. If we were to randomly select a portfolio

of blue chip shares and hold them for an indefinite period of time then the probable outcome would mirror the average performance of the entire stock market.

Frame of Reference

The average performance of a stock market over time is defined by the behaviour of its index, providing that the index in question is technically accurate. The All Ordinaries Index represents approximately 90% of the Australian stock market in terms of its market capitalisation and can be considered an accurate indicator of the overall market. The following chart shows the performance of the All Ordinaries Index over the 11-year period from the beginning of 1990 to the end of the year 2000:

Figure 10.2



Over this 11-year period, the All Ordinaries rose an average of 8.7% per annum. But looking at the chart we can see that there were years where the Index did in fact lose ground, such as 1994.

When tossing a coin, our frame of reference, in terms of our probable success, is 0%. In the stock market, our frame of reference is the performance of the All Ordinaries Index, which over the last century has risen approximately 9% per annum. Therefore, when we evaluate the success or failure of our market strategy, we must benchmark it against 9% per annum. If a market strategy is returning 9% per annum then it is performing no better than random share selection would. If a strategy is returning *less* than 9% per annum then random share selection would be a superior method!

When evaluating someone else's strategy, such as that of a fund manager, it also makes sense to compare it to the All Ordinaries. There is little point putting capital in a fund that outperforms the All Ordinaries by 2% per annum if the annual administration fees are 2% or more. My five-year-old daughter could do just as good a job of investing money.

The Law of Averages

Given the good news that the market invariably rises over the long term it is astonishing that the majority of people who enter the stock market are unsuccessful. This is largely due to people's inability to stay in the stock market long enough to exploit the law of averages. The lifespan of an American stock market trader is typically seven trades, where women survive an average of nine to ten trades and most men last for only five to six trades. Risk management is about surviving long enough to be able to exploit the benchmark of 9% per annum as a frame of reference for our market strategy. By simply surviving in the stock market we can achieve a positive result, unlike in a game of coin toss.

Passive investors will often use this fact to justify their 'buy and hold' philosophy of share ownership and to refute the use of risk management and stop losses. Their arguments are completely valid, providing they don't expect to outperform my daughter and her suction-cup dart set.

We can regulate the amount of money which we can lose from each position and thereby ensure our long-term survival in the marketplace. Even though our benchmark is 9% per annum in our favour, it is quite common to suffer a string of up to eight consecutive losses. If our total capital is $50,000 and we were to lose $5,000 on eight consecutive occasions, our total capital will be reduced to $10,000 in a very short space of time. Individuals who held on to technology stocks throughout 2000 will be able to relate to this. However, we can sustain a string of repeated losses if we only risk a

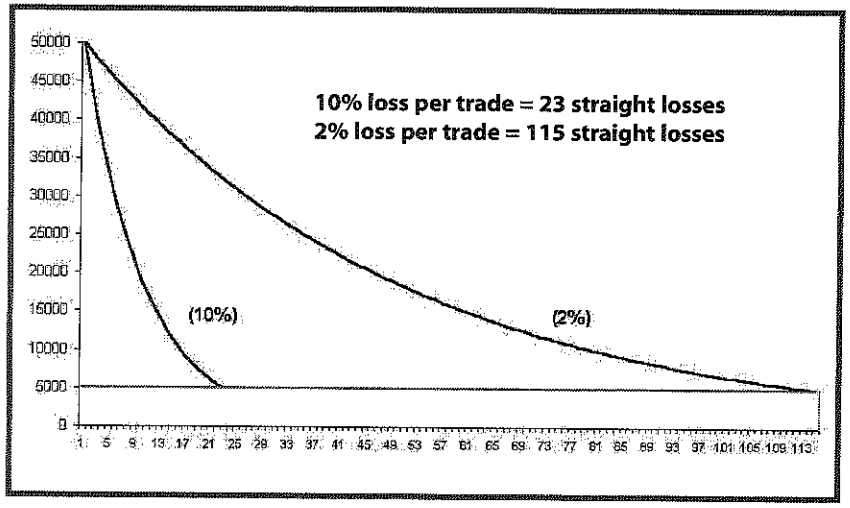
percentage of our total capital on each share that we buy. Let's look at an example:

- Assume that we have $50,000 total capital.
- On each new position (i.e. each new share we buy) we will only risk 10% of our current total capital.

Loss	Amount lost	Total Capital after the loss
1	$5,000.00	$45,000.00
2	$4,500.00	$40,500.00
3	$4,050.00	$36,450.00
4	$3,645.00	$32,805.00
5	$3,280.50	$29,524.50
6	$2,952.45	$26,572.05
7	$2,657.20	$23,914.84
8	$2,391.48	$21,523.36

This method of regulating our losses gives us the ability to calculate the number of losses it would take for us to be put out of the marketplace. Let's assume that we're starting out with $50,000 total capital and once we have reached $5,000 then we can no longer remain in the stock market. The following graph compares a 10% loss per trade with a 2% loss per trade:

Figure 10.3



Three guesses as to which rule of thumb successful market participants employ! By using a 2% risk rule we can sustain up to 115 consecutive losses, assuming that we ignore the cost of brokerage. This is a reasonable assumption, as our frame of reference of 9% per annum, when applied to a capital base of $50,000, will more than offset our annual brokerage fees.

Whenever I teach the 2% risk rule in my seminars I always joke that if you ever reach 100 consecutive losses then you should immediately stop what you're doing and give me a call. I make this suggestion for two reasons, the first one being that your market strategy obviously requires urgent review. The second reason is that I have never come across anybody in all my years of trading that has ever achieved this negative going benchmark. Hence my unwavering faith in the 2% risk rule which will only ever come into question should I ever receive such a phone call.

Before going any further into the mechanics of risk management, it is essential to understand that no amount of risk management will turn a losing strategy into a winning one. If a market strategy consistently loses money over time, then risk management will only prolong the agony. We must constantly test and measure our market performance to ensure that our market strategy is working for us and not against us. In the case of active investing I consider it prudent to analyse my performance on a half-yearly to yearly basis. Analysing my returns in a shorter timeframe is unrealistic given the nature of blue chip shares. Checking over a longer timeframe would be foolhardy – as good businessmen or women, we must keep our fingers on the pulse.

Using Stop Losses

To apply the concepts of risk management we must use stop losses, which we looked at in the previous chapter. We cannot manage our losses unless we are prepared to sell shares which are falling. A common method employed by casual investors is to buy shares that are closer in price to their 52-week lows than they are to their 52-week highs. The idea behind this simple technique is that the share carries less downside risk than it has upside potential.

To avoid clouding the issue of risk management, we will accept that this method has some degree of merit. But most casual investors fail to test this strategy properly, because they don't have the discipline to sell the shares when they fall to their 52-week lows. By not selling at the 52 lows they are not limiting their downside risk at all.

The toughest action that any of us will ever have to take as market participants is to realise our losses. Ironically, the ability to take a loss is the difference between success and failure in the stock market. Only if we have a predetermined stop loss can we calculate and manage our risk. Here's an example:

- We have $50,000 total capital and we're using the 2% risk rule.
- Assume that the closing price of a share is $12 and we have set the stop loss price at $10.

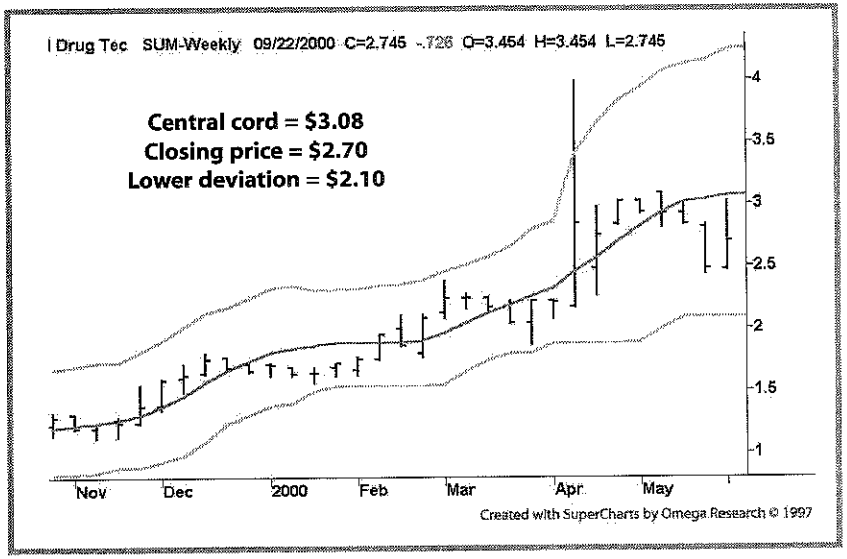
  (It is always assumed that the closing price, i.e. $12, is going to be our buy price.)
- The potential loss per share is: $12 – $10 = $2.
- The amount of money we are prepared to lose is: 2% of $50,000 = $1,000.
- Divide $1,000 by $2 to get the number of shares we can buy = 500 shares.
- Multiply 500 by the closing price of $12 to get the position size = $6,000.
- Divide $6,000 by $50,000 and multiply by 100 to get the percentage of total capital that can be spent on this position: ($6,000 / $50,000) × 100 = 12%. (This is also referred to as portfolio weighting.)

To limit our risk to 2% of our total capital, we must purchase no more than $6,000 worth of shares or use no more than 12% of our total capital, and sell when the share price drops to $10.

As active investors, we have the advantage of using the range indicator, covered in the previous chapter, which gives us a predetermined stop loss price for performing our calculations. Using the chart of IDT opposite, we will do the calculations using figures derived from the range indicator.

Looking at the right-hand edge of the chart, we can see that the price activity has fallen into the buy zone and then closed up for one week, indicating the presence of buyer support. The green light is flashing for an entry and it's time to do our risk management.

Figure 10.4



However, there are a couple of disadvantages to using the closing price as our entry price in the calculations. The first problem is that the share price could move higher when the stock market opens on Monday morning. We would then be forced to redo our risk management calculations during the trading day. The second problem is that we have not allowed for our brokerage fees. A quick and easy solution to both of these problems is to use the value of the central cord rather than the closing price for doing our sums:

- We have $50,000 total capital and we're using the 2% risk rule.
- The central cord price is $3.08 and the lower deviation price is $2.10.
- The potential loss per share is: $3.08 – $2.10 = $0.98.
- The amount of money we are prepared to lose is: 2% of $50,000 = $1,000.
- Divide $1,000 by $0.98 to get the number of shares we can buy = 1,020 shares.
- Multiply 1,020 by the central cord price of $3.08 to get the position size = $3,142.

- Divide $3,142 by $50,000 and multiply by 100 to get the percentage of total capital that can be spent on this position: ($3,142 / $50,000) × 100 = 6.3%.

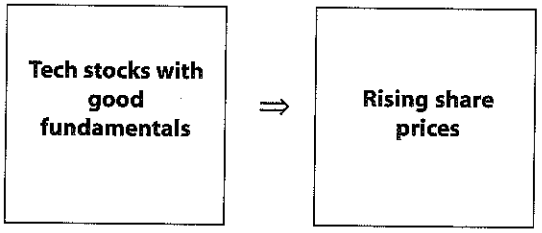
So, on Monday morning I will ring my stockbroker and issue my instructions, "I want to purchase $3,142 worth of IDT and I will pay up to $3.08 per share". It's his job to work out the number of shares that need to be purchased and my job to monitor the stop loss on a weekly basis. The weekly newsletter includes the 2% risk rule calculations for all of the shares listed and gives the 'Percentage of total capital' that can be spent on each position.

Sector Risk

The type of risk that we have looked at so far is referred to as 'position risk'. We now need to consider the other forms of risk that we will be exposed to in the stock market.

In 1999 and early 2000, technology stocks dominated the landscape. Our Dynamic Analysis block diagram was looking lopsided, in favour of the multitude of technology stocks that were trending up at the time:

Figure 10.5



Our 'Fundamentals' filter was doing a good job of keeping out many undesirables but any fundamentally sound blue chip shares that were remotely connected with technology were trending up. These shares were rising in price solely because of the 'tech bubble'. Whilst these shares qualified as potential trading opportunities, investing in them meant exposure to a sector which was being driven up predominantly by speculation. Some fundamentally sound blue chip shares rode up on the back of the Technology sector, only to be brought down as well when the bubble burst.

We must limit our exposure to the risk of speculation in any sector which becomes fashionable, such as Technology in the late 1990s or Resources (i.e. nickel) in the early 1970s. The limits we place on our sector risk must take into account both our total capital and the number of individual positions we have in any particular sector. The following example explains why:

- We have $50,000 of total capital and we will limit our sector risk to 30% of total capital.
- Assume that we will spread 30% of $50,000 ($15,000) across six positions.
- Our position risk is 2% per share and therefore our total position risk per sector is 12%.
- A sector crash occurs and we sell all of our six shares when they reach their stop losses.
- We have lost a total of 12% of our total capital, which equals $6,000.

Whilst we have limited our exposure to a sector crash to 30% of our total capital, we have still suffered a loss of 12% of total capital. We could have halved this loss simply by limiting the total amount of position risk to 6% per sector. Using the 2% position risk rule this would have forced us to search for only three shares to use up the entire $15,000 (30% of $50,000), instead of spreading it across six separate positions.

A sector crash, such as the tech-wreck of April 2000, is a catastrophic event. We may suspect that a catastrophic event is about to occur, but the timing of such events is relatively unpredictable. The only way in which we can limit our risk to catastrophic events is to limit the amount of capital that we have exposed to them. Additionally, we sell our shares when they hit their respective stop loss prices, and to protect ourselves against multiple position losses in a single sector, we must limit our total position risk per sector as well. The maximum amount of total capital that I allocate per sector is 30%, and I limit my total position risk per sector to 6%.

Portfolio Risk

'Portfolio risk' is the danger we face from our own market strategy and/or our mistakes in implementing it. Part of the process of

Dynamic Analysis is the qualitative assessment of MMA charts. It would be presumptuous to assume that our judgement of these charts is always correct. We are also relying on the research and opinions of others when it comes to finding shares with good fundamentals. Our market strategy is designed to shift the balance of probability in our favour as opposed to being the perfect answer to buying and selling shares. Unless we are prepared to pay for arrogance in hard currency, we need to limit our exposure to our own fallibility. So, portfolio or 'system' risk is the sum total of our position risk and is calculated by multiplying the number of positions we own by the risk per share:

- We are using the 2% risk rule and we have seven different shares in our portfolio.
- Therefore our portfolio risk = 2% × 7 = 14%.

In the same vein as limiting our total position risk per sector, we must limit our risk to the entire market. In the event of a stock market crash – another unpredictable and catastrophic event – our total exposure based on the above example is 14% of total capital. This assumes that we manage to sell our shares close to our stop losses, which is the only workable assumption that we can make.

To manage our portfolio risk we must establish guidelines that govern the number of shares that we have in our portfolio.

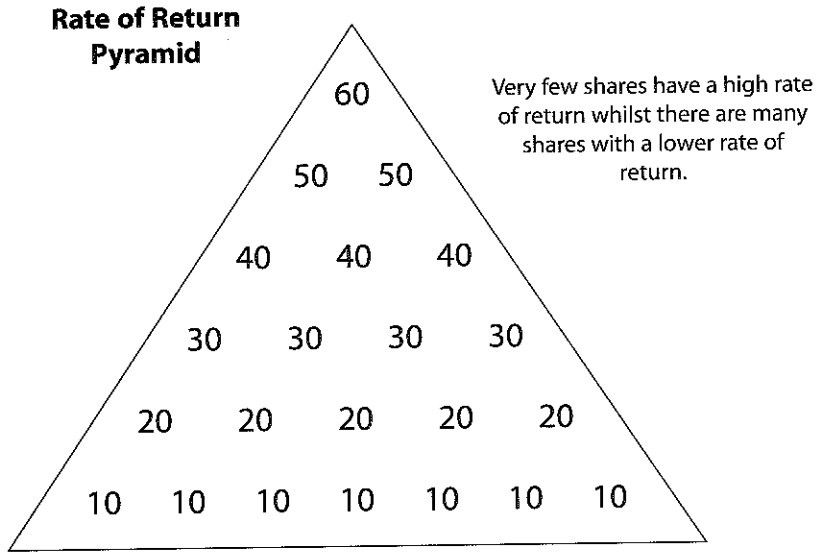
Using the 2% risk rule:

- Our portfolio can have a minimum of five shares and a maximum of 10 shares.
- No single position can be greater than 20% of our total capital.
- No single position can be less than $1,000 or brokerage will hinder our returns.
- Our minimum starting capital must be $10,000.

