LEX VAN DAM

Trading Academy

5-Step-Trading® Stocks
online course

▼

Workbook
www.lexvandam.com

5-STEP-TRADING® STOCKS WORKBOOK

Introduction
This workbook is meant to accompany the 5-Step-Trading® Stocks online modules. It is not designed to be a book in itself, but the idea is to save you time writing down what is discussed in the modules; space has been left so you can make your own notes. Some of the UK examples have been changed to US examples.

As I mention in the modules, 5-Step-Trading® Stocks is the culmination of everything I've learned about trading in the equity markets. It has taken me 20 years to get to where I am today and I am still learning new things, so this course should only ever serve as a basis from which to work. Trading and investing is hard work and you need to be prepared to invest in your own future by continuously learning new skills.

Most people watch the modules two or three times; this is completely normal and I believe it is better than making an investing or trading for dummies course.

The average man doesn't wish to be told that it is a bull or a bear market. What he desires is to be told specifically which particular stock to buy or sell. He wants to get something for nothing. He does not wish to work. He doesn't even wish to have to think.
Jesse Livermore

The famous trader Jesse Livermore said it so well in the quote above: you need to be above average to stand a chance!

In case you are not familiar with certain concepts, this workbook also contains a glossary of terms in the appendices at the back. If you do not find the answer there, any investment concept can easily be researched on the Internet.

For the latest on the academy go to www.lexvandam.com and please follow me on Twitter @lexvandam.

As a warning once again, I do not recommend that you actually trade, nor should you trade based on any of the advice given to you by me. All I do here is try to share with you my experiences and thoughts in the best way I can. Take away from it what you like.

Happy Trading,

Lex van Dam

The five steps in 5-Step-Trading®

1. Idea Generation
How to find good trading ideas. Why it can be costly to follow other people's trading ideas without doing your own checks first.

2. Company Analysis
To decide whether your best ideas make sense from the perspective of the individual companies involved. We will look at what the company's business is and give you the tools you need to analyse company financials.

3. Chart Analysis
Trading from a technical perspective and how to read stock charts. To help you look at market trends and decide whether the *timing* is right for a potential trade.

4. Self Check
Ensure that you are in the right state of mind to trade. Common trading mistakes and how to avoid them.

5. Risk Management
How to build and protect your stock portfolio in the market – to ensure that even when you do lose money it won't inhibit your ability to trade.

The idea is that you go through each of the five steps before you invest or trade. I basically don't want you to buy a stock that everybody else has already bought, the stock of a company that is run by incompetent management, or a stock that has doubled in the past week. I don't want you to trade when you are pre-occupied by matters outside trading nor do I want you to put all your money into one single idea, no matter how appealing.

If you go through each of the five steps you have a much better chance of making money than the average person!

STEP 1: IDEA GENERATION

Original ideas are KEY to successful trading.

• Don't trade on rumours and other people's trade ideas.

• Being the source of your own trades is a way of keeping in control of things as they change.

• Be very careful following consensus ideas.

• Newspapers and financial news channels are useful sources of information but be very careful trading based on what they tell you.

• Make sure that you know where the information comes from and that the source is reliable.

WORKBOOK QUESTION: *Why is it that you need to develop your own trading ideas?*

Trading ideas can be generated through **bottom-up analysis** or **top-down analysis**.

There are other ways of course. and we will discuss them in further courses, but this is what we will look at here.

BOTTOM-UP ANALYSIS
Bottom-up analysis starts by looking at one specific company and its exact business. What products does it make, and who does it sell to? Is it a new company with a lot of growth or an older one with a good steady business? How good are the products compared to its competitors?

Everyone has an area of expertise; think about what you know, what you do, and what you like, and use it to help you generate ideas and pick stocks. Just like Emile Coleman and others did in *Million Dollar Traders* on the BBC.

WORKBOOK QUESTION: How do you behave as a consumer? What trading ideas can you think of?

TOP-DOWN ANALYSIS
Top-down analysis means that you find interesting themes and investigate them, and then determine which companies are likely to be affected by the themes in question.

Two examples are exposure to the Chinese or the UK economy. (Note: All the numbers are historical estimates and are purely for illustrative purposes.)

Example 1

Percentage of sales to China

¥ Xtrata	35%
¥ Intertek Group	25%
¥ Vedanta	20%
¥ BHP Billiton	20%
¥ Rio Tinto	20%
¥ SAB Miller	12%
¥ Antofogasta	11%
¥ Schroders	10%

Example 2

Percentage of sales in the UK

´ Enterprise Inns	100%
´ JD Wetherspoon	100%
´ Punch Taverns	100%
´ Home Retail Group	100%
´ Sainsbury	100%
´ WH Smith	97%
´ Marks & Spencers	90%
´ BSkyB	85%

Short selling

Short selling profits from a fall in the stock price by selling a stock and buying it back later at a lower price.

It is the opposite of buying a stock or going long. When you buy a stock at 100p and you sell it at 120p you make a profit of 20p. If your idea was wrong, and you have to sell at 90p, you have made a loss of 10p.

Buy		
Purchase	100p	
Sell	120p	20p
Sell	90p	-10p
Short Sell		
Sell	100p	
Buy Back	90p	10p
Buy Back	120p	-20p

Let's see what happens in the case of short selling. If the stock is trading at 100p, but you believe it will fall 10% to 90p then you can short it at 100p and buy it back at 90p, thus making 10p profit.

Of course, when you are wrong you will have to buy it back at a higher level than you sold it for. If you end up buying it back at 120p you will have a loss of 20p.

Short selling can be undertaken to protect your portfolio or on its own as an outright trading idea.

WORKBOOK QUESTION: When you do a short sale your potential gain is unlimited, while your potential loss is 100%. Correct or incorrect?

WORKBOOK QUESTION: Is short selling legal in every market?

IDEAS AND PSYCHOLOGY

• Taking personal responsibility for your actions will help you to become more successful.

• By using your own ideas you will feel more involved in your trading, have greater control and build confidence.

• Find the type of trades and style of trading that suits you best.

WORKBOOK QUESTION: When things go wrong, do you blame yourself or other people? If you blame other people first, do you think you would become a better trader if you were able to work on this and change it?

THE BUSINESS CYCLE

The business cycle reflects the tendency of economies to move through periods of boom and bust, with fluctuations in economic growth typically occurring every five to seven years.

Different sectors of the economy perform better at different stages of the business cycle. So if you are able to figure out where we are in the cycle you can generate better ideas and increase your chances of making money.

The analysts at Goldman say that the business cycle can be divided into four distinct phases:

Stock market phase	1. Despair	2. Hope	3. Growth	4. Optimism

Table: The four stages of the business cycle

1. Despair
• People fear the economy will never recover.
• Stock market returns are bad.
• Best performers: defensive sectors such as healthcare, utilities and oil; can still go down but will still be strong relative to a weak market.

2. Hope
• People start to anticipate economic recovery.
• Stock market rallies; returns are good.
• Best performers: sectors that nearly went under in previous phase (i.e. those with high fixed costs that require economic activity to survive), e.g. automotive and chemical industries.

3. Growth
• Recovery proves to be not as good as hoped.
• Stock market rises, but not as fast as in phase 2; returns are average.
• Best performers: luxury travel and leisure sector; oil and gas exploration; real estate.

4. Optimism
• Economy continues to improve, people think the recovery will last forever.
• Stock market rallies hard again; returns are good.
• Best performers: will vary, often defending on the latest technological developments.

However at some point the actual economic growth will cease to keep up with the consensus forecast and the market will begin to fall and the economy will return to the despair phase.

WARNING: The next time things will be slightly different so always look at the overall picture, both economic and political before making investment decisions. The best or worst performing sectors might well change, as we move over time to a new business cycle, never assume that because something happened before it will happen again!