Note that the more positions we have, the higher our portfolio risk. If we diversify our portfolio unnecessarily then we will be doing ourselves more harm than good. So, we always want to minimise the number of positions we have in our portfolio.

A higher number of positions will also reduce our returns, because there are only a limited number of shares with high rates of return. The rate of return pyramid, below, illustrates that there are only a small number of shares which give the highest possible rate of return. If I only own five shares then the bulk of my holdings will probably be tucked up near the top of the pyramid.

Figure 10.6



But if we arbitrarily set the minimum number of positions that we own to 15 then we will be forced to accept a lower average rate of return on our portfolio. Under the 2% risk rule, the minimum portfolio risk is 15 × 2%, which equals 30%. We would be better off owning just five shares with an average rate of return of 40% to 50% and total portfolio risk of 10%, than 15 shares with an average rate of return of 30% and portfolio risk of 30%. Diversification should be the *result* of risk management rather than a form of risk management within a share portfolio.

Risk Management versus Buy and Hold

We can quickly and easily test the virtues of risk management versus buying and holding by applying both techniques to a sample portfolio. We will:

- Use a portfolio of eight shares.
- Set the risk management stop losses by using a 21-week Simple Moving Average (SMA) – i.e. if a share closes below its 21-week SMA then we will sell it.
- Use even weighting for each position, and our total capital will be $20,000.
- Select eight shares that are trending up at our starting date of July 2000.
- Select a mixture of new and established trends.

The purpose of this exercise is to test the basic concept of employing stop losses to limit downside risk. We are not applying the 2% risk rule, nor are we selecting shares by using dynamic analysis. We will, however, limit our portfolio to blue chip shares. The following table shows our buy price and the value of each position at the beginning of July 2000:

Company	Code	Buy price	Position size
AGL	AGL	$9.70	$2,500
Blackmore	BKL	$5.70	$2,500
Caltex	CTX	$2.85	$2,500
I Drug Tec	IDT	$3.80	$2,500
Orbital	OEC	$1.94	$2,500
Toll Holdings	TOL	$9.73	$2,500
Westfield	WSF	$11.36	$2,500
Woolworths	WOW	$6.11	$2,500

Figures 10.7 and 10.8 (opposite) show what our portfolio of shares looked like at the start of July 2000 and their 21-week simple moving average stop losses. These are weekly charts and they show just over one year of previous price activity.

Figure 10.7

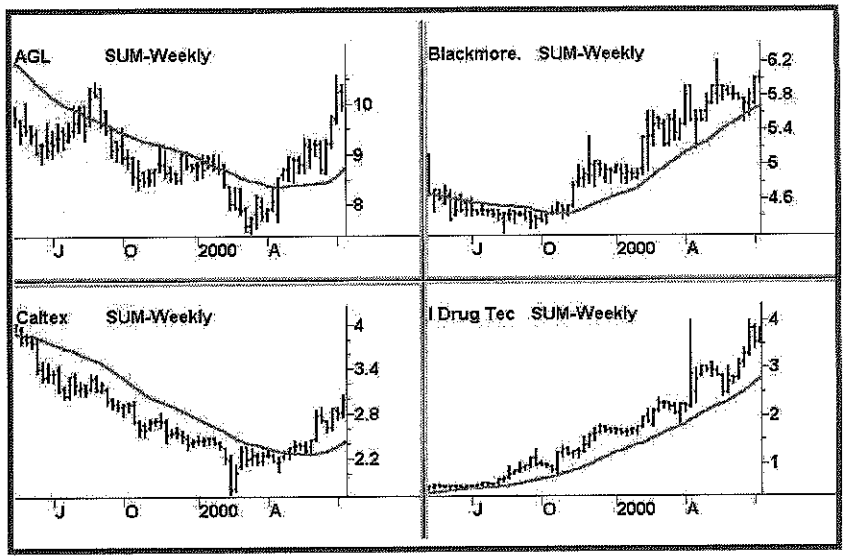
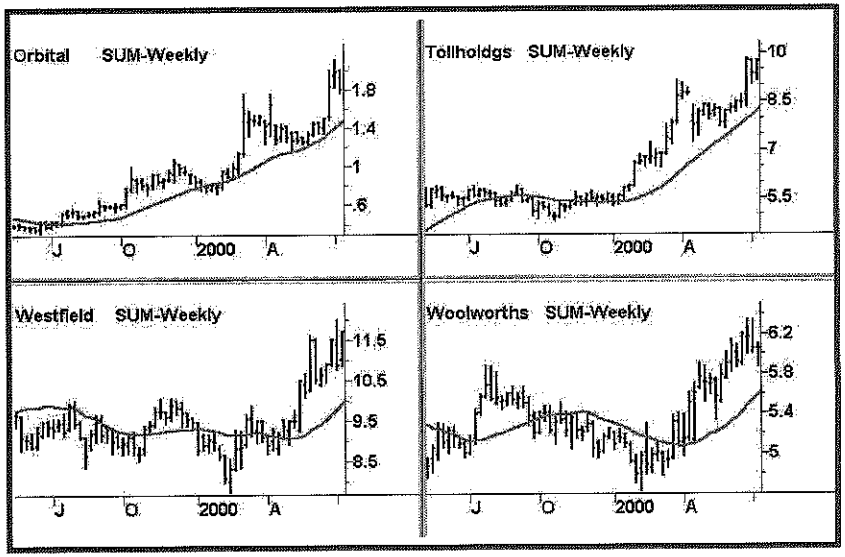


Figure 10.8



The charts on the following page show what our shares looked like at the end of June 2001, one year later.

Figure 10.9

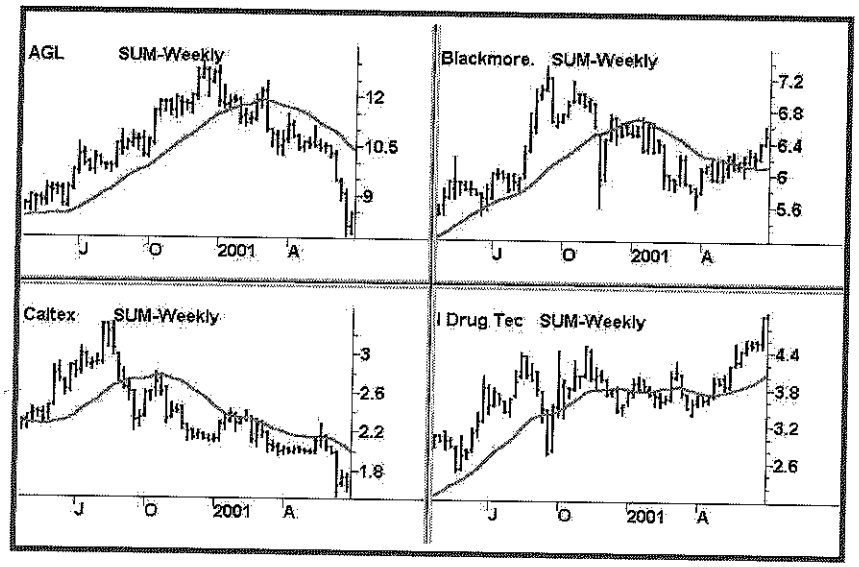
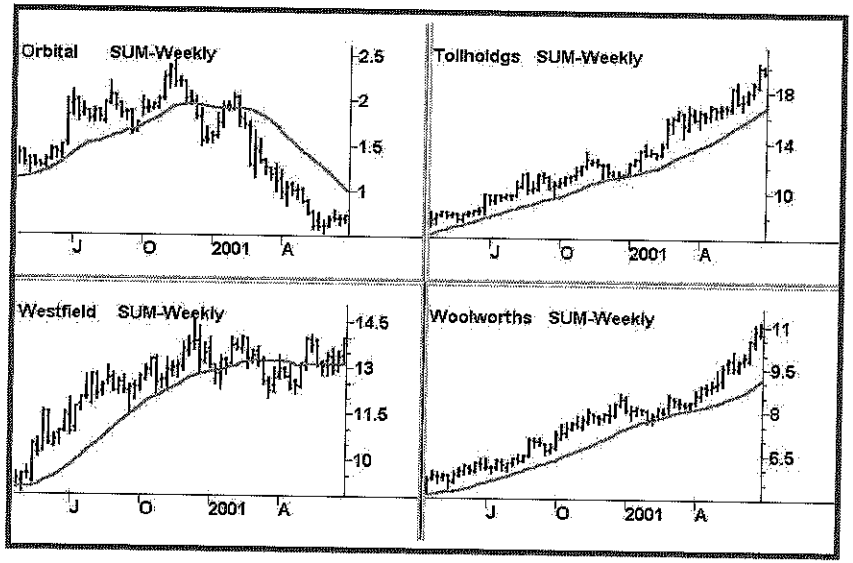


Figure 10.10



Results for Buying and Holding:

ASX Code	Price at 30/06/2001	Position Size at 30/06/2001	Gain/Loss
AGL	$8.48	$2,186	Dn $314
BKL	$6.50	$2,851	Up $351
CTX	$1.63	$1,430	Dn $1,070
IDT	$4.71	$3,099	Up $599
OEC	$0.73	$941	Dn $1,559
TOL	$19.51	$5,013	Up $2,513
WOW	$11.00	$4,501	Up $2,001
WSF	$14.00	$3,081	Up $581

Portfolio Value as at 30/06/2001 = $23,102 (A gain of 16%).

Results for 21-week SMA Stop Loss:

ASX Code	Price at 30/06/2001	Position Size at 30/06/2001	Gain/Loss
AGL	Stopped out at $11.40	$2,938	Up $438
BKL	Stopped out at $6.00	$2,632	Up $132
CTX	Stopped out at $2.63	$2,307	Dn $193
IDT	Stopped out at $2.79	$1,836	Dn $664
OEC	Stopped out at $1.65	$2,115	Dn $385
TOL	Current price is $19.51	$5,013	Up $2,513
WOW	Current price is $11.00	$4,501	Up $2,001
WSF	Stopped out at $12.80	$2,817	Up $317

Portfolio Value as at 30/06/2001 = $24,159 (A gain of 21%).

Probably by virtue of the fact that we only chose shares which were trending up, both of our portfolios are in profit. Looking at the gain/loss columns, though, we can see that the two different approaches gave very different results. Using stop losses outperformed holding the shares by 5% (21% – 16%).

Using stop losses limits our downside risk but doesn't limit our profits. The most common argument for not using stop losses is that we could sell a share that has fallen in price and then starts moving up again. In other words, we could be prematurely pulled out of a winning position, as we were here with IDT. Holding IDT for the whole year would have returned a profit of $599, whereas using risk management we sold it for a loss of $664. However, the reverse is also true. We were stopped out of AGL with a profit of $438, instead of holding it at the end of June 2001 for a loss of $314. What's more,

there is no reason why we can't buy back into a share once it starts trending upwards again.

In any case, whether or not risk management increases our profitability is actually a side issue – its primary purpose is to ensure our long-term survival. Looking back at the Gain/Loss columns again, we can see the limiting effect which using stop losses had on the magnitude of our losses. When we just held the shares for 12 months, we suffered losses of up to $1,559, as opposed to our worse loss with risk management of $664 with IDT. By using risk management we have also culled the losing positions out of our portfolio and are left only holding the winners. Quantitative risk management ensures our long-term survival in the marketplace, doesn't reduce our profitability and eliminates losing positions from our portfolio.

11 | OTHER FACTORS THAT AFFECT OPINION

The US sneezes and we all catch a cold

Our sole purpose in applying Dynamic Analysis so far has been to locate and exploit the impact of fundamentals as a factor which affects opinion. We first verified the presence of sound fundamentals and then tested and measured their effect on share price activity. In doing so, we have eliminated the need for time and patience, which so many passive investors and fundamentalists cite as a hallmark of successful investing (which may explain the absence of youth amongst this fraternity!). The significance of Dynamic Analysis, however, is far wider reaching than this single application. We can now revisit the entire list of factors which affect opinion and expand on their properties with respect to predictability and which members of the market crowd are affected by them:

	Factor	Timeframe	Predictability	Common Users
1.	Fundamentals	Long term	Good	Individuals/ Institutions
2.	Global Factors	Long term	Good	Individuals/ Institutions
3.	Macro Economics	Long term	Good	Individuals/ Institutions
4.	Market Cycles	Medium term	Fair	Individuals
5.	Herd Mentality	Medium/ Short term	Fair	Individuals/ Institutions
6.	News and Rumours	Short term	Poor	Individuals
7.	Gambling and Speculation	Short term	Poor	Individuals

As active investors, we are working with weekly charts in a medium- to long-term timeframe and the prioritisation of the above list is based on this aspect of our market strategy. If we were monitoring share prices on a daily basis and wanting to be in and out of the market quickly – one week for example – then the structure of our list would change dramatically and 'Fundamentals' would appear close to the bottom. We would also be preoccupied with monitoring daily news and company announcements, as these factors have a large impact on a short timeframe.

The purpose of prioritising the list in the first place is so that we can focus our limited resources as small business owners as efficiently as possible. Now, we need to look at how we can test and measure each of these factors. Here, as previously, we are seeking to tip the balance of probability as far as possible in our favour and we make no pretence of achieving perfection.

Fundamentals

This factor is number one on our list and the cornerstone of active investing. Its importance can never be understated. It is the main driving force behind the majority of the money in stock markets around the world and has been the primary long-term influence on share prices since the inception of equity markets. As we have seen, we could achieve a positive result by simply testing and measuring this factor alone.

Global Factors

Global factors include any phenomenon which occurs in offshore markets that will have an impact on the Australian stock market. Overseas market trends are used as leading indicators for the Australian stock market by both individual and institutional investors.

As we mentioned in Chapter 5, in terms of market capitalisation the Australian stock market represents approximately 1% of world equity markets, while the US represents an incredible 50%. Hence the saying, "The US sneezes and Australia catches a cold". There is very clear historical evidence to support the fact that the ebbs and flows of our stock market closely mirror those of our neighbour on the other side of the Pacific Ocean. We are also influenced, but to a lesser extent, by the wellbeing or otherwise of Asian markets. This is because companies in the Asia Pacific region are the primary customers for most of the commodities we produce in Australia. Probably the least influential offshore markets are the European 'bourses', which include England, France, Germany, etc.

However, it is a rare occurrence for us to enjoy a sustained uptrend when the US markets are in decline, and we inevitably follow their lead when it comes to stock market crashes. Their influence over us mainly emanates from the New York Stock Exchange (NYSE) with the NASDAQ running a close second. In April 2000 it was the sharp decline in the NASDAQ market that triggered the panic-selling of technology stocks around the world. Below are the three main US indices, along with the relevant exchange, the number of companies it represents and its proportion of market capitalisation:

Index	Market	Number of Companies	Market Capitalisation
Dow Jones Industrial Average	NYSE	30	20%
Standard & Poor's 500 Index	NYSE & NASDAQ	500	N/A
NASDAQ	NASDAQ	5,000	100%

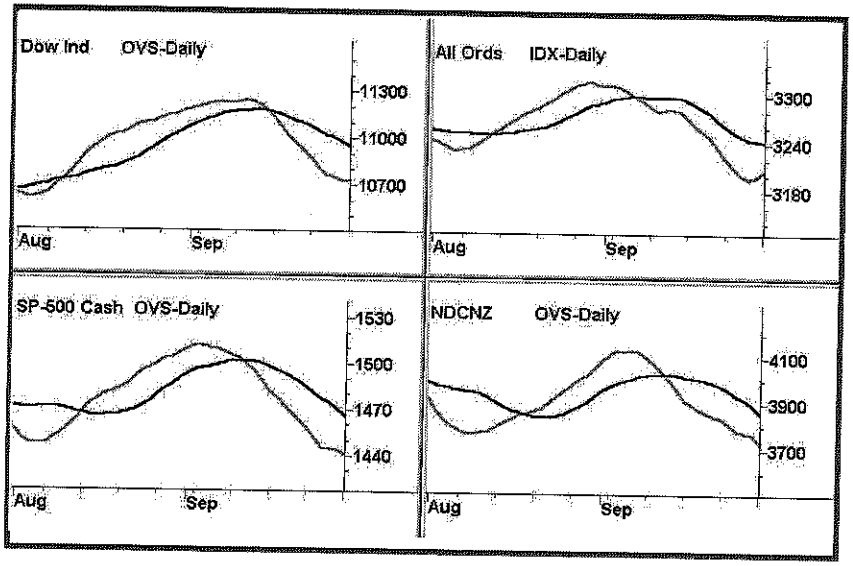
When these are trending down in unison, the rest of the world usually follows. The reasons behind the downtrend don't alter its impact on the Australian stock market. For example, in early 2001 the Japanese government forced many Japanese banks to foreclose on bad debts. The banks could no longer list these debts on their balance sheets and a day of reckoning for many Japanese financial institutions was fast approaching. This had a massive flow-on effect in the US as it is the largest offshore lender to Japan. The US markets became very nervous and fell for several trading days. The Australian stock market, in turn, and for no logical reason, fell in sympathy with the US.

So, we can see that the behaviour of the broad market, predominately the US, can overrule other factors which drive Australian share prices up and down. There are many who would debate the logic behind this phenomenon, but as active investors we are concerned with the practicalities of the market, rather than with comprehending its governing logic or lack of it.

The broad market can be tested and measured using index charts. The diagram below shows the three main US indices and the All Ordinaries Index. These are daily charts, and they include a 9-day simple moving average (the grey line) and a 21-day simple moving average (the black line). As with the MMA charts, the price activity has been switched off because we are only interested in the two moving averages.

As mentioned before, the nine-day SMA is referred to as a fast moving average and it tracks the index more closely than the 21-day SMA, which is called a slow moving average. When the fast moving average is below the slow moving average the index is in retreat and heading downwards; when the fast SMA is above the slow SMA then the index is trending upwards. Not surprisingly, these charts are referred to as 'crossover' charts. They are simple in construction, answer our question of whether or not the indices are trending up or down and provide us with robust and unambiguous signals. The charts below clearly indicate the impact of a pre-October broad market sell-off with all the indices retreating in unison.

Figure 11.1



Whilst we don't want to overreact to a broad market decline by proactively selling shares, it is not a time to be opening new positions.

To build this action into our strategy we have to add another instruction to our Space Monkey's rule book:

- Do not open new positions when all of the crossover charts are crossed to the downside.

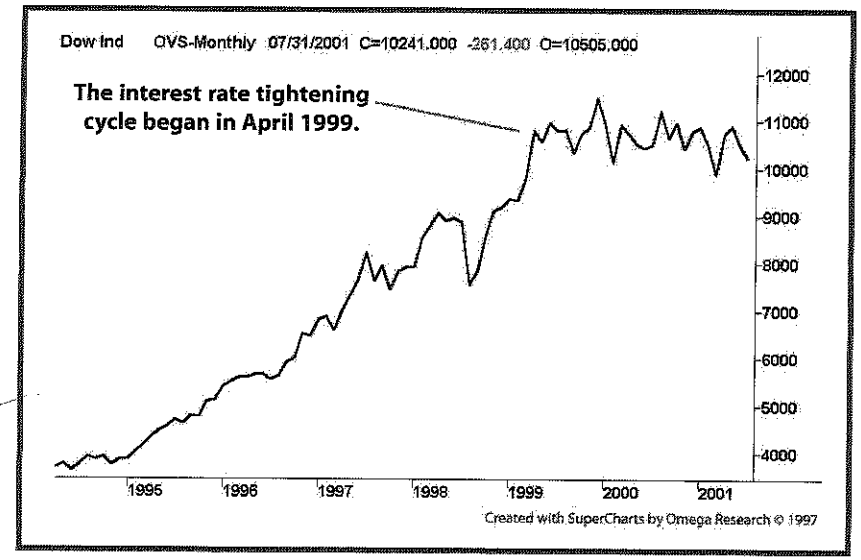
This tells us when to leave our money in the bank and stand aside. Global stock markets often retreat in unison during the months of June and September. If we can see this pattern of retreat in the crossover charts, then it pays to wait until the market has turned up again before opening new positions. The first quarter of 2001 was a negative period for global markets, and many analysts feared that it was going to be the start of a protracted bear market. Had their fears been correct, crossover charts would have prevented us from buying into a falling market and incurring a string of losses. If we try to swim against the direction of the broad market, the best risk management in the world will not save us.

Macro Economics

Alan Greenspan is often referred to as 'God' by many market participants because of the US Federal Reserve's ability to influence the direction of world equity markets, as mentioned in Chapter 5. His address to the US Congress in October 2000 demonstrated this power. Greenspan indicated during the address that he was concerned about the heightened sense of wealth which stock ownership was having on consumers and its flow-on effect on inflation. In the 24 hours that followed, global equity markets fell by an average of approximately 3%. Events such as this are completely unpredictable and can make market participants very nervous.

Greenspan is well aware of the power of his words and he uses them very effectively to control speculative activity in the market place. Those who disapprove of this form of 'crowd control' should revisit history and note the Federal Reserve's complete impotence in the lead-up to the Great Crash of 1929. On a more significant level, the US Federal Reserve can indirectly regulate equity markets by either tightening or easing money supply to the markets via official interest rates. Figure 11.2 (on the following page) of the Dow Jones Industrial Average shows the effect of the interest rate tightening cycle that began in 1999.

Figure 11.2



This tightening cycle arrested the long-term upward trend in US markets, and the Federal Reserve dropped interest rates from early 2001 in an attempt to get the domestic economy growing again. It is assumed by most analysts that US equity markets will inevitably respond to a speed up in the economy, once it flows through to improved company profits. It's the timing of the flow-on effect that has everyone, including Alan Greenspan, stumped.

In the event of a major and sustained decline in world equity markets due to macro economic factors, the crossover charts will all cross to the downside. Hence our crossover charts can act as a 'safety switch' against the effects of most major macro economic factors.

However, we can actually use the more subtle impact that macro economic factors can have on individual market sectors to our advantage. What's more, we don't need to have an intimate understanding of these economic factors or how they affect specific industries in order to do so.

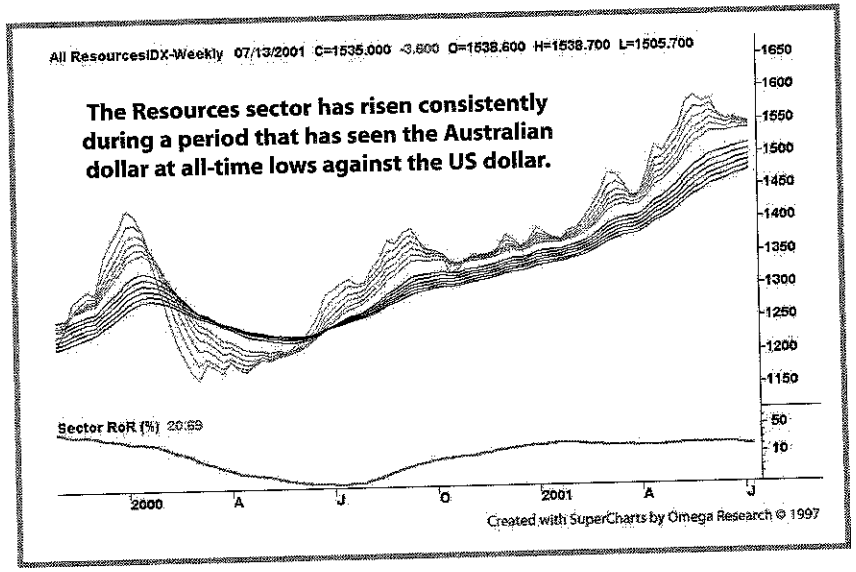
To illustrate how we are going to test and measure the effect of macro economic factors, let's look at a specific example. Imagine that you are an Australian manufacturer exporting widgets to the US.

- Each widget costs you $A10 to produce.
- $US1 is the equivalent of $A1.50.
- You sell your widgets for $US10 which equals $A15.
- The Australian dollar falls against the US dollar and $US1 now buys $A1.80.
- You continue to sell widgets for $US10 which now equals $A18.
- Therefore, your profit increases from $A5 to $A8 per widget.

Of course, weakness in the Australian dollar will have the opposite effect on importers. But Australian resource companies, which produce and export commodities, are in the same boat as we are as a widget exporter. Any Australian company which is a net exporter will benefit from weakness in the exchange rate between our currency and the US dollar, as the US dollar is used as an international standard. Paul Anderson, a former CEO of BHP-Billiton, once stated that a one cent fall in the Australian dollar against the Greenback added $50 million to BHP's bottom line. It therefore follows that any weakness in our currency will be reflected in the performance of our resource sector.

The following chart of the All Resources Index demonstrates how we can test and measure the entire sector's performance using a Rate of Return indicator. We can simultaneously apply our multiple moving averages to assess the stability of the sector. The stability of trends in sectors is just as important as it is with individual shares. Sectors with unstable trends should be passed over for sectors with greater stability, and stability should take precedence over the rate of return.

Figure 11.3

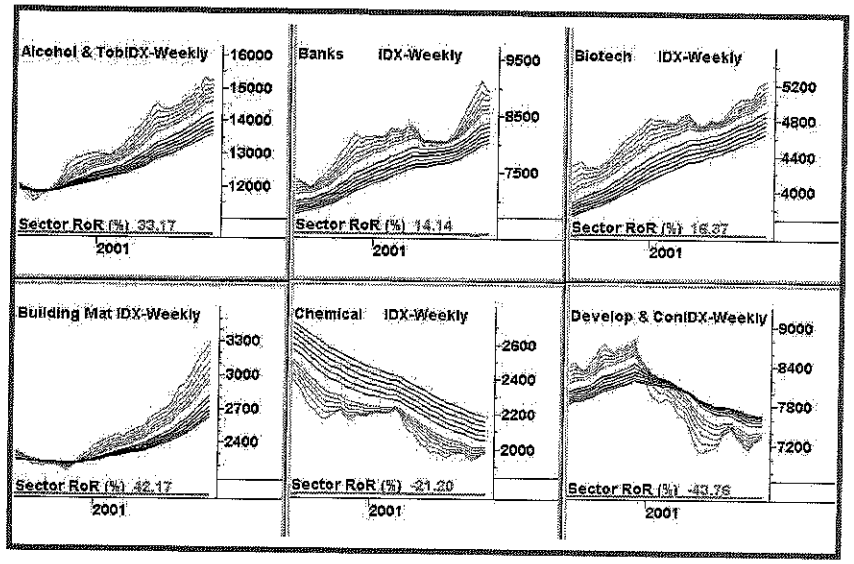


The All Resources Index, at time of writing, was rising at a rate of 20.69% per annum in a fairly stable manner. By examining the performance of individual sectors, not only can the impact of macro economic factors on specific industries be deduced, but an insight can also be gained into the thinking and behaviour of institutional investors.

If you read articles in the print media, or listen to fund managers being interviewed on television, you will have noticed that they talk in terms of different sectors rather than specific companies. Their actions reflect this, as they generally allocate funds on a sector by sector basis, spreading them around several leading companies from the same industry group.

So, by committing our capital to a share within a rising sector, we are working in harmony with both macro economic factors and institutional investors. The following chart shows how we can assess several sectors at the same time by reducing them in size. There are a total of 24 individual industry sectors at the time of writing.

Figure 11.4



It is not practical, or indeed possible, to set up hard and fast rules for interpreting sector charts, as it involves making qualitative judgements about MMA charts. My preferred approach is to use the sector charts to prevent indecision when I am analysing individual shares. If I have two shares, both with acceptable MMA charts and similar rates of return, then the share from the best performing sector will be my choice. We can see from the above charts that the Building Materials sector is steaming along, ahead of the rest. By periodically checking these charts I carry around a shortlist of the best-performing sectors in the back of my head. Almost on a subconscious level, this list will influence my share selection. But sector picking is secondary to our primary strategy of selecting rising shares with good fundamentals.

Market Cycles

The presence of timing cycles in the stock market is a well-established fact and we have already seen evidence of them in Chapter 5. Very few, if any, market participants manage to anticipate them consistently. Disciples of Gann and Elliott Wave theory centre their entire market approach around predicting market cycles. Whilst there is a degree of validity to these methods, successful businesspeople base their business strategies on probable outcomes... not prediction. Fortunately, we can, and already do, test the influence of market cycles by using the crossover charts.

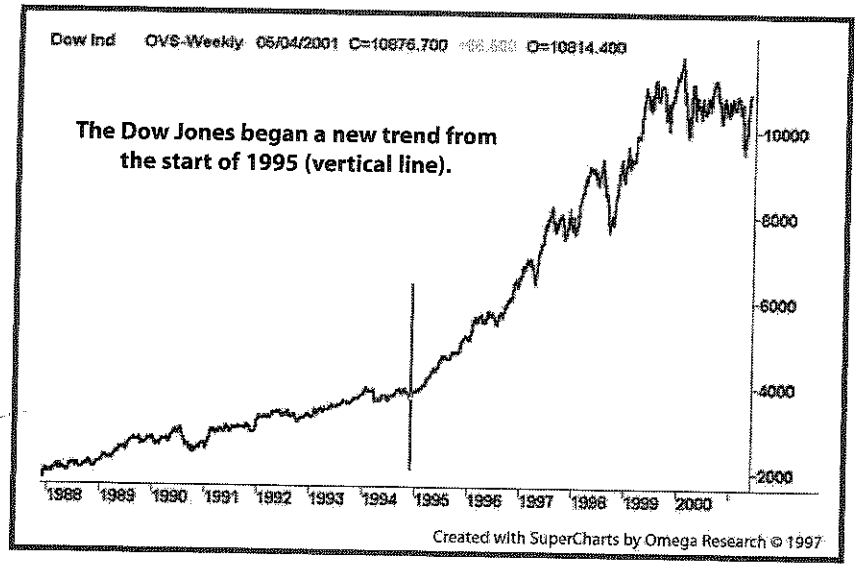
Herd Mentality

Herd mentality is most evident, and has its greatest impact, during boom/bust cycles. These cycles can occur in a short space of time – six months for example – or over an extended period of time such as a decade.

To study the behaviour of the herd we need to observe the major index charts. They are, theoretically, representative of everyone present in the marketplace. By analysing an index we are observing a sample group which would make any statistician drool with envy.

Consider the trend (Figure 11.5, overleaf) in the Dow Jones Industrial Average, which lasted for just over a decade, involved millions of participants and was worth trillions of dollars (a trillion being a million times a million). Imagine, in money terms, the force that is required to shift the Dow Jones even a few points and keep it there! Note how the trend began to accelerate from 1995 onwards. The personality of the herd, or market crowd, became more bullish from this point.

Figure 11.5

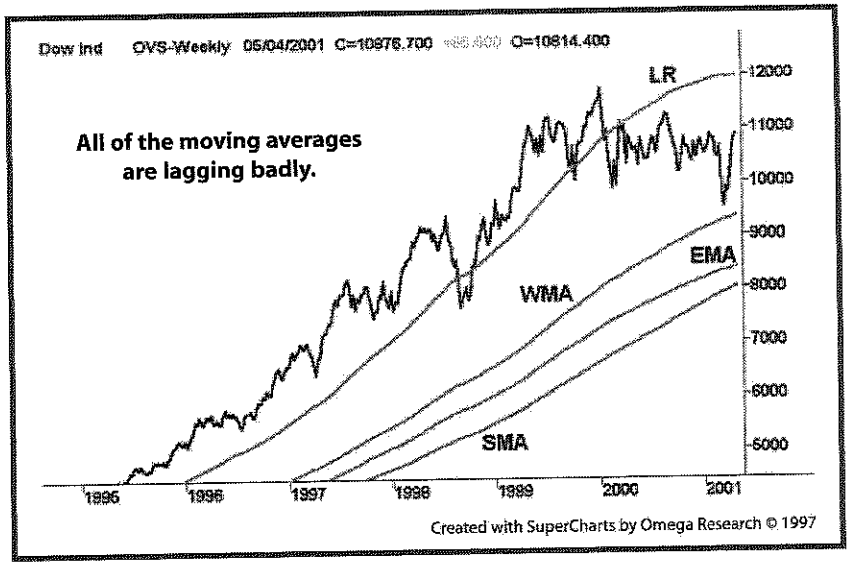


The first step in understanding this or any other crowd is to map the consensus of everyone present. So, we go to the chartist's toolbox, where we can choose from an assortment of moving averages or linear regression (which is more favoured by statisticians than technical analysts). We can map the consensus of the crowd using a simple moving average, an exponential moving average, a weighted moving average or a line of linear regression. Once again, we see how technology, by providing us with an increased number of options, promotes indecision. Nevertheless, without prejudice, we will consider every possibility by comparing them. We are looking for the line that most accurately reflects the behaviour of the index.