The economic phase you are in will have a significant impact on the kind of stocks you should be buying or selling.

WORKBOOK QUESTION: What economic phase do you believe we are in currently? How long do you think we have been in it? Which economic phase do you think some other major countries are in?

WORKBOOK QUESTION: What is generally a good stage to buy oil companies? When do you generally buy automobiles? And when is a good time for healthcare stocks?

KEY ECONOMIC INDICATORS

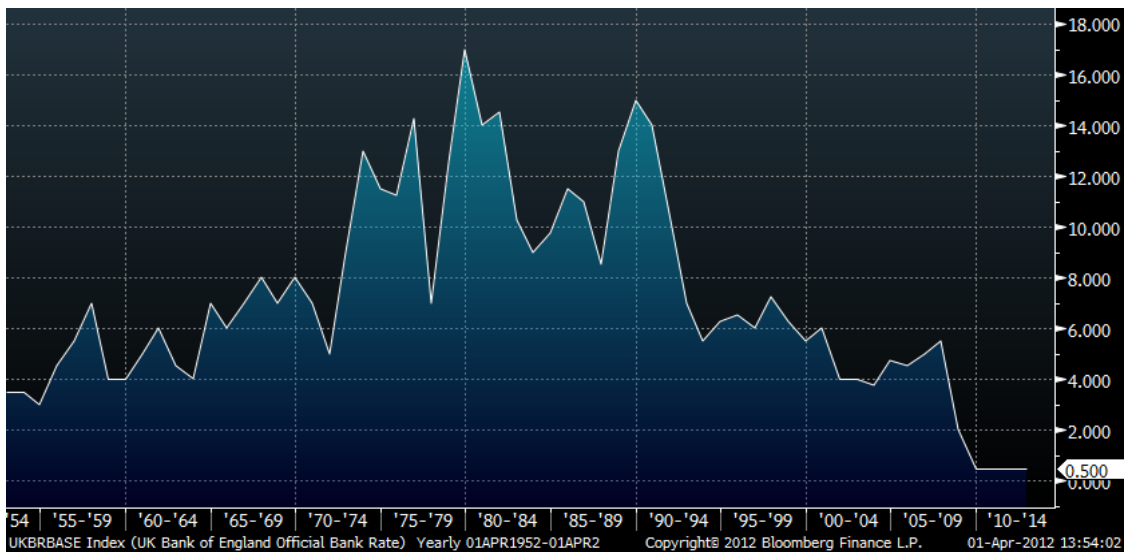The **interest rate** is really the price of money
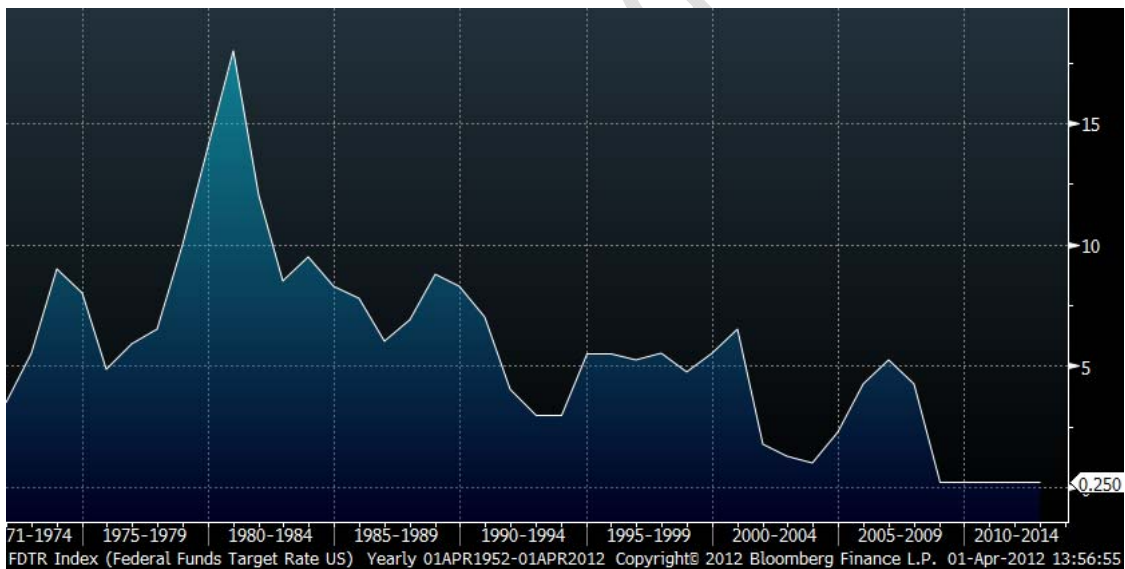

Chart UK interest rates since 1954

Chart USA Federal Funds Target Rate since 1971

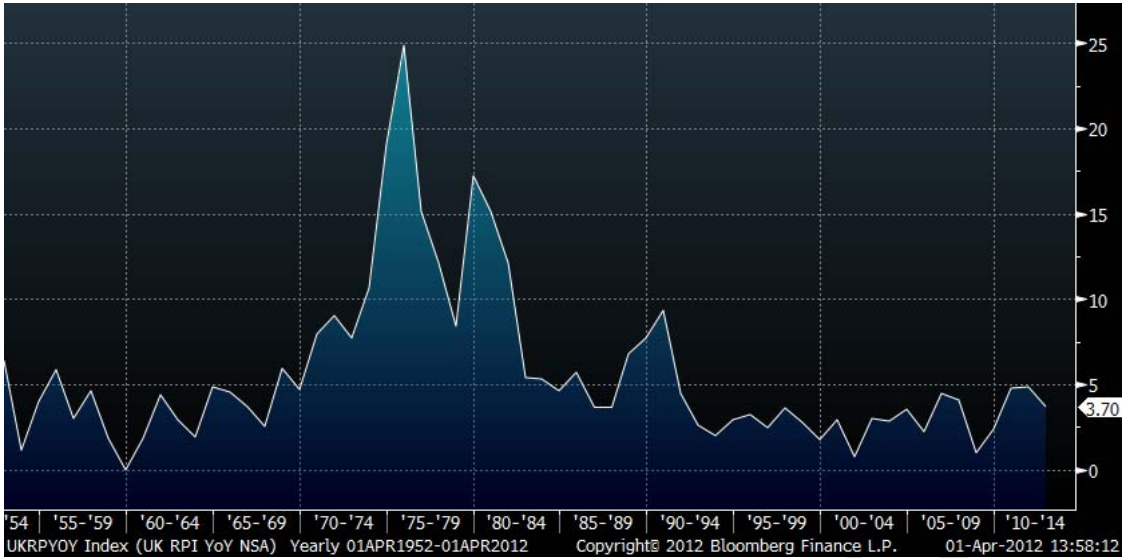**Inflation** means that prices of goods are rising.
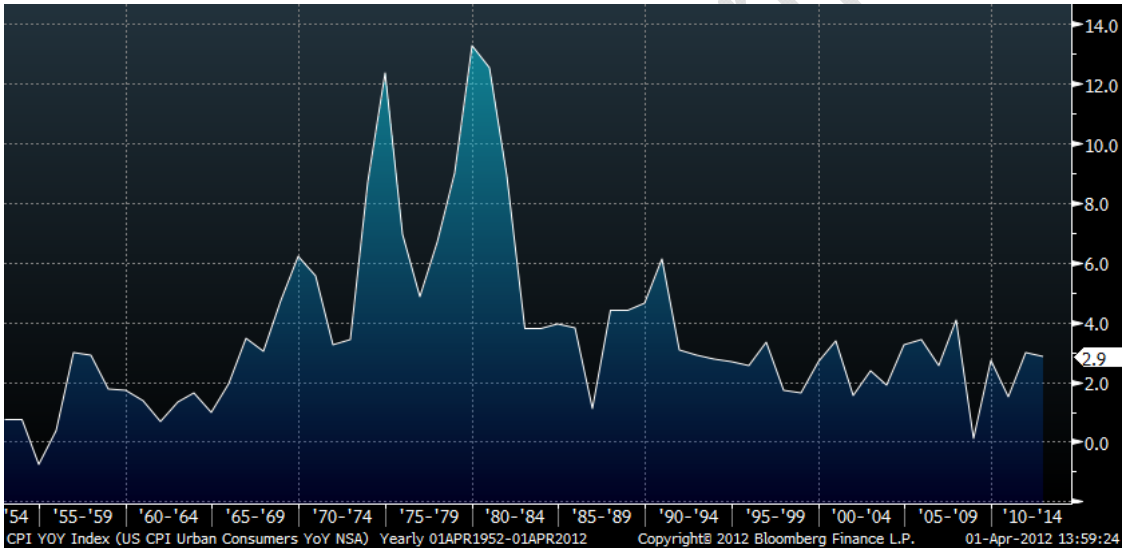
Chart UK inflation (RPI) since 1954