Our trend in the Dow Jones Index started 333 weeks ago, give or take a couple of weeks, so we will compare averages and linear regression values based on the past 333 weeks. Figure 11.6, opposite, shows all four instruments together, making comparison easy.

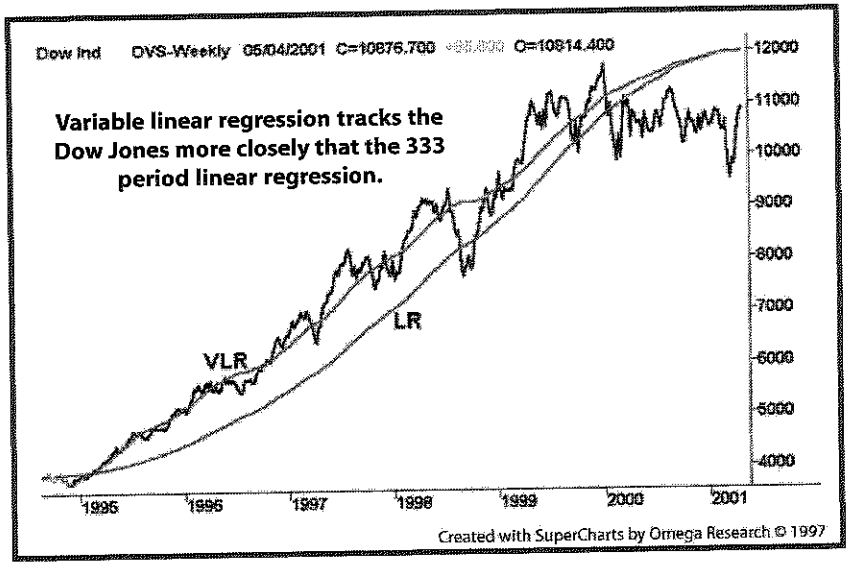
My money is on linear regression as the best tool for observing the consensus of the crowd. It's not surprising, given that linear regression was designed for this task whereas the moving averages are only giving the average value over the past 333 days – which is not the same as the consensus of the crowd. The next step is to decide on the period we are going to use for the line of linear regression.

Figure 11.6



The value of 333 is valid now, at time of writing, but it won't be valid in six months time... neither was it valid in 1999. So, we will use a self-adjusting value based on the start of the trend. At one year we will use a value of 52, at 150 weeks a value of 150, and so on. Using this self-adjusting value, we get a variable linear regression line, which as you can see tracks the index more accurately than any fixed value would:

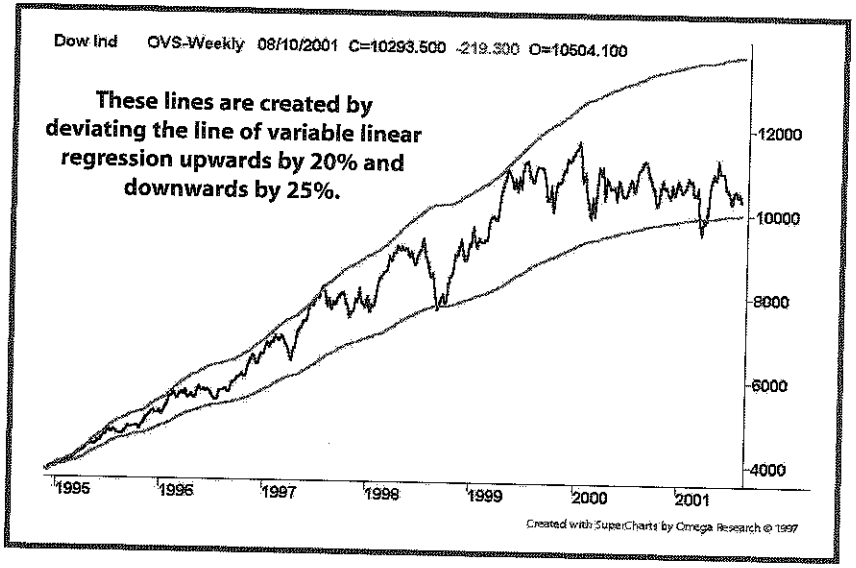
Figure 11.7



Now that we have mapped the consensus of the crowd as best we can, it is time to measure the tolerance of the crowd – that is, identify how far the index will stray from the crowd consensus. This is a gooey business as every crowd is different and, supposedly, what works for the Dow Jones won't necessarily work for the All Ordinaries, because these two indices have almost discrete crowds. Interestingly though, all crowds appear to have very similar tolerances. This means that all indices have a tendency to stray the same proportional distance in either an upward or downward direction. A proportional deviation upwards of 20% and downwards by 25% is almost a universal fit on index charts.

Let's have a look at this in practice:

Figure 11.8

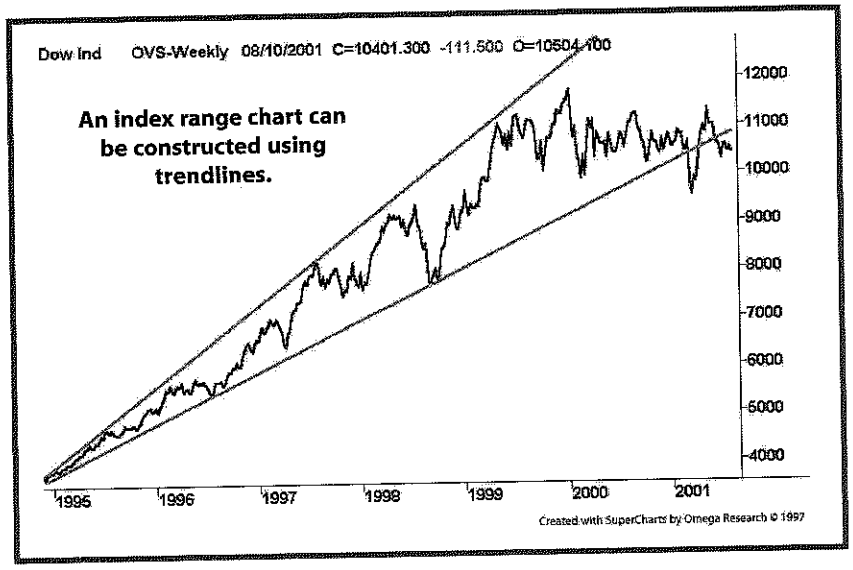


We now have the Dow Jones Index fairly well boxed up. Note that we can achieve a very similar result using simpler methods such as trendlines or a Support/Resistance fan, as you can see from Figure 11.9, opposite. (Most charting programs have S/R fan capability.)

In any case, now that we've caught the index we need to decide what to do with it. For starters, we are not attempting to predict the future and foresee the date, time and extent of a forthcoming crash, and we are definitely not going to use it as a 'buy low, sell high' indicator. The fact that the index is hovering near the bottom of its range doesn't mean that it *must* move up from this point. There is

every possibility, when the index is low, that we may be on the eve of a bear market and that the crowd consensus is about to take a turn for the worse. Index range charts are simply barometers that will tell us, approximately, which part of the market's spectrum we are in. We can see at a glance if the market is overheated (possible rain... stay indoors) or if an upward trend has plenty of headroom (clear skies... rain is not expected).

Figure 11.9



The old adage 'what goes up must come down' can be reversed to, 'what comes down must go up first'. Herd mentality has its greatest influence and represents the greatest danger to us in the lead up to a stock market crash. Index range charts enable us to watch for overheating markets that are being driven to breaking point by herd mentality. April 1999, when the Dow Jones almost reached the upper tolerance of the crowd, was a time to become defensive and consider actively reducing our exposure to stock markets. We could also deduce, on the balance of probability, that our upside potential was very limited compared to the downside.

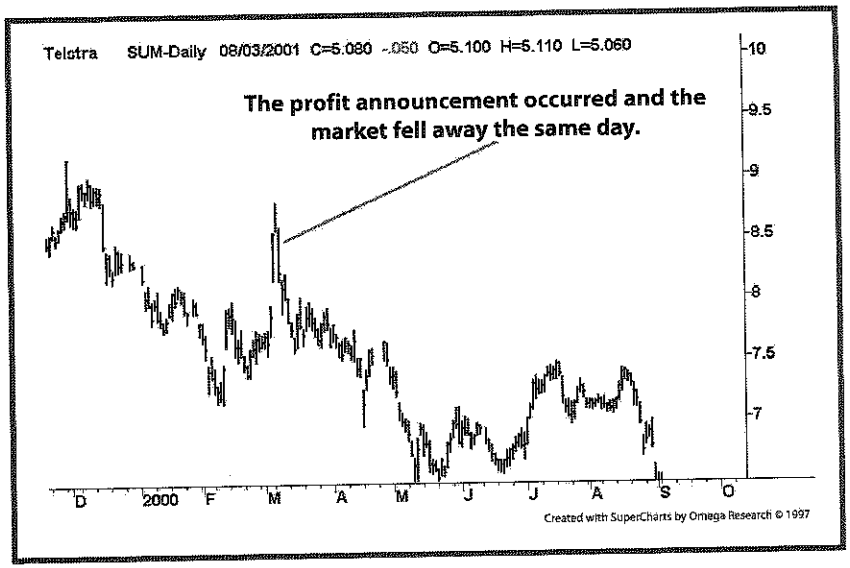
In more recent times (at time of writing), the Dow Jones has actually dipped below the lower tolerance of the crowd. It is interesting to note that this event correlates with the timing of official interest rate *cuts* announced by the US Federal Reserve... a curious coincidence.

News and Rumours

News and rumours have both an unpredictable and short-term effect on price behaviour. Some rumours are true and to act on them can generate handsome returns in a very short space of time. However, some market participants deliberately attempt to use the influence of rumours to gain an advantage in the marketplace. So, while some rumours are true, there are many which are falsely created to temporarily shift share prices in a predetermined direction. Technology, in the form of online chat sites, has lent a hand in circulating rumours by allowing virtually any individual or group of individuals to rapidly transmit false information to other market participants. The main advantages of using chat rooms and investment forums for rumour-mongering is their fan-out capability and the anonymity they provide. Of course, the spreading of rumours is not limited to the Internet. Many stockbrokers use their access to rumours as a marketing hook, although they refer to it as access to 'the word on the street'. The act of talking up a share price by transmitting misinformation about a company's prospects is colloquially referred to as a 'pump and dump'. The idea is to buy shares in a company, circulate a positive rumour and offload your shares at a higher price as others act on the rumour by buying up the share price. That is, buy the share, pump up the price and then dump it for a profit.

The possibility of a significant profit from a true rumour leads many market participants into the trap of acting on unsubstantiated tips and rumours. In the lead up to Telstra's profit announcement in March 2000, a rumour spread far and wide that Ziggy Switowski, CEO of Telstra, was to announce the selling off of one or more dot-com spin-offs when he made the profit announcement. It was widely assumed that Telstra shareholders would receive share allocations in these independently listed entities and that, given the prevailing technology boom, it would pay to be in on the ground floor. Unfortunately Ziggy disappointed the market by failing to announce any such spin-off strategy and the share price responded accordingly. In the chart opposite, you can clearly see the drop-off in the share price following the company announcement. Note that this is a daily, rather than weekly, chart.

Figure 11.10



The spin-off rumour was so widely circulated that one felt tempted to post it as security on a bank loan. Unfortunately, it turned out to be a case of 'Buy on the rumour, sell just before the news'. Whilst trading rumours can make for good sport, it doesn't qualify as the foundation of a successful market strategy. Luckily, as active investors we are working in a timeframe that is relatively immune to the short-term impact of announcements and rumours.

Gambling and Speculation

Another side-effect of technology is the high level of accessibility which we all have to the stock market. Online broking means that we can instantly buy and sell shares from the comfort of our own home at discount brokerage costs, which are comparable to the price of a cinema ticket. This level of accessibility has opened the doors to the stock market being treated as a type of virtual casino. Fortunately, however, the influence of individuals who gamble on share price movements is usually minimal. The power of their influence is at its greatest when markets are in a boom cycle and market speculation focuses on a single sector, such as technology. During these times, the monetary force behind most speculators and gamblers will become focused in the same direction, thus amplifying their impact on the

market. Gamblers and speculators, given their nature, will often fall victim to the uncertainty of the rumour mill.

Keep It Simple

No doubt we could actively search for other factors which effect opinion and ways to test and measure their influence. But we have now reached the point, given our limited personal resources, where we would be deviating from our original objectives. That is, we would be putting in a lot more time and effort for minimal improvements in our returns.

By testing and measuring every fundamentally sound blue chip share for a rising share price, we are performing what traders refer to as 'bottom up' analysis. This task would have been beyond contemplation several decades ago, prior to the advent of personal computing. We are also performing 'top down' analysis by showing a preference for shares in rising sectors. We are taking into account market cycles as well, and constantly checking over our shoulder by monitoring the broad market conditions. Our overall strategy as active investors is comprehensive in design and highly efficient in its use of our time. So, to go beyond our current level of refinement is to entertain unnecessary complexity. As the saying goes, 'The best way to turn a good trading system into a bad trading system is to try and make it a perfect trading system'.

12 | THE DOWNSIDE

Need is the true mother of invention

An inevitable consequence of being exposed to equity markets for a prolonged period of time is exposure to stock market crashes. Because of their magnitude and infrequent occurrence, crashes are perceived to be isolated events, brought about by macro economic circumstances that are a function of a unique moment in the evolution of global economics and industrialisation. Once the economists of the day have performed their post mortem on a crash, a wave of economic reforms are implemented. Regulatory bodies are given greater powers to ensure that the speculators and the corporate cowboys behave themselves in the future. Powerful political, economic and industrial figures have private meetings, supposedly to orchestrate their efforts at ensuring the long-term prosperity of humankind, and they each emerge stating that everything is going to be okay. The man in the street forgets all about becoming rich in the stock market and returns to his job, content in the knowledge that he has a roof over his head, a shirt on his back and food on the table.

After a narrow escape from economic Armageddon we collectively adopt the attitude, world leaders and the general public alike, that fiscal exuberance is the root of all evil, and we all begin the monotonous task of consolidating our debts. Governments balance their budgets and we pay off our credit cards. As long as the painful memory of the aftermath of a crash lingers, there is little chance of the capitalist orgy that precedes a crash recurring.

As we look back at history, the crashes of the past appear as punctuation marks in the chronology of global commerce. They pinpoint the hard economic lessons committed to print in the form of university textbooks. As such, they serve as high doctrine to future world leaders and the other apprentice keepers of the global economy.

But here's the kicker. Whilst civilisation evolves both economically and industrially, human psychology remains a constant. History repeats itself because we repeat previous actions that are a function of our psychological makeup. Ironically, every time there is a repetition of stock market speculation we trot out the well-worn line, "But this time circumstances are different". In the technology boom of the 1990s, people based this belief on the advent of the Internet and other technological marvels.

The following table compares the current technological revolution to that of the early 1900s:

Developments – Early 1900s	Developments – Late 1900s
Radio	The Internet
Motor car	Satellites
Telephone	Mobile phones
Flight	Space travel
Moving Pictures	Computers

I know which list I would rather live without! Some readers will claim that several of the developments from the early 1900s are actually from the 1800s. But although radio, for example, was invented in the late 1800s, broadcast radio only came into common use in the 1920s. Likewise, the Internet was originally developed in the 1960s for military use, but has only had a commercial impact on the world since the late 1980s.

Technology and industry will always evolve. Human psychology, our needs and desires, on the other hand, are all constant. Circumstances are similar but never the same. Stock market crashes are inevitable.

If we accept this inevitability then it is more important to understand the *nature* of the event rather than the cause of it, so that we can develop strategies to cope with the problem of stock market crashes. It's Alan Greenspan's job to work at the futile task of preventing future equity market meltdowns, not ours.

The chart opposite of the Dow Jones Industrial Average shows the Crash of 1987.

Figure 12.1

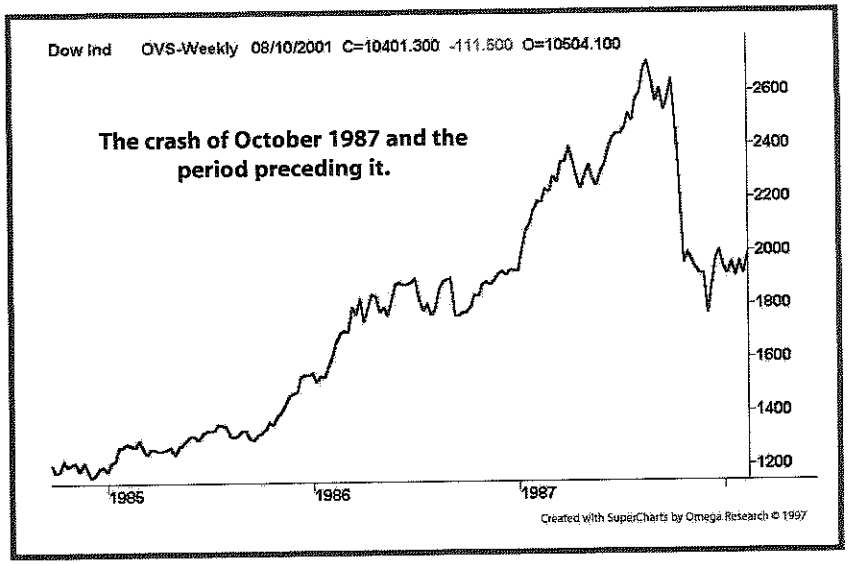
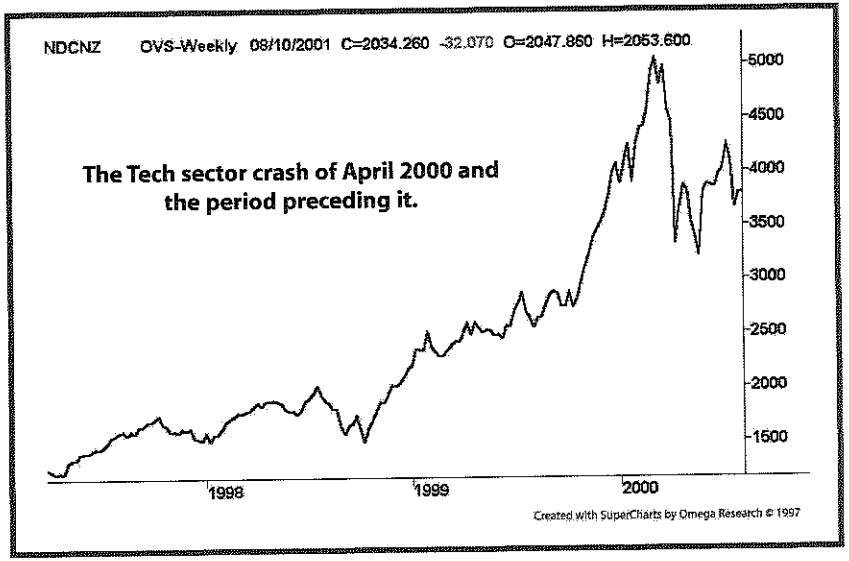


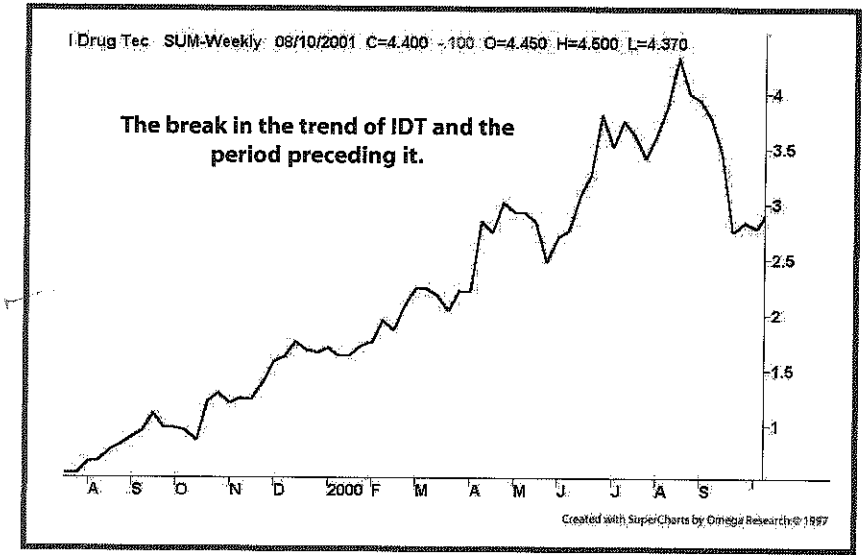
Figure 12.2 shows the collapse in April 2000 of the NASDAQ Index:

Figure 12.2



Now compare these index crashes with the break in the trend of IDT, below. Do they look similar?

Figure 12.3



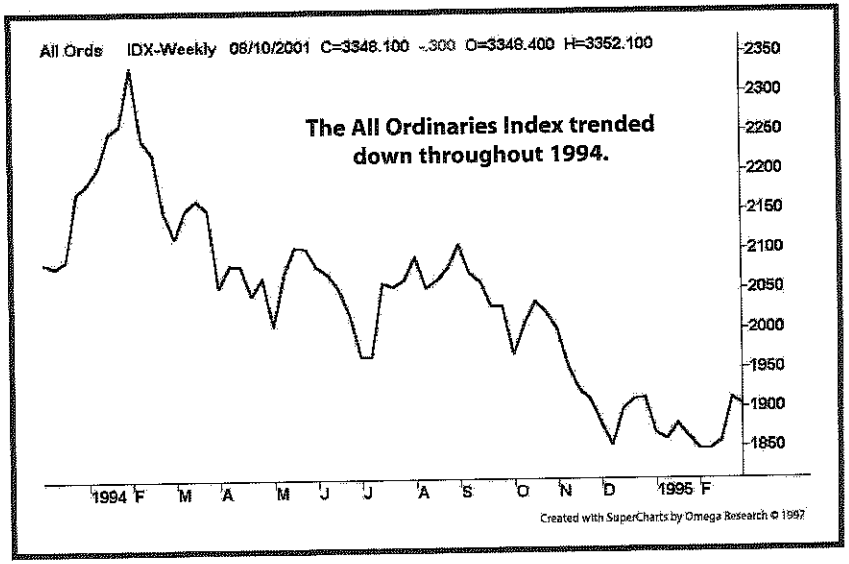
The crowd of market participants which the chart of IDT represents is infinitesimally smaller than that of either of the Indexes, but the overall behaviour is strikingly similar. Our reaction to the break in the trend in IDT is one of regret, but little else. In contrast, the reaction to the end of a bull market that had lasted for years was one of mass panic and fear. Yet a bull market is just a trend which lasts much longer and is driven by a much larger crowd. Therefore we can view the problem as one of having to deal with a trend in an index. We need to employ risk management that can cope with a break in such a trend.

By being in the stock market in the first place we are exposing all of our capital to index trends. If we are caught in a crash with a portfolio of blue chip shares, we can expect to suffer a loss of up to 50%. It would then take approximately four years to recover our losses at 20% per annum – and this is an optimistic estimate given the lack of confidence which pervades stock markets in the aftermath of a crash. A more realistic estimate would be six to seven years, and even this assumes that there won't be a prolonged bear market.

One answer is diversification. Applying the concept of position risk would mean limiting the amount of our total investment capital that we allocate to shares. This is a sensible measure if we don't have seven years to spare to rebuild our capital base. By allocating our total capital across different investment media we will limit our exposure to catastrophic risk in any individual group of financial products such as cash deposits, real estate, bonds, etc. These other media are not within the scope of my expertise, but there are a wide range of books available covering these topics (see Further Reading at the end of this book).

Going back to the stock market, though, we face another problem with respect to index trends. As well as a break in an upward trend we also have to contend with the possibility of a sustained downward trend, more commonly known as a bear market. The following chart of the All Ordinaries Index shows the relatively brief bear market that occurred during 1994. Australian equity funds and many superannuation funds reported negative returns during this period – reporting a positive return for the calendar year was considered exceptional. The Index fell 20% over 12 months:

Figure 12.4



Short Selling

If we are to trade with the prevailing trend and not open any new positions when the broad market is trending down, we will find ourselves being sidelined during periods such as 1994. To prevent

this from happening we need the ability to profit during bear markets. To do this we need to 'short sell' ordinary shares, which is to sell shares that we don't own with the intention of buying them back later, at a cheaper price. The best way to explain short selling is to use an analogy. The following example illustrates how we can profit from selling an item before we buy it:

- Imagine that you rented a brand new TV from Acme Rentals.
- The rent is $100 per annum.
- You *sell* the TV to Fred Nurk for $600.
- One year later you *buy* the TV back for $400, making a profit of $200.
- You then return the TV to Acme Rentals and pay the $100 rent.
- Your net profit after the rent of $100 is repaid is $100.

Unfortunately, it is illegal to sell goods that you don't have clear title to and so in the real world we can't profit from short selling tangible goods that we rent. However, it *is* possible to 'rent' shares and sell them into the market with the intention of buying them back later and returning them to the lender. To short sell ordinary shares requires the services of a full-service broker, as online discount brokers don't facilitate short selling. The bad news is that we have to pay 'rent' on the shares that we short sell *and* our broker is going to want an amount of money placed on deposit just in case something goes terribly wrong, i.e. in case share prices start rising. The 'rent' cost usually includes an upfront fee plus an interest payment that is commensurate with fixed deposit interest rates, calculated and payable on a daily basis.

Brokers usually request that clients have a separate 'short selling' account with a balance equal to or greater than 30% of the value of the shares that they wish to short sell. So, by short selling we become exposed to leverage, as we can short sell $100,000 worth of shares that we don't own with a deposit of only $30,000. I recommend that a deposit of 50% be used for short selling as it is a comfortable distance away from the broker's margin and will reduce the likelihood of a request for more funds from the broker. This added safety cushion also allows room for the rental that is deducted on a daily basis from the short selling account. There is a range of other conditions that apply to short selling but they vary from broker to broker and therefore there is little point in going over them in this book. My stockbroker, named in the acknowledgments, has gone to great efforts to make the task of short selling a very simple and straightforward process. I mention this because most stockbrokers are very reluctant to accommodate short selling, as it involves added headaches for them without additional reward.

Now to the good news. If we're caught in a crash and our total capital is reduced from $100,000 to $50,000, we will have suffered a 50% loss to our capital base. The cruelty of mathematics is that to recover this 50% loss we have to double our $50,000 back to $100,000, which is a 100% gain. But when we short sell, this cruelty of mathematics is eliminated. A fall of 20% equates to a 20% gain for us, based on our original position, and if the share were to rise by 20% then we only lose 20% on our original position. At the end of the day the pros and cons of short selling virtually cancel each other out, and the added mathematical complexities are the only real barrier for most people. However, there is also the psychological discomfort people often feel about obtaining financial gain through someone else's loss. If you fall into this category, or find short selling difficult to comprehend, then don't do it. It is not an essential component of active investing and the stock market is not the place to operate outside your comfort zone. The only time when short selling becomes necessary is during a prolonged bear market.

Hedging

Another way to eliminate the risk of a crash for those of us who want to concentrate our efforts, and capital, in the stock market and not in other investment media, is to use hedging. In order to hedge our portfolio against a crash we need to 'short' at least 30% of our total capital. The following example assumes that we have a total capital base of $100,000:

- A stock market crash has occurred, causing all shares to fall 50%.
- We have $70,000 in long positions (i.e. shares we bought expecting they would increase in value) and $30,000 deposited in our short selling account.

- We have short sold ('shorted') $60,000 worth of shares, i.e. our $30,000 deposit represents 50% of our shorted positions.
- Our $70,000 of long positions is now worth only $35,000 (i.e. a 50% loss).
- We can buy back the $60,000 worth of shares that we have short sold for $30,000, because these shares have also fallen in price by 50%.
- We lost $35,000 on our long positions and made $30,000 on our short positions.
- Therefore our total loss in a 50% market correction is only $5,000, which is 5% of $100,000.

Conventional hedging techniques usually involve the use of derivative products such as options and futures, which act like an insurance policy. Whilst they alleviate losses in the event of a fall in equity prices, they will lose value if the market *doesn't* fall. In the event that the market doesn't crash, the exponents of this form of hedging treat their losses as an insurance premium. But we can actually profit from both sides of the market at the same time when we hedge by short selling fully-paid ordinary shares. We also avoid the added complexities that come with trading derivatives such as time decay and liquidity problems.

Using Dynamic Analysis to Short Sell

An added bonus for us is that, in order to short sell, all we have to do is turn our existing strategy upside down. The following block diagram depicts the market dynamic for shorting:

Figure 12.5

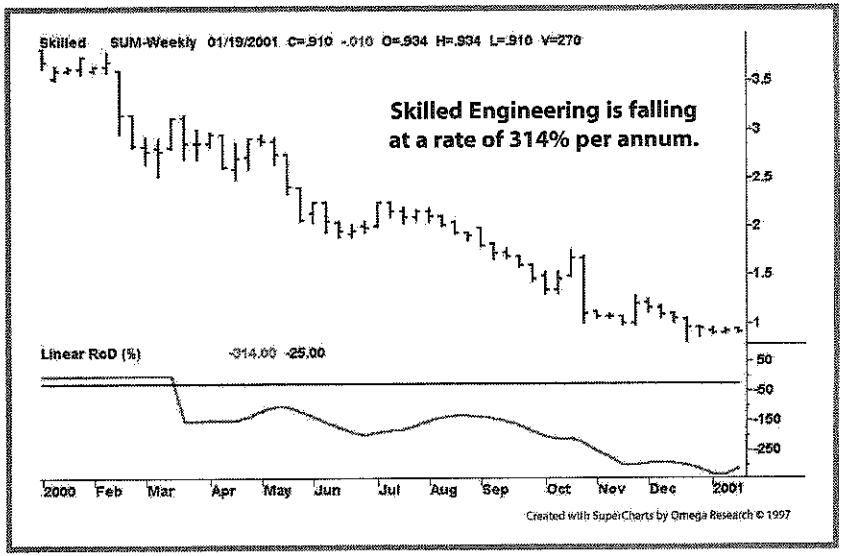
Unfortunately, Wrightbooks doesn't publish a book on shares with bad fundamentals, poor future prospects or incompetent management. This means that we will have to do the bulk of the research ourselves. It puts a feather in STOCKdoctor's cap, however, because this program will locate companies with bad fundamentals as well as good fundamentals.

As we have no ready-made pool of shares to work with, we can simply subject all of the shares available for short selling to a 'rate of decline' search and individually investigate their fundamentals at the other end. This is a workable approach, as there is a limited number of shares available for short selling anyway. Shaw Stockbroking, for example, has a short selling list containing approximately 150 shares.

Rate of Decline

Short selling uses an upside down version of the conventional approach, with the 'Rate of Return' indicator becoming the 'Rate of Decline' Indicator. The mathematics behind the rate of decline indicator are identical to the rate of return indicator, except that we are now searching for shares that are *falling* at rate of at least 20% per annum. (For RoD Indicator formulas, see Appendix A.) The 'Rate of Decline' indicator can be seen in the following chart of Skilled Engineering.

Figure 12.6



Note that the rate of decline increases as the share price gets lower, unlike the rate of return, which has a tendency to fall as the share

price rises. This is due to the fact that both rates are based on the current share price, and their behaviour is inversely proportional to that of the share price. The trade-off is that when the price of a share we are shorting becomes very low, the volatility of price behaviour becomes proportionately greater and our position risk increases. The purpose of doing this rate of decline search, as before, is to reduce the number of potential trading opportunities down to a manageable level, i.e. approximately 50 shares.