Chart US inflation (CPI) since 1954

Gross Domestic Product (GDP) is the value of all goods and services produced by an economy over a specified period.
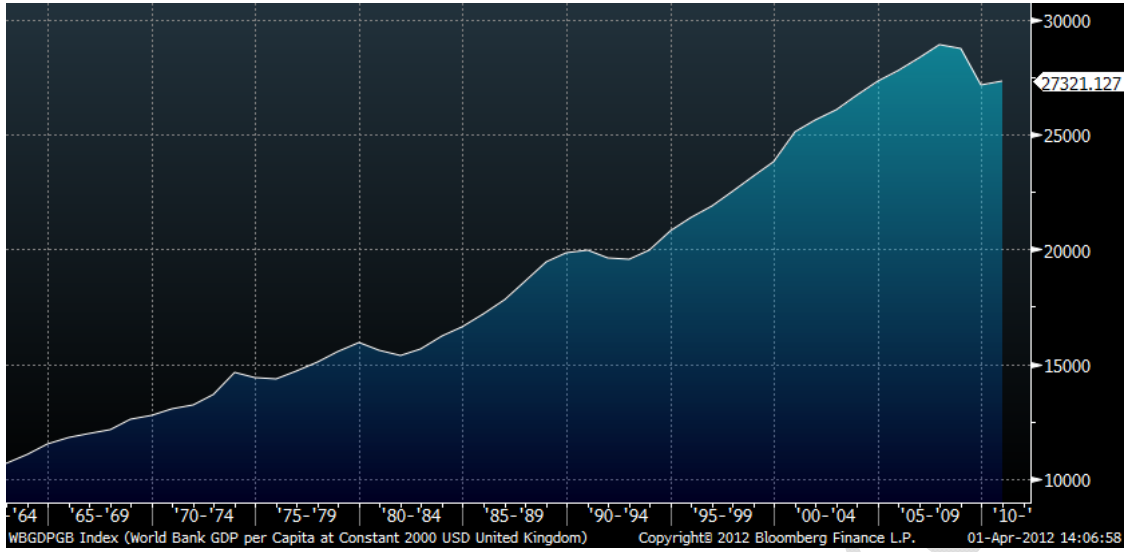
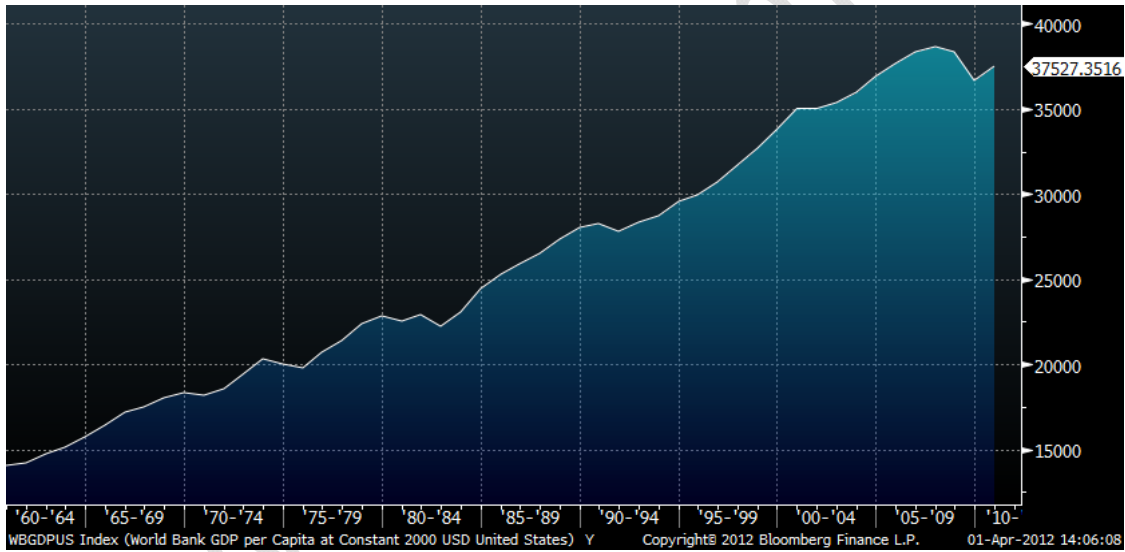Chart UK GDP per capita since 1964 (in US$)
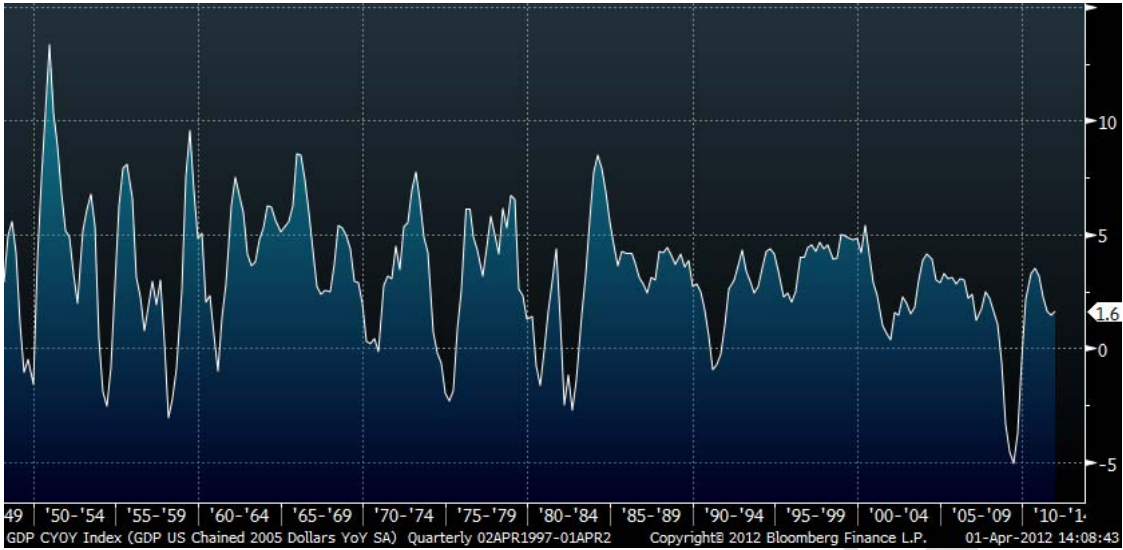