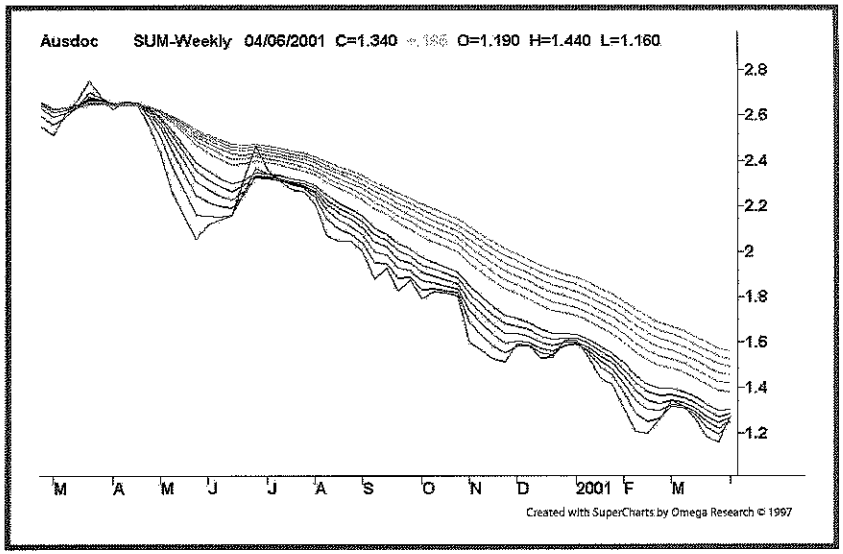
Upside-down MMA charts

The sentiment that drives equity markets up is not the exact reverse of the sentiment that pushes share prices down. Bulls run on greed, whilst bears are driven by fear and these emotional forces are not mirror images of each other. Therefore, given this lack of symmetry, we need to use a slightly modified set of tactics for trading the sharemarket on the short side.

The most noticeable difference between bears and bulls is that the bears act with greater impetus but in shorter bursts than the bulls. Historical examination of stock markets supports this observation, as global markets have tended to rise for much longer periods than they fall, but fall with greater speed. However, human beings, in the majority, are optimists and react swiftly when a glimmer of hope appears on the horizon. Therefore, short-term factors that affect opinion have a greater influence in a bear market, as they work in harmony with people's optimism to lift share prices. We must also resist the temptation to short sell shares which have high 'Rates of Decline' because they carry a greater chance of a sudden trend reversal and increased risk.

We must place added importance on avoiding volatility when selecting shares for shorting. However, when searching through the MMA charts of our 50 candidates we will discover that volatility is harder to avoid and that the regular pullbacks in the short-term group of averages are more pronounced. Looking at the chart of Ausdoc opposite, we can see that the short-term group of averages are on the bottom and a pullback in price activity is, technically speaking, a pull *up* in price activity.

Figure 12.7

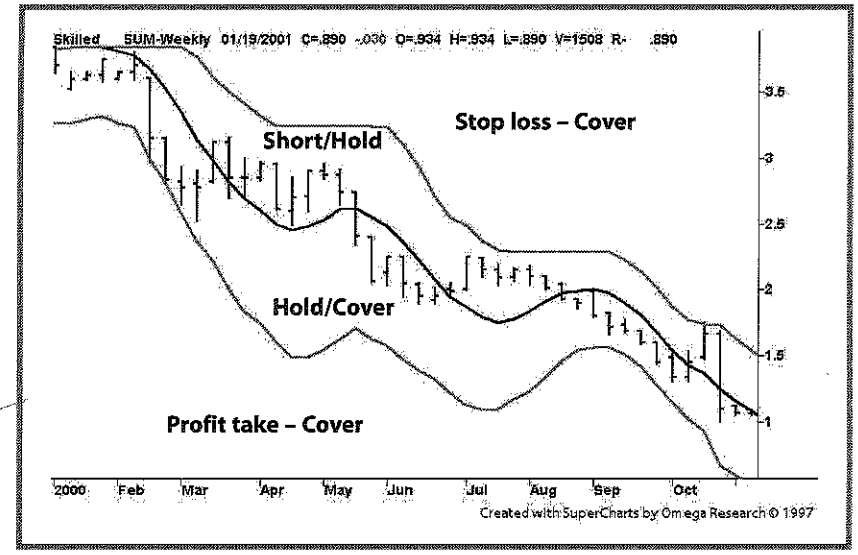


Ausdoc had been falling steadily over time. But even Ausdoc is capable of a sharp reversal if the right catalyst appears in print, such as a takeover announcement. Therefore, we must be more vigilant in monitoring and executing our stop losses and *daily* stop loss execution is highly recommended. If a severe pullback has caused us to prematurely exit the market then we can always re-enter the position when the downtrend resumes. Short selling is a more intense activity, requiring more effort, and the downtrends are typically shorter.

The Range Indicator in Reverse

Applying the Range Indicator means transposing all of our rules from buying and selling to 'shorting and covering', where covering is the act of buying back the shares we originally short sold. Figure 12.8, overleaf, shows the range indicator for falling equities, where the upper deviation is displaced by 2.5 times the 13-week average true range and the lower deviation is displaced by three times the 13-week average true range. In the case of short selling, the upper deviation is prevented from rising instead of the lower deviation being prevented from falling.

Figure 12.8



The rules I use for the short selling zones are:

Stop Loss Cover Zone

Mandatory **Cover** if the share price closes at the end of the day in this zone.

Short/Hold Zone **Short sell** if the share has closed at the end of the week in this zone and it has closed lower than the previous week's closing price. The short selling price must be between the upper deviation and the central cord.
Hold if already owned.

Hold/Cover Zone **Hold** if the share price is in this zone or you may elect to **profit take by covering** if the position is up by 10% per month or more in terms of profit – i.e. 10% in four weeks, 30% in 13 weeks, etc.

Profit Take Cover Zone

Mandatory **Profit take by covering** if the share price closes in this zone at the end of the week.

Optional **Profit take by covering** if the share price is in this zone at any time.

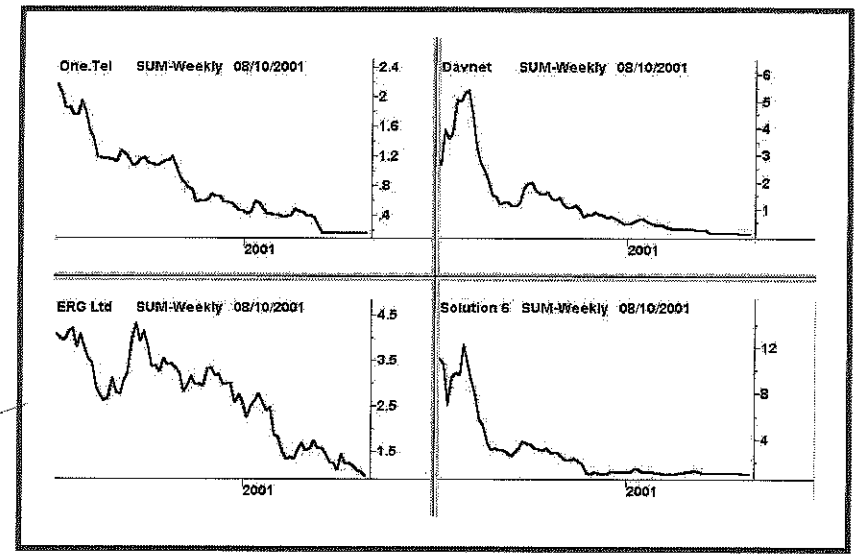
Short Selling Rules

The following set of short selling rules summarises the main differences between shorting and conventional buying and selling.

- In order to overcome the additional costs involved with short selling, we must use a minimum position size of $5,000 and a minimum annual 'Rate of Decline' of 20%.
- We must use a total capital base of at least $25,000 for short selling, because our minimum position size must be no more than 20% of our total capital (i.e. $5,000 is 20% of $25,000).
- We must 'short' at least 30% of our total capital in order to be hedged effectively.
- Always use a 50% deposit for short selling. So, if our deposit is $20,000 then we can short a maximum of $40,000 worth of shares.
- We must never use the value of short positions when calculating our total capital, as they are leveraged. We must always use the current balance of our 'Shorting Account' plus the current profit or loss from our open short positions.
- We must base our position risk calculations on the potential loss from the shorted position using the difference between the central cord and the upper deviation.
- If we short sell during a stock market crash and make a lot of money, we must refrain from dancing down the street singing, 'Happy days are here again'. We're likely to get run over.

Our Space Monkey will need to adhere to these additional rules when short selling. If our monkey, or for that matter our Chief Engineer, has a problem comprehending any aspect of shorting, it is best forgotten about altogether. In order to train up for short selling though, we can begin by paper trading until we work the bugs out of our system. The risk that we face from a stock market crash is referred to as 'catastrophic risk'. It is a very real and ever-present danger to all market participants. But if we attempt to short sell before we are ready, then a stock market crash will be the least of our problems. There is no doubt however that our perspective will shift dramatically as former adversity becomes advantage. We can see in Figure 12.9 (overleaf) how short selling puts a different slant on the tech wreck of 2000.

Figure 12.9



13 | THE BIG PICTURE

A quote from someone who should get out more: "I have never met a rich chartist"

The football analogy at the end of Chapter 1 looked at the difference between being on the oval in the thick of the action and sitting at the top of the grandstand taking in the whole picture. In the last few chapters we have looked, in detail, at the techniques that we need to employ at ground level. Although we make no pretence at being omnipresent in the marketplace, our strategy encompasses all of the following areas and more:

- Fundamental analysis
- Technical analysis (charting)
- Broad market analysis
- Cyclical analysis
- Sector analysis
- Macro economics
- Risk management
- Short selling.

In this final chapter we will sit up in the grandstand and look at the global aspects of Active Investing. When we are at ground level we need to maintain a tight focus on what we are doing and not be distracted by the noise which is being generated around us. However, in order to hold this focus we must have complete faith in our perception of the big picture and where we fit into it.

House Cleaning

Most of us start out on the road to active investing by cleaning up our existing portfolio. This involves categorising each share as either an income-producing lifetime asset or a stock-in-trade share. Although this process sounds simple, it is often a tough job, as it is the time of reckoning when we have to own up to previous mistakes. The proverbial bottom drawer is gone and with it the psychological comfort it afforded us.

The easiest way to approach this task is by deciding whether or not a share is a lifetime asset. Two main questions must be answered:

1. Will the company that the shares represent be around for a lifetime?
2. Is the company returning a good income, based on the original purchase price of the shares, or is it likely to do so in the foreseeable future?

I always find the first question a fairly easy one to answer. In my opinion, there are very few companies that are likely to be around for the remainder of my lifetime. The companies that do qualify are usually very large in terms of market capitalisation, operate in stable industry sectors and produce essential products and/or services. The second question is harder to answer because it is open-ended with regard to 'foreseeable future' and 'good income'. Each of us must decide on our own personal benchmarks.

Once we have separated out the assets, we can focus on the stock-in-trade shares and the question of what stays and what goes. Once we've singled out the shares that are neither assets nor stock-in-trade shares, it's time to march them out to the woodshed and put them out of their misery... sell them.

Trading Strategy Versus Trading System

With our house cleaning done, we can start to focus on setting up our s-store. Step one is to reduce the strategy of active investing to a personalised set of trading rules, i.e. a trading system. We have global decisions to make today so that we won't suffer indecision tomorrow. We must form policy while sitting in the grandstand, not when we are in the middle of the action. The following list covers some of the major areas that we need to look at:

- Do I need to diversify across investment mediums?
- Do I paper-trade at the start and for how long?
- Do I execute my stop losses on a daily or weekly basis?
- Do I perform my own company research or use other people's research?
- When do I voluntarily take profit? (Is 10% per month okay?)
- Who is the Chief Engineer and who is the Space Monkey (a spouse, sibling, friend, etc.)?

Of course, no matter how hard we try to think of every question that needs addressing, we will encounter further unanswered questions when we start running our s-store. This is the way every business evolves, and as long as questions are answered by the setting of new policies, indecision can be avoided in the future.

When this task is completed it is a good idea to write down all of the policies on a piece of paper, sign it and give it to your partner. These policies or sets of individualised rules allow us to apply discipline to the job of running our s-store. In order to apply discipline, we must not permit ourselves to alter the policies whenever the urge to do so is upon us. So, it pays to appoint an independent party to safeguard the rule book. At the outset we should elect a time at which to review our business policies – every three months or six months, etc. When the policy review occurs, we will have an accurate and substantial body of results on which to base policy changes.

Constant Vigilance

Here's the bad news. The reason ready-made trading systems don't work is because they assume that all factors – i.e. people and financial markets – remain constant. Whereas, the only constant that we have to concern ourselves with is the need for constant vigilance in reviewing our policies. For what works for us today will not necessarily

work for us tomorrow. The following examples give some changing circumstances which may require policy adjustments to be made:

- If market conditions change then we may have to lower our entry level 'rate of return' and other strategic benchmarks.
- If world markets become nervous then it may be prudent to start using daily stop losses instead of weekly stop losses. (Note that daily stop losses are safer, but no more or less profitable.)

In any evolving business environment, an out-of-date rule book will inevitably be self-defeating. What's more, our personal goals and business objectives will also change with the passage of time, so we need to review and update these on a regular basis as well. We do not want to fall for the trap of running off the end of our business plan, as so many other small businesses have done.

Test and Measure

If our policy reviews are to be productive, not to mention easy, then we must have accurate data at our disposal. We can't implement change if we don't know what it is that we're changing. Business consultants often comment that the majority of small business owners don't know what they're doing wrong because they don't know what they're doing. Nor can they tell what they're doing right. Therefore, step one in most small business makeovers is the implementation of testing and measuring procedures. I used to believe in the saying, "Half the money you spend on advertising is wasted – the problem is you never know which half". I now test and measure everything I do in my business, which includes asking people where they heard about me. As a result, I know exactly which advertising media work, which don't, which headlines work, etc. Here's a scary piece of useless information: some advertisers were keying (i.e. testing and measuring) ads 100 years ago, but few small businesses do it today.

When people talk to me about their stock market strategy it is usually a short conversation. This is because I ask embarrassing questions such as, "Do you use daily stops or weekly stops?" and, "What was your portfolio's annual rate of return for last year?" These questions are embarrassing for people because they often either don't test and measure what they're doing or they constantly 'tweak' their trading rules as they go along, or both.

You won't know if something works unless you implement it for a reasonable period of time and test and measure the results. I know what does and doesn't work for me because I have tested and measured all of my mistakes. Those who are afraid to make mistakes and ask others for advice will never know what truly works and what doesn't. If you don't own the mistake then you don't own the wisdom that comes from it.

Organisation

When I was in high school in the 1970s, a study was undertaken to identify the common behavioural traits of highly successful school students. The only common factor it found was organisational ability. Successful students knew their strengths and weaknesses, allocated their time and kept impeccably organised class notes.

Success in business is also dependent on organisational ability, as there is little point in testing and measuring our market performance if we fail to record properly the results. I maintain a handwritten trading ledger in which I have recorded every trade that I have ever executed. A trading ledger is essential and it should include, at minimum, the following fields:

■ Date	The date of the transaction.
■ Buy or Sell	The type of transaction (buying or selling).
■ Share/Code	The name of the share and its ASX code.
■ Number of shares	The number of shares bought or sold.
■ Price	The price per share of the transaction.
■ Profit	The net profit including slippage – brokerage, GST, etc. (completed trades only).

- **Loss** — The net loss including slippage (completed trades only).
- **Cumulative Profit & Loss** — A running subtotal of the 'Profit' and 'Loss' columns.
- **Cost** — The full cost of a purchase including slippage.
- **Value** — The full value of a sale including slippage.
- **Account Balance** — A running subtotal of the 'Cost' and 'Value' columns.

I fill out my trading ledger when I receive the buy and sell contracts in the mail. Then, when I review my trading rules I have solid evidence on which to base my decisions. If I am happy with my performance then I can confidently carry all of my existing policies forward. If my performance is below par, on the other hand, I can usually determine the problem and alter my trading rules accordingly. If I make a bad decision then I will have irrefutable proof of it and can claim the mistake as mine alone... and the wisdom that goes with it.

Poor Judgement

In the stock market we are required to make qualitative judgements. We will inevitably have fairly poor judgement in the beginning, and will suffer poor judgement from time to time in the future. We are employing risk management on the basis that mistakes are unavoidable as buying and selling shares is not a perfect science. Interestingly though, our strategy also anticipates poor judgement insofar as it forces us to sell losing positions but hold on to winning positions.

By revisiting our sample portfolio from Chapter 10, we can see the cleansing effect that cutting our losses has on a portfolio (opposite).

Figure 13.1

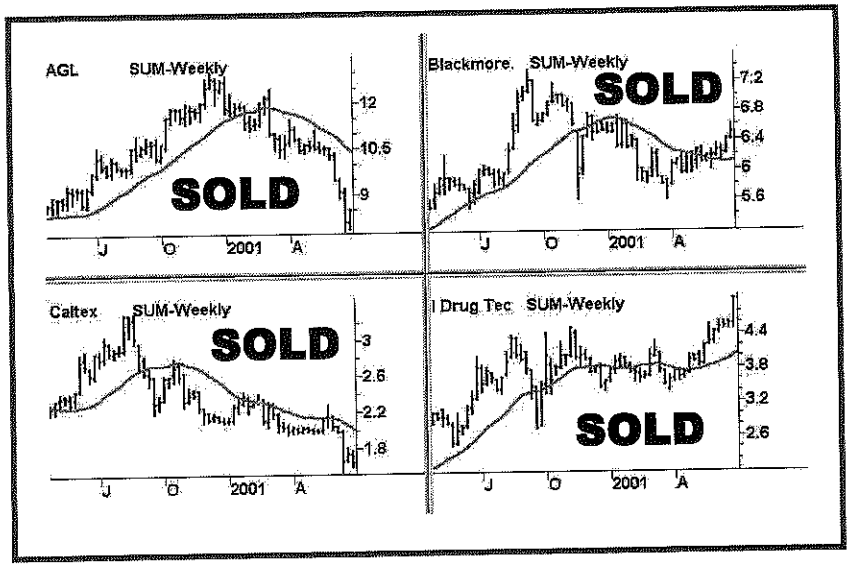
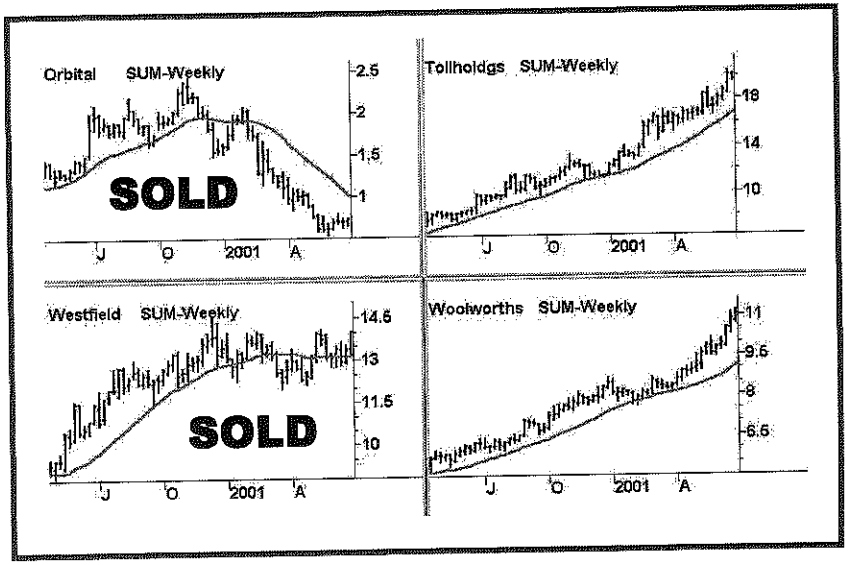


Figure 13.2



The only two shares that we own after one year are the winners, Toll Holdings and Woolworths. All of the duds we chose have been eliminated from our portfolio and they have caused only minimal damage to our bank balance, thanks to our risk management. So, in

spite of our personal judgement, our money will eventually find its way onto winning shares. Providing, of course, that we don't deviate from our market strategy.

Focus on the Strategy, not the Shares

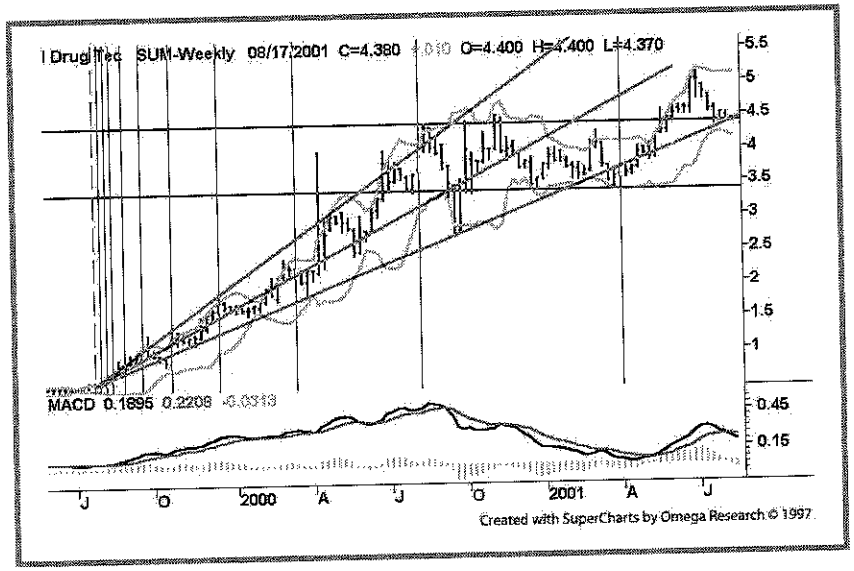
It is our market strategy that makes us successful and not the actual shares we own. When I was new to the stock market, I used to marvel at the level of objectivity that the more experienced traders had. A share and the company that it represented seemed to be irrelevant to them. I, on the other hand, would defend a company's performance and the integrity of its management and expound on its future potential. I was so preoccupied defending my judgement in choosing the share in the first place that I couldn't see the big picture – my market strategy. The more experienced traders were focused on improving their market strategies and, as a direct consequence, had absolutely no emotional connection to the underlying shares. They saw the shares as easily replaceable commodities in exactly the same way a shoe salesperson sees shoes. You can't afford to become emotionally attached to last year's fashion if you're in the shoe business.

Successful businesspeople focus on their business as a whole and not just on the product they sell. As a businessman, I have to pull back from the product level and make my business model the focus of my affections. When I buy and sell shares I have to shift my emotional attachment from the shares I trade to the strategy that I employ. As the author of this book I am focused on the science of investing, but to put the content of this book into practice you, the reader, need to focus on the business of investing.

Analysis Paralysis

A common trait amongst men is the overwhelming desire to complicate matters. This is one of the two major advantages that women have over men in the stock market. (In addition to not unnecessarily complicating things, women are more open about their personal psychology.) When I first started out in the stock market I wanted to devour as much information as I could, and the net result was a severe case of analysis paralysis. I was a walking encyclopedia on technical analysis and all my charts were overlayed with so many indicators that they looked like road maps of Sydney (Figure 13.3):

Figure 13.3



Many chartists work on the 'body of evidence' approach, where they look for consensus across a large range of indicators. While this method has merit, it is a trap for the inexperienced. Fundamentalists can also use the 'body of evidence' approach and create a tangle of facts. At some point in time, most traders and investors will recognise the downside of complexity and reverse their way out of it. Today I:

1. Seek profits;
2. Only use the three indicators which I've described in this book; and
3. If it isn't broken... I don't fix it.

Having taught hundreds of people to trade shares, I can testify that I have met less than a dozen people who lacked the ability to succeed. (In every such case it has been due to an aversion to mathematics.) On the other hand, I have taught hundreds of people who will not succeed because they are too 'smart' to hold to simple truths. They can't see the wood for the trees.

Other Strategies

Having warned about the dangers of complexity, it is still possible to integrate active investing with other market strategies. Nothing prevents us from combining active investing techniques with recommendations from stockbrokers, newsletters, magazines or any other source. But we must prioritise if we are going to employ multiple strategies. If I receive a tip from a friend or read a positive article about a company in the newspaper, I will always investigate it further, but the active investing strategy has the final say. If a recommendation doesn't appear on my list of 50 blue chip shares with good fundamentals and rising share prices, then I immediately reject it. By prioritising different strategies in this way I avoid both wasting my time and the danger of indecision. What I have observed about stock market tips is that the sources of these tips rarely contact me to say that things have gone terribly wrong and I should sell. Active investing, on the other hand, provides me with unambiguous selling signals, and I consider this function of the strategy to be just as valuable as identifying buying opportunities.

Random Effect

Fundamentals work over time and expecting tangible results in a space of one month is unrealistic. But while we patiently wait for profits to materialise, we see other shares that are rising in price. There is an overwhelming urge to move our capital to a running share and get with the action. (The grass is always greener on the other side.) But constantly shifting from share to share will cause us to suffer from random effect – i.e. short-term, random price fluctuations.

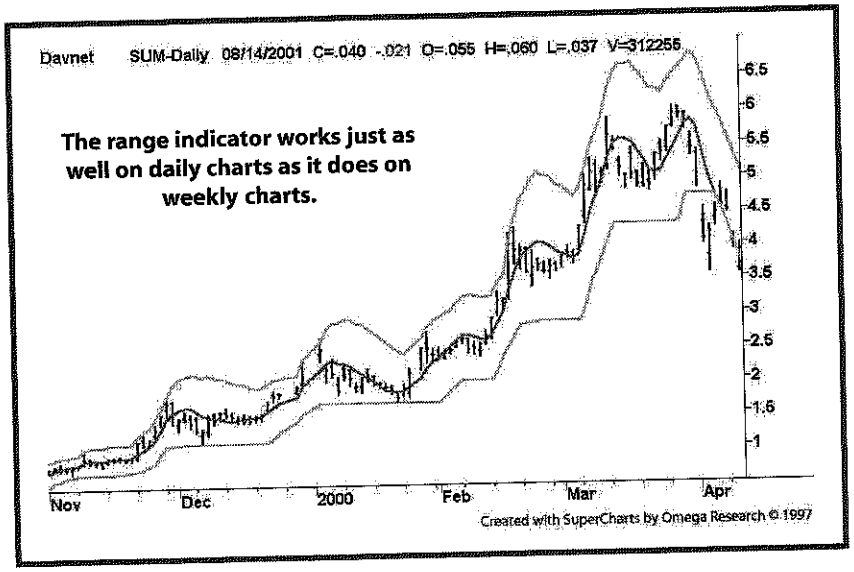
Blue chip shares are the elephants of the stock market and they can plod along, moving sideways in price, for months at a time. The rate of return indicator measures the increase in share prices over a timeframe of at least six months and is designed to filter out short-term price fluctuations. We must be consistent in our approach – as our strategy ignores short-term price fluctuations, so should we. Day-to-day price fluctuations, although they are the staple diet of day traders, are considered random from the perspective of active investing.

End-of-Day Trading

Active investing is the mainstay of my income, and I also trade speculative shares and derivatives such as exchange traded warrants. I treat speculative shares and derivative trading as sport rather than an essential source of income. The easiest market strategy for anyone to master is blue chip trading and that is why I often refer to Active Investing as 'kindergarten for traders'.

Whilst trading day-to-day price movements negates the necessity of using fundamental analysis, the technical skills required do not differ from those used in Active Investing. The following picture shows the range indicator being used on a daily chart of a speculative share:

Figure 13.4



Acquiring Knowledge

As anyone who has ever started a small business will attest, you will encounter many problems on the road ahead – big and small, technical and psychological. Save your brain capacity for dealing with these unexpected pot-holes. Acquire market knowledge only out of need and not out of desire.

In a similar vein, when I had been trading for one year I had a year's market experience and after five years of trading I had five year's market experience. To master the content of this book alone

will take the most enthusiastic reader six to twelve months in the marketplace. There is no shortcut to this process, so don't try and replace market experience with market knowledge.

Take Your Time

I have spent most of my adult life working with technology. I have repaired several thousand computers, serviced hundreds of printers and developed a range of computer accessories. The majority of the skills I acquired during my working life and the hi-tech products that I developed are now obsolete. Being involved in hi-tech industries means learning new skills quickly and being prepared to abandon old ones just as fast. It's an appalling waste of mental capacity and an endless merry-go-round of learning.

In contrast, the concepts behind buying and selling shares are static. All the market experience and knowledge I gain today will still be applicable in 50 years' time – the effect is cumulative. There is no need to be in a hurry. There is no force, short of a nuclear holocaust or permanent amnesia, that can put me back to where I started. Although I will inevitably miss many opportunities today... the market will always be there tomorrow.

APPENDIX A
SUPERCHARTS INDICATOR FORMULAS

The following SuperCharts indicators are for use on weekly charts where volume is in units of 100. The 'Rate of Return' and 'Rate of Decline' indicators use a cutoff of 25%.

'Rate of Return' Indicator

Only Plots 3 and 4 are visible with Plots 1 and 2 being used for calculations only.

Plot1

```
iff( round(
((6.854*LinearRegValue(close,13,0))+(4.236*LinearRegValue
(LinearRegValue(close,13,0),11,0))+(2.618*LinearRegValue
(LinearRegValue(LinearRegValue(close,13,0),11,0),7,0))+
(1.618*LinearRegValue(LinearRegValue(LinearRegValue(LinearRe
gValue(close,13,0),11,0),7,0),5,0)) +
(1*LinearRegValue(LinearRegValue(LinearRegValue(LinearReg
Value(LinearRegValue(close,13,0),11,0),7,0),5,0),3,0))  )/
16.326,2) >plot1[1]  ,iff(round(
((6.854*LinearRegValue(close,13,0))+(4.236*LinearRegValue
(LinearRegValue(close,13,0),11,0))+(2.618*LinearRegValue
(LinearRegValue(LinearRegValue(close,13,0),11,0),7,0))+(1.618*Linear
RegValue(LinearRegValue(LinearRegValue(LinearRegValue
(close,13,0),11,0),7,0),5,0)) +
1*LinearRegValue(LinearRegValue(LinearRegValue(LinearRegValue
(LinearRegValue(close,13,0),11,0),7,0),5,0),3,0))  )/16.326,2)-
(2.5*AvgTrueRange(13))>plot1[1],round(
((6.854*LinearRegValue(close,13,0))+(4.236*LinearRegValue
(LinearRegValue(close,13,0),11,0))+(2.618*LinearRegValue(Lin
```

```
earRegValue(LinearRegValue(close,13,0),11,0),7,0))
+(1.618*LinearRegValue(LinearRegValue(LinearRegValue
(LinearRegValue(close,13,0),11,0),7,0),5,0)) +
(1*LinearRegValue(LinearRegValue(LinearRegValue
(LinearRegValue(LinearRegValue(close,13,0),11,0),7,0),5,0),3,0))
)/16.326,2)-
(2.5*AvgTrueRange(13)),plot1[1]),LinearRegValue(close,13,0))
```

Plot2

```
iff( Summation(weightedclose*volume,13)>100000 and
(LinearRegValue(weightedclose,13,0)+LinearRegValue(LinearRegValue
(weightedclose,8,0),13,0)+LinearRegValue(LinearRegValue
(LinearRegValue(weightedclose,5,0),8,0),13,0)+LinearRegValue
(LinearRegValue(LinearRegValue(LinearRegValue
(weightedclose,3,0),5,0),8,0),13,0)+LinearRegValue(LinearRegValue
(LinearRegValue(LinearRegValue(LinearRegValue
(weightedclose,2,0),3,0),5,0),8,0),13,0))/5 >
(LinearRegValue(weightedclose[1],13,0)+LinearRegValue(Linear
RegValue(weightedclose[1],8,0),13,0)+LinearRegValue(LinearReg
Value(LinearRegValue(weightedclose[1],5,0),8,0),13,0)
+LinearRegValue(LinearRegValue(LinearRegValue(LinearRegValue
(weightedclose[1],3,0),5,0),8,0),13,0)+LinearRegValue
(LinearRegValue(LinearRegValue(LinearRegValue(Linear
RegValue(weightedclose[1],2,0),3,0),5,0),8,0),13,0))/5 and
LowestBar(weightedclose,Tperiod)=Tperiod-1 and plot2[1]=0 and
average(weightedclose,13)>average(weightedclose,21),Tperiod-
1,iff(plot2[1]>Tperiod-2 and
average(weightedclose,13)>average(weightedclose,21) and
plot3[1]>24 and plot1 >= plot1[1] and
Summation(weightedclose*volume,13)>100000,plot2[1]+1,
iff(average(weightedclose,21)>=average(weightedclose,13) or
Summation(weightedclose*volume,13)<100000 or plot1[1]>plot1
or plot3[1] <25,0,plot2[1])))
```

Plot3

```
round(iff(plot2>0,iff( plot2<52,(5200/
(plot2+1))*((LinearRegValue(weightedclose,13,0)-
weightedclose[plot2])/
```



```
LinearRegValue(weightedclose,13,0)),100*((LinearRegValue(weightedclose,13,0)-
LinearRegValue(weightedclose[51],13,0) )/
LinearRegValue(weightedclose,13,0))),0),0)
```

Plot4

25

'Rate of Decline' Indicator

Only Plots 3 and 4 are visible with Plots 1 and 2 being used for calculations only.