Chart US GDP per capita since 1964

Chart US GDP year on year changes since 1948

Unemployment – the number of people out of work – has many implications for the economy.
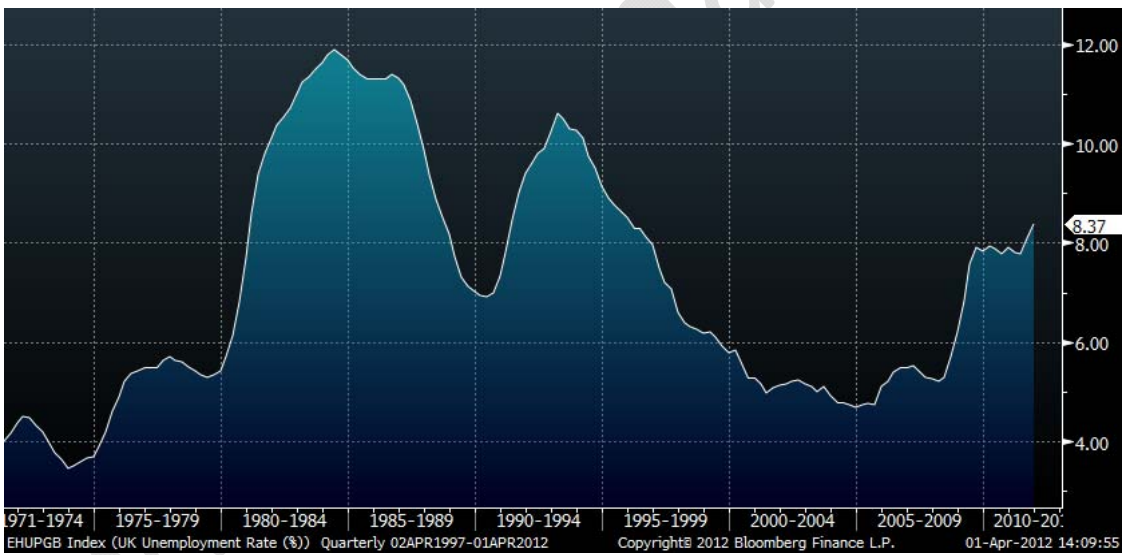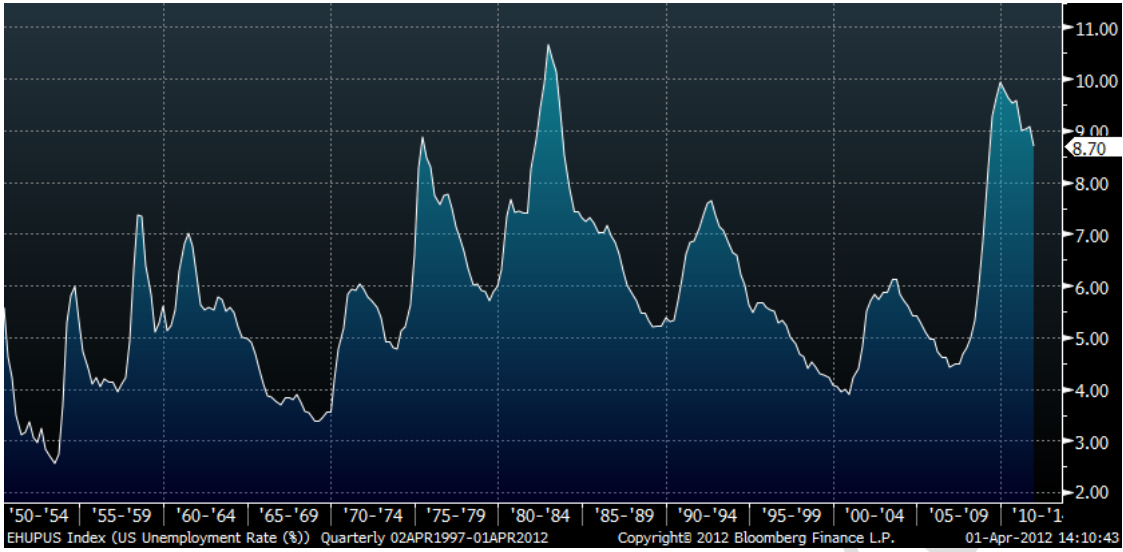

Chart UK unemployment since 1971
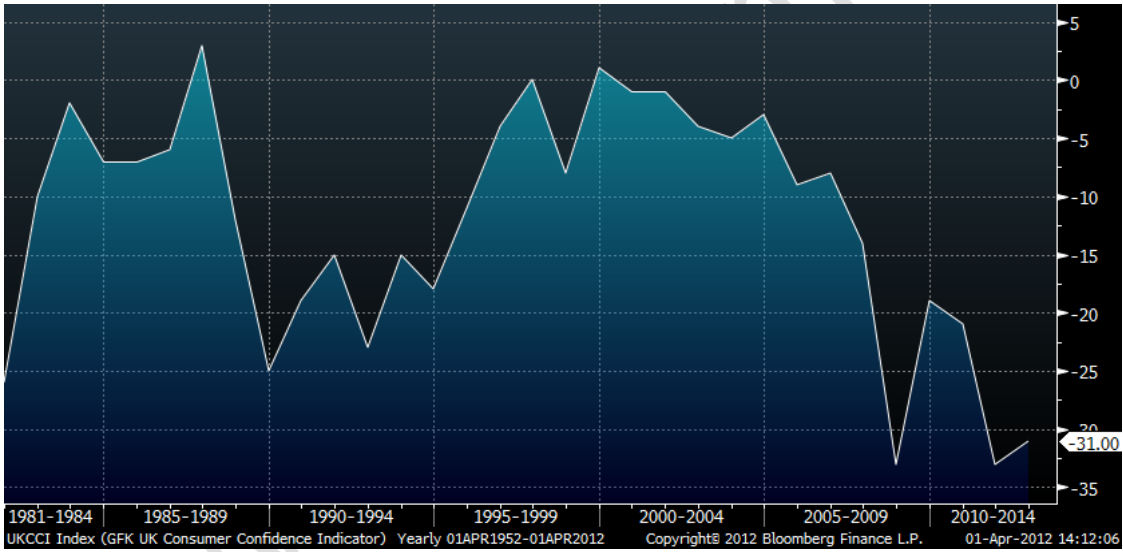
Chart US unemployment since 1950

Chart UK consumer confidence since 1981
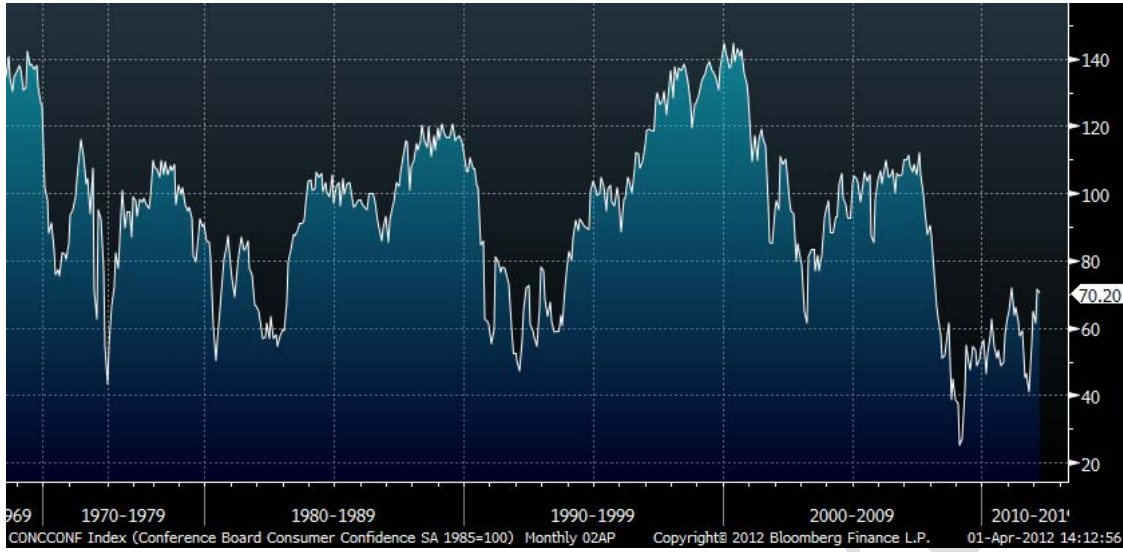
Chart US consumer confidence since 1967

Lex van Dam Financial Education©

ISM Survey

The **ISM Survey** has been produced in the US by the Institute for Supply Management since 1947. Even though it is an American indicator it is key to global stock markets because the American economy is by far the largest in the world.

• The ISM survey asks 400 purchasing managers over 20 industries a series of questions about economic activity in a number of areas and this data is put together in an index.

• The index is a number between 0 and 100. When the ISM is above 50 the economy is expanding, and when it is below 50 the economy will soon start to contract, or is already contracting.

Chart: The ISM Survey since 1950
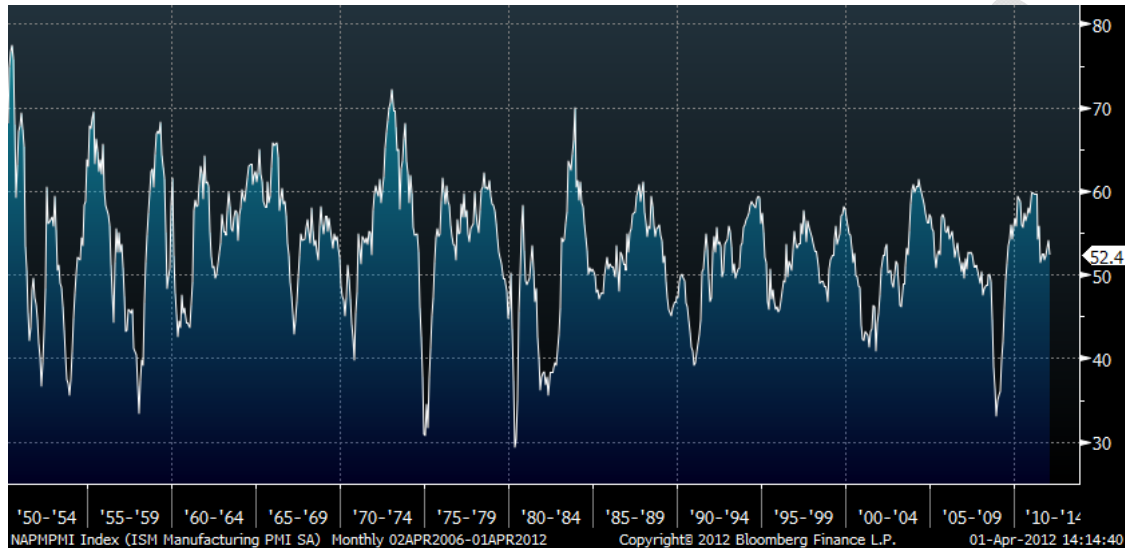
WORKBOOK QUESTION: What is the current level of the ISM?

• The ISM survey is a very good indicator of what the economy will look like in 3–6 months but crucially it seems to **precede** the GDP cycle by 3–6 months and can help us predict changes in the economy and therefore in the stock market.
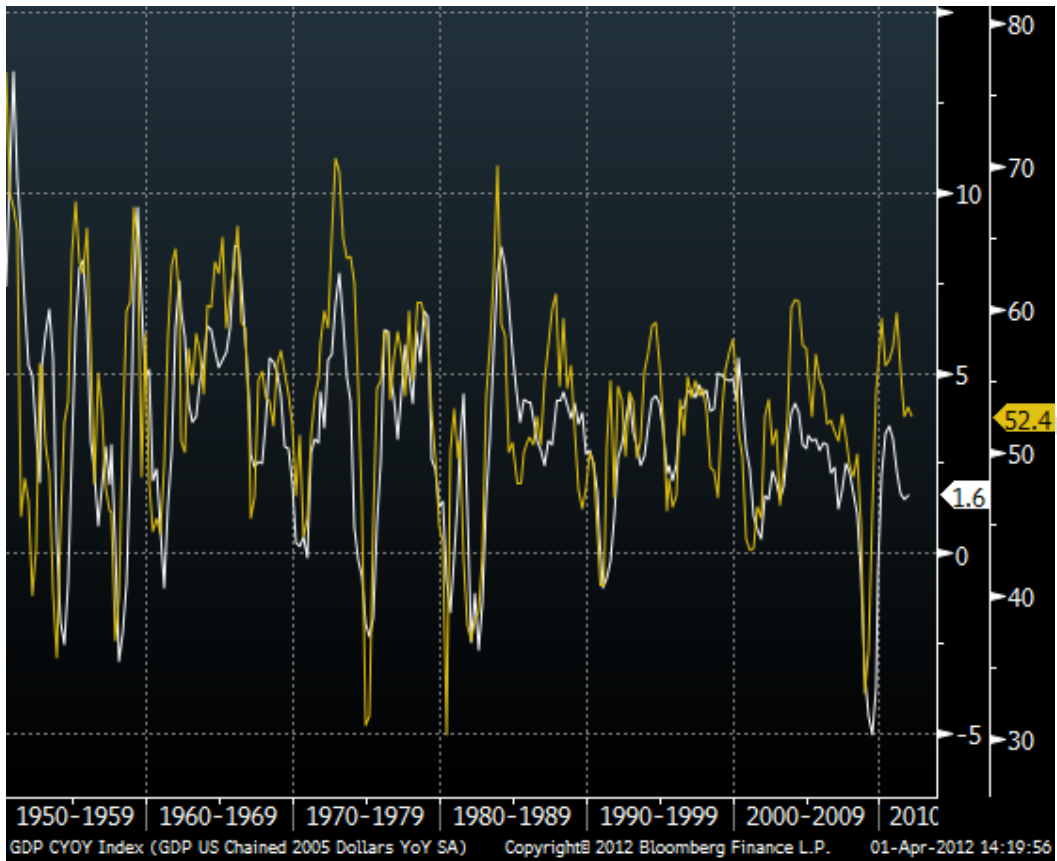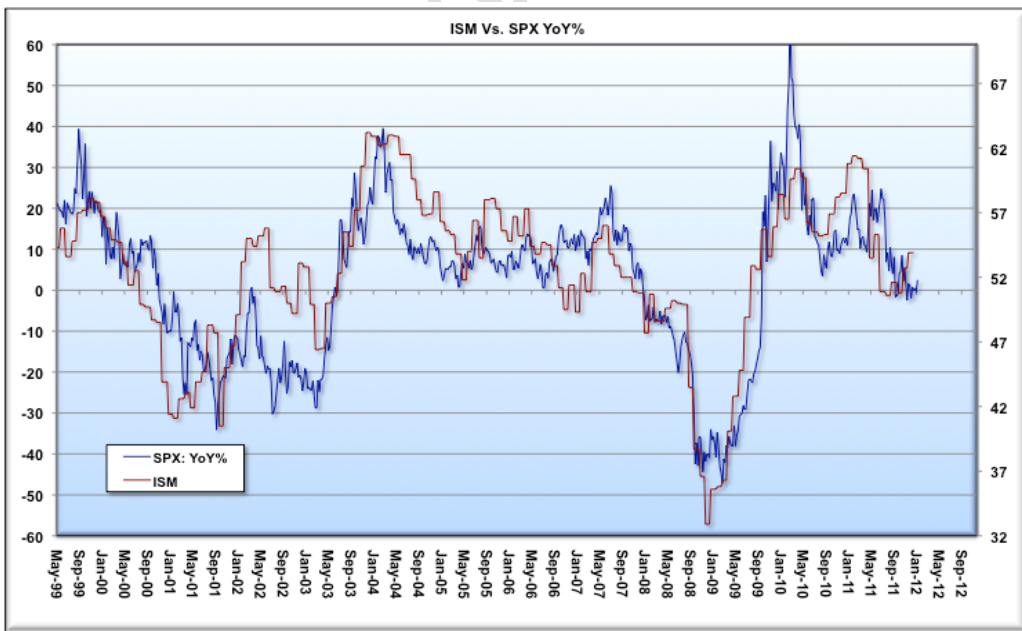
Chart: The ISM (yellow) leading US GDP (white)

Chart: The ISM leading the US stock market

In January 2012 the ISM was at 53.9. This implies a US S&P 500 stock market target of about 1385, which is about 10% more than the value of a year ago, which was about 1260. The current value of the S&P is about 1315 so on this basis the market would currently be about 5% cheap. Again, don't solely rely on this to make investment decisions! It is just one of many indicators. For the UK stock market this would also imply a potential 13% upside. Be aware though that if the ISM turns back down to 50, the S&P target would be reduced to about 1200, and we would currently be almost 10% overvalued.