Plot1

```
iff( round( ((6.854*LinearRegValue(close,13,0))+(4.236*
LinearRegValue(LinearRegValue(close,13,0),11,0))+(2.618*LinearRegValue
(LinearRegValue(LinearRegValue(close,13,0),11,0),7,0))+(
1.618*LinearRegValue(LinearRegValue(LinearRegValue(LinearReg
Value(close,13,0),11,0),7,0),5,0)) +
(1*LinearRegValue(LinearRegValue(LinearRegValue(LinearReg
Value(LinearRegValue(close,13,0),11,0),7,0),5,0),3,0)) )/
16.326,2) < plot1[1] ,iff(round(
((6.854*LinearRegValue(close,13,0))+(4.236*LinearRegValue
(LinearRegValue(close,13,0),11,0))+(2.618*LinearRegValue
(LinearRegValue(LinearRegValue(close,13,0),11,0),7,0))+(1.618*
LinearRegValue(LinearRegValue(LinearRegValue(LinearRegValue
(close,13,0),11,0),7,0),5,0)) +
(1*LinearRegValue(LinearRegValue(LinearRegValue
(LinearRegValue(LinearRegValue(close,13,0),11,0),7,0),5,0),3,0))
)/16.326,2)+(2.5*AvgTrueRange(13))<plot1[1],round(
((6.854*LinearRegValue(close,13,0))+(4.236*L
inearRegValue(LinearRegValue(close,13,0),11,0))+(2.618*LinearRegValu
e(LinearRegValue(LinearRegValue(close,13,0),11,0),7,0)
)+(1.618*LinearRegValue(LinearRegValue(LinearRegValue
(LinearRegValue(close,13,0),11,0),7,0),5,0)) +
(1*LinearRegValue(LinearRegValue(LinearRegValue
(LinearRegValue(LinearRegValue(close,13,0),11,0),7,0),5,0),3,0))
)/16.326,2)+(2.5*AvgTrueRange(13)),plot1[1]),LinearRegValue
(close,13,0))
```

Plot2

```
iff( Summation(weightedclose*volume,13)>100000 and
(LinearRegValue(weightedclose,13,0)+LinearRegValue
(LinearRegValue(weightedclose,8,0),13,0)+LinearRegValue
(LinearRegValue(LinearRegValue(weightedclose,5,0),8,0),13,0)+Linear
RegValue(LinearRegValue(LinearRegValue(LinearRegValue(weighted
close,3,0),5,0),8,0),13,0)+LinearRegValue(LinearRegValue(Linear
RegValue(LinearRegValue(LinearRegValue(weightedclose,2,0),3,0),5,0),
8,0),13,0))/5 <
(LinearRegValue(weightedclose[1],13,0)+LinearRegValue(Linear
RegValue(weightedclose[1],8,0),13,0)+LinearRegValue(Linear
RegValue(LinearRegValue(weightedclose[1],5,0),8,0),13,0)+
LinearRegValue(LinearRegValue(LinearRegValue(LinearReg
Value(weightedclose[1],3,0),5,0),8,0),13,0)+LinearRegValue
(LinearRegValue(LinearRegValue(LinearRegValue(LinearRegValue
(weightedclose[1],2,0),3,0),5,0),8,0),13,0))/5 and
HighestBar(weightedclose,Tperiod)=Tperiod-1 and plot2[1]=0
and
average(weightedclose,13)<average(weightedclose,21),Tperiod-
1,iff(plot2[1]>Tperiod-2 and
average(weightedclose,13)<average(weightedclose,21) and
plot3[1]< -24 and plot1 <= plot1[1] and
Summation(weightedclose*volume,13)>100000,plot2[1]+1,iff
(average(weightedclose,21)<=average(weightedclose,13) or
Summation(weightedclose*volume,13)<100000 or plot1[1]<plot1
or plot3[1] > -25,0,plot2[1]))
```

Plot3

```
round(iff(plot2>0,iff( plot2<52,(5200/
(plot2+1))*((LinearRegValue(weightedclose,13,0)-
weightedclose[plot2])/
LinearRegValue(weightedclose,13,0)),100*((LinearReg
Value(weightedclose,13,0)-
LinearRegValue(weightedclose[51],13,0) )/
LinearRegValue(weightedclose,13,0))),0),0)
```

Plot4

```
-25
```


Range Indicator – Rising Equities

The range indicator overlays three lines on the price data and 'Scaling' must be set for 'Same as price data'.

Plot1

```
round( ((6.854*LinearRegValue(close,13,0))+(4.236*LinearReg
Value(LinearR
egValue(close,13,0),11,0))+(2.618*LinearRegValue
(LinearRegValue(LinearRegValue(close
,13,0),11,0),7,0))+(1.618*LinearRegValue(LinearRegValue
(LinearRegValue(LinearRegValue(close,13,0),11,0),7,0),5,0)) +
(1*LinearRegValue(LinearRegValue(LinearRegValue(LinearRegValue
(LinearRegValue(close,13,0),11,0),7,0),5,0),3,0)) )/16.326,2)
```

Plot2

```
round(plot1+(3*AvgTrueRange(13)) ,2)
```

Plot3

```
round( iff( plot1>plot3[1] ,iff(plot1-
(2.5*AvgTrueRange(13))>plot3[1],plot1-
(2.5*AvgTrueRange(13)),plot3[1]),plot1),2)
```

Range Indicator – Falling Equities

Once again, 'Scaling' must be set for 'Same as price data'.

Plot1

```
round( ((6.854*LinearRegValue(close,13,0))+(4.236*LinearReg
Value(LinearRegValue(close,13,0),11,0))+(2.618*LinearRegValue
(LinearRegValue(LinearRegValue(close,13,0),11,0),7,0))
+(1.618*LinearRegValue(LinearRegValue
(LinearRegValue(LinearRegValue(close,13,0),11,0),7,0),5,0)) +
(1*LinearRegValue(LinearRegValue(LinearRegValue(LinearRegValue
(LinearRegValue(close,13,0),11,0),7,0),5,0),3,0)) )/16.326,2)
```

Plot2

round(plot1–(3*AvgTrueRange(13)) ,2)

Plot3

round(iff(plot1<plot3[1]
,iff(plot1+(2.5*AvgTrueRange(13))<plot3[1],plot1+
(2.5*AvgTrueRange(13)),plot3[1]),plot1),2)

Multiple Moving Average Indicators

The MMA charts are created by using three separate indicators that each contain four plots.

Weekly MMA Indicator 1

Plot1

xaverage(close,3)

Plot2

xaverage(close,5)

Plot3

xaverage(close,7)

Plot4

xaverage(close,9)

Weekly MMA Indicator 2

Plot1

xaverage(close,11)

Plot2

xaverage(close,13)

Plot3

xaverage(close,21)

Plot4

xaverage(close,24)

Weekly MMA Indicator 3

Plot1

xaverage(close,27)

Plot2

xaverage(close,30)

Plot3

xaverage(close,33)

Plot4

xaverage(close,36)

Sector 'Rate of Return'

Plot1

200*(linearregvalue(close,52,0)–linearregvalue(close[26],52,0))/
close

Variable Linear Regression

Plot1

iff(MRO(Open=StartO and Close=StartC,BarsBack,1)>0 ,
LinearRegValue(medianprice,MRO(Open=StartO and
Close=StartC,BarsBack,1),0) ,close)

Inputs

StartO	Opening price for the starting trading period (Default value 0)
StartC –	Closing price for the starting trading period (Default value 0)
Barsback	The number of bars back that the MRO function tests (Default value – 100)

Index Range Indicator

Plot1

iff(MRO(Open=StartO and Close=StartC,BarsBack,1)>0 , medianprice[MRO(Open=StartO and Close=StartC,BarsBack,1)]+ 1.2* (LinearRegValue(medianprice,MRO(Open=StartO and Close=StartC,BarsBack,1),0)– medianprice[MRO(Open=StartO and Close=StartC,BarsBack,1)]),close)

Plot2

iff(MRO(Open=StartO and Close=StartC,BarsBack,1)>0 , medianprice[MRO(Open=StartO and Close=StartC,BarsBack,1)]+ 0.8* (LinearRegValue(medianprice,MRO(Open=StartO and Close=StartC,BarsBack,1),0)– medianprice[MRO(Open=StartO and Close=StartC,BarsBack,1)]),close)

Inputs

StartO – Opening price for the starting trading period (Default value – 0)

StartC – Closing price for the starting trading period (Default value – 0)

Barsback – The number of bars back that the MRO function tests (Default value – 100)

APPENDIX B
METASTOCK INDICATOR FORMULAS

The following indicators have been adapted from the SuperCharts formulas in Appendix A for use on MetaStock by Simon Sherwood, author of *MetaStock® in a Nutshell* (Wrightbooks). Whilst they have been derived from the formulas in Appendix A, they do not return identical values (i.e. The RoR and RoD indicators do not switch ON and OFF and do not check liquidity). They are designed for use on weekly charts.

Rate of Return & Rate of Decline Indicators

200*(LinearReg(C,52)–Ref(LinearReg(C,52),–26))/C

Exploration – Rate of Return

Rate of Return > 25

Exploration – Rate of Decline

Rate of Decline < –25

Range Indicator – Rising Equities

Central Cord

LinearReg(C,13);

Lower Deviation

If(LinearReg(C,13)>PREV,If(LinearReg(C,13)–(ATR(13)*2.5)> PREV,LinearReg(C,13)–(ATR(13)*2.5),PREV), LinearReg(C,13));

Upper Deviation

LinearReg(C,13)+(ATR(13)*3);

Range Indicator – Falling Equities

Central Cord

LinearReg(C,13);

Lower Deviation

LinearReg(C,13)–(ATR(13)*3);

Upper Deviation

If(LinearReg(C,13)<PREV,If(LinearReg(C,13)+(ATR(13)*2.5)<PREV,LinearReg(C,13)+(ATR(13)*2.5),PREV),LinearReg(C,13));

MMA Charts

MetaStock users can either build MMA indicators or create an MMA template.

Short-term group of exponential moving averages – 3, 5, 7, 9, 11 and 13.
Long-term group of exponential moving averages – 21, 24, 27, 30, 33 and 36.

Sector Rate of Return

200*(LinearReg(C,52)–Ref(LinearReg(C,52),–26))/C

Variable Linear Regression and Index Range Indicator

There are no MetaStock equivalents for these indicators.

APPENDIX C
TRADESTATION INDICATOR FORMULAS

The following indicators are used to generate the data tables and the charts in the weekly ActVest Newsletter. They are for use on weekly charts where volume is in units of 100 and the 'Rate of Return' and 'Rate of Decline' indicators use entry and hold cutoffs of 30% and 20% respectively.

'Rate of Return' Indicator

```
Variable: Cord(0),LD(0),Roar(0),Cutoff(0),Enter(0), Counter(52), Period(26) ;
For Counter = 52 downto 13 Begin
        if linearRegValue(close,Counter,0) > linearRegValue(close,Period,0) then Period
= Counter;
End ;
Cord = linearRegValue(close,Period,0);
LD = Cord - (2.618 * Cord * AvgTrueRange(52)/Average(close,52) ) ;
If LD < LD[1] then LD = LD[1];
If Cord < LD then LD = Cord;
if LinearRegValue(close,26,0)>0 then Roar = IntPortion (5200 * linearRegSlope(close,26)/
LinearRegValue(close,26,0))else Roar = 0;
If Roar >= 30 and IntPortion (LinearRegValue(roar,5,0)) >= 30 then Roar = IntPortion
(LinearRegValue(roar,5,0));
Cutoff = 20;
Enter = 30;
if Roar < Cutoff then Roar = 0;
if Roar < Enter and Roar[1] = 0 then Roar = 0;
if Roar[1] = 0 and summation(volume * MedianPrice,13) < 120000 then Roar = 0 ;
if Roar[1] > 0 and summation(volume * MedianPrice,13) < 100000 then Roar = 0 ;
if Cord = LD then Roar=0;
plot1 (Roar ,"Roar", darkgray, black, 1 );
plot2 (Cutoff , "Cutoff" , black , black , 1 );
```

'Rate of Decline' Indicator

```
Variable: Cord(0),UD(0),Road(0),Cutoff(0),Enter(0), Counter(7), Period(7),
Period1(26) ;
For Counter = 7 to 13 Begin
if linearRegValue(close,Counter,0) < linearRegValue(close,Period,0) then Period =
Counter;
End ;
Cord = linearRegValue(close,Period,0);
UD = Cord + (2.618 * Cord * AvgTrueRange(13)/Average(close,13) ) ;
If UD > UD[1] then UD = UD[1];
If Cord > UD then UD = Cord;
```

```
For Counter = 26 to 52 Begin
        if LinearRegValue(close,Counter,0) > 0 then begin;
                if LinearRegValue(close,26,0) <= 0 and period1 = 26 then period1 = 27;
                        if linearRegSlope(close,Counter)/
LinearRegValue(close,Counter,0) < linearRegSlope(close,Period1)/
LinearRegValue(close,Period1,0) then Period1 = Counter;
        End;
End;
Road = IntPortion (5200 * linearRegSlope(close,Period1)/
LinearRegValue(close,Period1,0));
If Road <= -30 and IntPortion (LinearRegValue(road,5,0)) <= -30 then Road =
IntPortion (LinearRegValue(Road,5,0));
Cutoff = -20;
Enter = -30;
if Road > Cutoff then Road = 0;
if Road > Enter and Road[1] = 0 then Road = 0;
if Road[1] = 0 and summation(volume * MedianPrice,13) < 120000 then Road = 0 ;
if Road[1] > 0 and summation(volume * MedianPrice,13) < 100000 then Road = 0 ;
if Cord = UD then Road=0;
plot1 (Road ,"Road", darkgray, black, 1 );
plot2 (Cutoff , "Cutoff" , black , black , 1 );
```

Range+ Indicator for rising equities

```
Variable: Cord(0),LD(0), UD(0), Period(52), Counter(52) ;
For Counter = 52 downto 13 Begin
        if linearRegValue(close,Counter,0) > linearRegValue(close,Period,0) then Period
= Counter;
End ;
Cord = linearRegValue(close,Period,0);
LD = Cord - (2.618 * Cord * AvgTrueRange(52)/Average(close,52) ) ;
If LD < LD[1] then LD = LD[1];
If Cord < LD then LD = Cord;
UD = Cord + (2.618 * Cord * AvgTrueRange(52)/Average(close,52) ) ;
plot1 (Cord ,"Cord", black , default , 1 );
plot2 (LD , "LD" , darkgray , default , 1 );
plot3 (UD , "UD" , darkgray , default , 1 );
```

Range– Indicator for falling equities

```
Variable: Cord(0),LD(0), UD(0), Period(7), Counter(7) ;
For Counter = 7 to 13 Begin
        if linearRegValue(close,Counter,0) < linearRegValue(close,Period,0) then Period
= Counter;
End ;
Cord = linearRegValue(close,Period,0);
LD = Cord - (2.618 * Cord * AvgTrueRange(26)/Average(close,26) ) ;
UD = Cord + (2.618 * Cord * AvgTrueRange(13)/Average(close,13) ) ;
If UD > UD[1] then UD = UD[1];
If Cord > UD then UD = Cord;
plot1 (Cord ,"Cord", black , default , 1 );
plot2 (LD , "LD" , darkgray , default , 1 );
plot3 (UD , "UD" , darkgray , default , 1 );
```

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FURTHER READING

Charting in a Nutshell, Alan Hull (Wrightbooks)

Top Stocks, Martin Roth (Wrightbooks)

The Bear Book, John Rothchild (Wiley)

Instant Cashflow, Bradley J. Sugars (Action International Publishing)

Rich Dad Poor Dad, Robert T. Kiyosaki (Techpress Inc.)

Trading for a Living, Dr Alexander Elder (Wiley)

The Great Crash 1929, John Kenneth Galbraith (Penguin Books)

Scientific Advertising, Claude Hopkins (Action International Publishing)

The E-Myth Revisited, Michael Gerber (Harper Collins)

Building Wealth through Investment Property, Jan Somers (Herron Books)

Anyone can be a Millionaire, Sean O'Reilly (Pan McMillian)

Buffettology, Mary Buffett (Simon & Schuster)

One Up on Wall Street, Peter Lynch (Simon & Schuster)