For more examples and explanations see Appendix D.

Having an informed view on the stock market direction will help you avoid buying stocks when the market is going down.

WARNING: These things change over time, so while this was Lex's opinion at the time of writing, he will almost certainly have changed his opinion at some point in the future.

REMEMBER:
• You need to check that your trading ideas still make sense when you take account of the general economy and the expected stock market direction.

• There are a number of economic indicators that you should follow to get a feel for the economic cycle and thus the stock market trend.

• A great indicator to use to predict the direction of the stock market has been the ISM – at least until now!

• Nothing is forever though, so always be wary of relying on a single tool. And not all stocks go up in the long term.

STEP 2: COMPANY ANALYSIS

The best source of information from a company is the report they publish at year-end called the Annual Report.

To understand a company properly, you need to look at it from five different angles:

1. Company management: who runs the company?

2. The business: what products or services does the company provide?

3. Company finances: sales, costs, level of debt etc.

4. Stock market valuation: how does the market view the company?

5. Geographical split of costs and sales: national or international?

WORKBOOK QUESTION: *Are there any companies you can answer all five questions for?*

WORKBOOK QUESTION: *Do you think these questions are more relevant for short or for long term investing?*

CAKES4U
How does this fictitious company look from the angles described above?

1. Management
The company founder owns 25% of the company, which is good for investors – he has a vested interest in its success. This information can be gleaned from annual reports or from the Internet.

WORKBOOK QUESTION: *Why do you care who runs the company you consider investing in?*

WORKBOOK QUESTION: *Would you like to know if the company you consider investing in is run by someone with a prior criminal conviction?*

CAKES4U

How does this fictitious company look from the angles described above?

2. Products

Company invented and produces 'Slimming Cakes' in the UK and sells them all over the world. Extremely profitable market and company has a global market share of 90%.

WORKBOOK QUESTION: Why would you care what products the company makes before you invest in it?

WORKBOOK QUESTION: How much do you need to know about the products the company makes before you invest in it?

CAKES4U
How does this fictitious company look from the angles described above?

3. Financial data
Tools available to work out the financial health of a company.

• Earnings
The profitability of the company: sales - costs = earnings.

• Dividend
The cash payment to shareholders as a reward for investing in the company.

• Future earnings
To form an opinion about future earnings you can:
1. Look at different investment analyst's predictions for a company and calculate the average, the consensus earnings expectation.
2. Look at a company's historical earnings to help predict what next year's figure might be. Remember to take into account the state of the economy and any 'one-off' items.

A. INCOME STATEMENT

	Value £ million
Sales of slimming cakes	100
Cost of making the cakes	30
Gross profit	**70**
Salaries	8
Rent of Cakes4U Head office	12
Utilities	8
Advertising slimming cakes	10
Operating Income	**32**
Interest	7
Taxes	10.36
Earnings (profit for shareholders)	**14.64**

Cakes4U: income statement

Let's say they sell £100 million worth of cakes that costs them £30 million. This means Cakes4U makes a profit of £70 million. However, the company needs to pay its staff, pay rent on a head office, pay its utility bills, and a lot on marketing as well. The business makes £32 million before it pays out 7% interest on the £100 million debt that Cakes4U has borrowed to finance its business. The tax bill is just over £10 million. Profit for shareholders is £14.64 million; with 100 million shares outstanding, EPS (earnings per share) is 14.64p.

EPS
=
Earnings per Share
=
Earnings per Share
=
Total Earnings of Company

Number of Shares Outstanding
=
£ 14.64 Million
----
100 million shares
=
14.64p Earnings per Share

The analysis above applied to several years of income statements should help you understand if the profit a company makes is because they are selling more products, or because they keep cutting costs. You would rather have what they call top-line growth than cost cutting; that is because cost cutting is often much easier than growing sales.

B. BALANCE SHEET

Provides a snapshot of the financial health of a company at a certain point in time: left-hand side shows what the company owns; the right-hand side shows who it belongs to.

Assets in £ million		Liabilities in £ million	
Cash	10	Notes payable	30
Accounts receivable	20	Tax	20
Current Assets	30	Current liabilities	50
Goodwill	10	Long-term debt	70
Buildings	40	Derivative contracts	10
Tools and equipment	65	Non-current liabilities	80
Non-current assets	115	Owners' equity	15
Total	145	Total	145

Table: Cakes4U balance sheet

• Other items to check: pension liabilities (future pension payments the company is liable for); **'other'** (unspecified liabilities)

• **Assets**: £10 million of cash, with invoices outstanding for another £20 million, which are due to be paid by their clients within the next year. Cakes4U bought a little company a few years ago, and paid £10 million more than the value of the assets of that company, this is called goodwill. The company has buildings and tools worth £105 million. The total assets of the company are worth £145 million.

• **Liabilities**: Cakes4U also has debts, some short term and some long term to a total of £100 million. The cost of this debt is 7%. There is a tax bill outstanding for £20 million and some derivative contracts valued at £10 million. Total liabilities add up to £130 million.

• Whatever is left over is called the **equity** of the company or the **book value**. If Cakes4U gets wound up this £15 million is left for the shareholders.

Current Assets	£ 30 Million	
Non-Current Assets	£ 115 Million	Plus
Current Liabilities	£ 50 Million	Minus
Non-Current Liabilities	£ 80 Million	Minus
Book Value = Owners' Equity	£ 15 Million	

The ultimate goal of analysing financial data is to identify differences between what you think a company is worth and what the stock market thinks.

Go to Appendix C for Financial health continued.

WORKBOOK QUESTION: Why is it important that you know if a company is profitable or not before you invest in it?

WORKBOOK QUESTION: What are earnings per share?

WORKBOOK QUESTION: What is the difference between the income statement and the balance sheet?

WORKBOOK QUESTION: What percentage of the company belongs to the shareholders?

WORKBOOK QUESTION: Why does it matter if a company has significant pension liabilities?

CAKES4U
How does this fictitious company look from the angles described above?

4. Stock market valuation
The best estimate for the value of a company is the price of the stock on the stock market.

• **Price Earnings (P/E) ratio** = stock price ÷ earnings per share, i.e. how many times earnings the stock is trading at.

Price (p)	10
Earnings (p)	2
P/E Ratio	5

Table: P/E scenario 1

Price (p)	20
Earnings (p)	2
P/E Ratio	10

Table: P/E scenario 2

The higher the P/E ratio the more expensive a stock is.

Price	120
Earnings	14.6
P/E Ratio	8.2

Table: Cakes4U P/E ratio

WORKBOOK QUESTION: Why does it matter if a company is expensive or not?

WORKBOOK QUESTION: Are there normally good reasons why one stock is more expensive than another stock?

WORKBOOK QUESTION: Are there always good reasons why one stock is more expensive than another stock?

MODEL TO PREDICT FUTURE STOCK PRICE

This uses historical price data and earnings to calculate historical P/Es, i.e. the valuation at which the stock has traded at in the past. When combined with an earnings estimate for the next year it will help to calculate an upper and lower band for the stock price

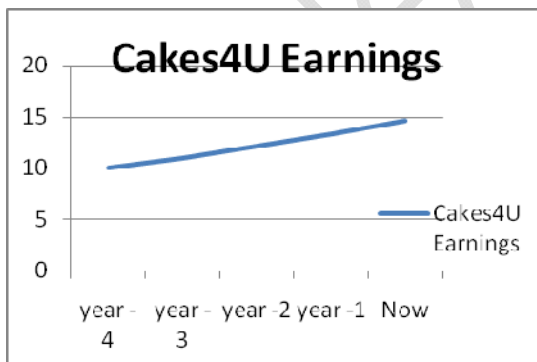| Date	Price	Earnings	P/E
Year -4	P(-4)	E(-4)	P(-4)/E(-4)
Year -3	P(-3)	E(-3)	P(-3)/E(-3)
Year -2	P(-2)	E(-2)	P(-2)/E(-2)
Year -1	P(-1)	E(-1)	P(-1)/E(-1)
Now	P	E	P/E

Table: Cakes4U historical P/E ratio

STEP 1: Historical earnings for each of the five years

Date	Earnings (p)
Year -4	10
Year -3	11
Year -2	12.1
Year -1	13.31
Now	14.64

Table: Cakes4U historical earnings

• Sales have grown 10% over the past five years.

Graph: Cakes4U historical earnings

STEP 2: Highest and lowest price level for each of the five years

Date	Price High (p)	Price Low (p)
Year -4	100	90
Year -3	90	80
Year -2	110	85
Year -1	105	95
Now	120	110

Table: Cakes4U high and low price over time

• Compare high and low prices over the last five years.

Graph: Cakes4U high and low price over time

STEP 3: Calculate highest and lowest P/E ratio for each of the five years

Date	PE High	PE Low
Year -4	10.0	9.0
Year -3	8.2	7.3
Year -2	9.1	7.0
Year -1	7.9	7.1
Now	8.2	7.5

Table: Cakes4U high and low P/E over time

• Price ÷ EPS for each of the years gives us two ranges of P/E ratios.
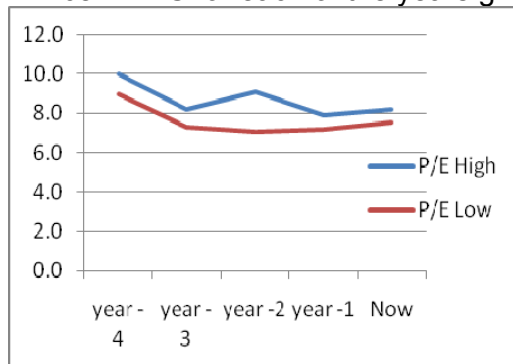
Graph: Cakes4U high and low P/E over time

STEP 4: Estimate next year's earnings and multiply it by the highest and the lowest P/E ratio over the last five years to give you an estimated range for the stock price.

• Another year of 10% growth in earnings will give expected EPS of about 16p.
10 x earnings = 160p
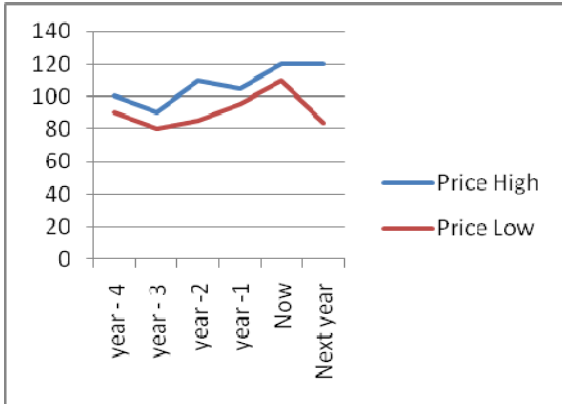7 x earnings = 112p
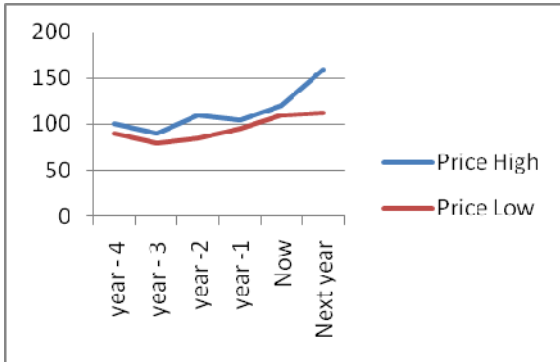
Graph: Cakes4U expected future price range when earnings up 10% to 16p

• When Cakes4U trades near 112p it could be a good buying opportunity; when it gets to 160p it looks like a good sell compared to history.
• Currently at 120p, near lower end; could be a good entry point.

SCENARIO ANALYSIS: What happens if there is a health scare?

Graph: Cakes4U expected future price range when earnings down 20% to 12p

• Earnings fall to about 12p:
10 x earnings = 120p
7 x earnings = 84p

• Current stock price of 120p is now a great level to sell.

Chart: Cakes4U expected future price range when earnings down 20% to 12p
and P/E down to 6–8 range

• Multiple range of 7–10 now seen as too high, 6–8 now more realistic
8 x earnings = 96p
6 x earnings = 72p

• 112p is now a good level to sell.

	Expected Earnings	P/E	Fair Value Price
Day before the announcement	16p	8	128p
Day after the announcement	12p	6	72p

Table: Cakes4U summary of earnings shock

• Difference in fair value between day before and day after announcement is over 40%.

WARNING: Some sectors trade based on p/e, others do not at all, for example because they might have no earnings or have very high earnings growth.

How to identify what is a good level to buy and sell a stock:

• First look at the past earnings and multiples where a stock has traded.

• Then try and estimate next year's earnings, either yourself or by looking at analyst research.

• This gives you a range where the stock should be trading.

• Then compare this target price range with the stock price today: this will tell you, from a valuation perspective, whether you are in buying or selling territory.

• If the stock is in the middle of the range wait until it gets to a price where you are comfortable owning it, i.e. close enough to the P/E low to make some money.

WORKBOOK QUESTION: Why would you want to wait until a stock trades at the lower end of the P/E band?

WORKBOOK QUESTION: Why would a stock start trading at a systematically higher P/E ratio?

WORKBOOK QUESTION: Do all stocks trade based on P/E?

CAKES4U

How does this fictitious company look from the angles described above?

5. **Geographical split**

• Where the products are made.

• Where the products are sold.

• Where the components come from.

Overseas economies and exchange rates will impact earnings.

• Cakes4U exports 90% of its products, equally to Europe, the Americas and Asia. All the manufacturing takes place in the UK.

Company Profit Profit Local Currency	Company Profit Profit Exchange Rate Euro / Sterling	Company Profit Profit Translated Back To Sterling
Euro 1.5 Million	2	£ 0.75 Million
Euro 1.5 Million	1.5	£ 1 Million
Euro 1.5 Million	1	£ 1.5 Million

Table: Euro/Sterling table

• Cakes4U has a currency risk to manage.

• Costs are in Sterling, sales are in Euros: a strong euro = higher profits; a weak Euro = lower profits.

WORKBOOK QUESTION: Why is it important to know what the geographical exposure of a company is?

STEP 3: CHART ANALYSIS

Stock charts help you decide if you should trade and if so, help you with the correct timing of that trade. In 5-Step-Trading® charts are there to help you with the timing over your decision.

• Typical stock charts plot time along the horizontal axis and price on the vertical axis.

Chart: Stock chart

• **Support level**: the line that connects all the low points in the chart.
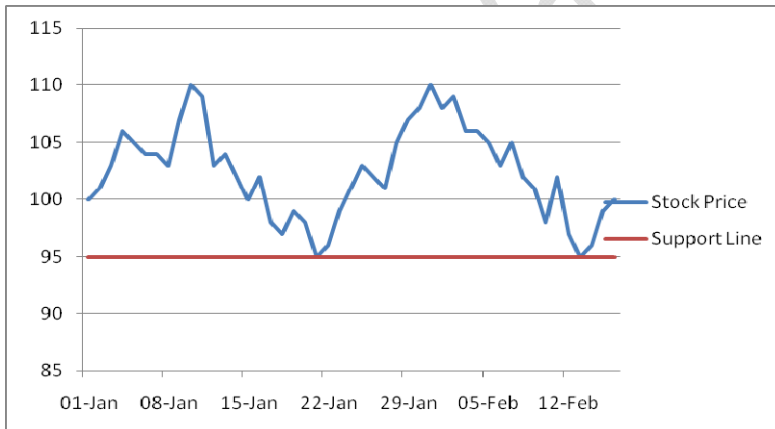
Chart: Support level

• This represents a good point to make a purchase.

Chart: Buy at support

• **Resistance level**: the line that connects all the peaks in the chart.
• Represents the point where historically sellers have been stronger than the buyers.

Chart Resistance level

• You may want to sell a stock that is approaching resistance level.
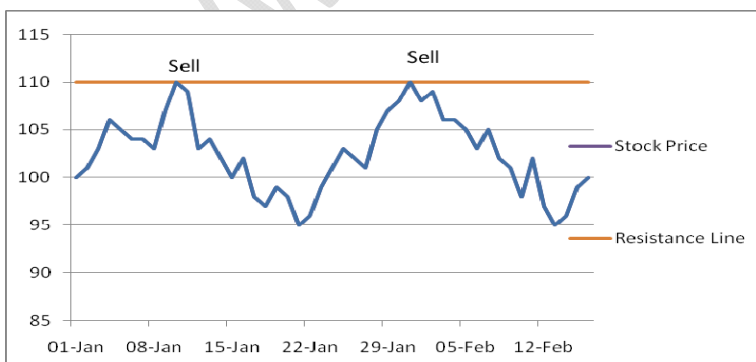
Chart Sell at resistance

• If you sell at support level you are betting against what has happened historically.
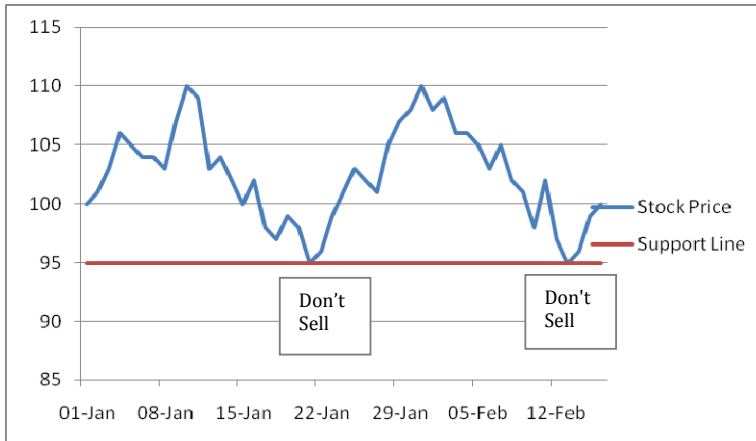
Chart: Don't sell near support

• **Trading range**: the difference between the highest and lowest prices; the area of the chart between the resistance and support levels.
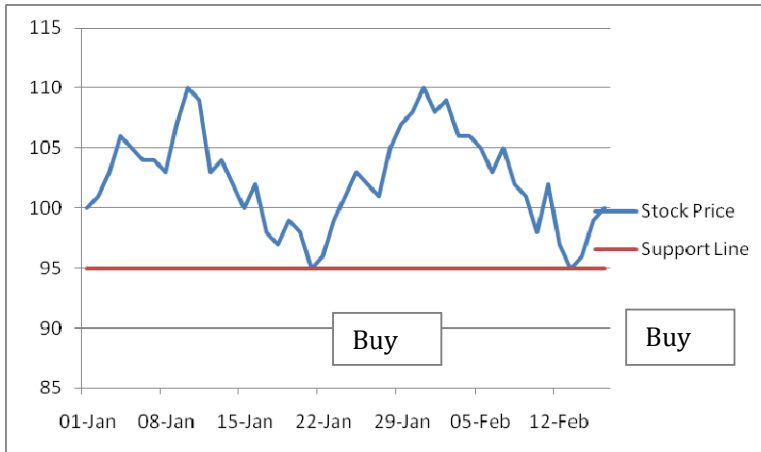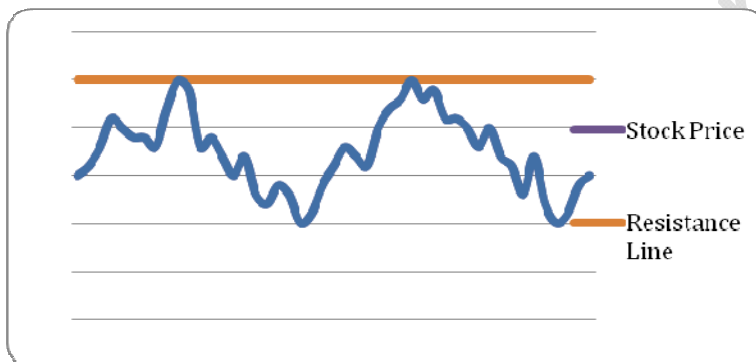• If a trading range is in place for a long time you make money buying near support and selling near resistance.

Chart Trading range strategy

• **Trend**: where a stock is actually not within a trading range but is moving higher or lower without stopping at a previous peak or bottom.
• Support and resistance lines will have an upward or downward slope.

If you can identify a trend early, it can be highly profitable.
WORKBOOK QUESTION: Draw an uptrend, where would you buy, where would you sell?

WORKBOOK QUESTION: Draw a downtrend, where would you buy, where would you sell?

• **Technical breakout**: when the price breaks above a resistance level and moves higher.
• Generally a good buying signal.
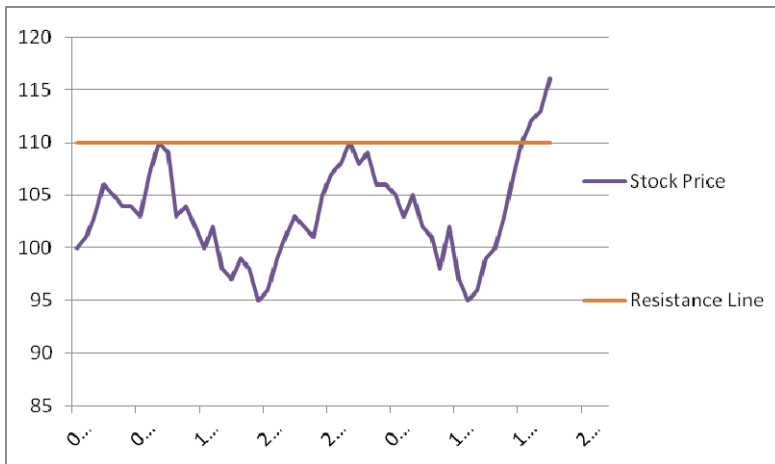
Chart: Technical breakout

• **Technical breakdown**: when the price breaks below its support level and starts to fall.
• Generally a good selling signal, or an opportunity to short.

Chart: Technical breakdown

• But beware of false breakdowns.
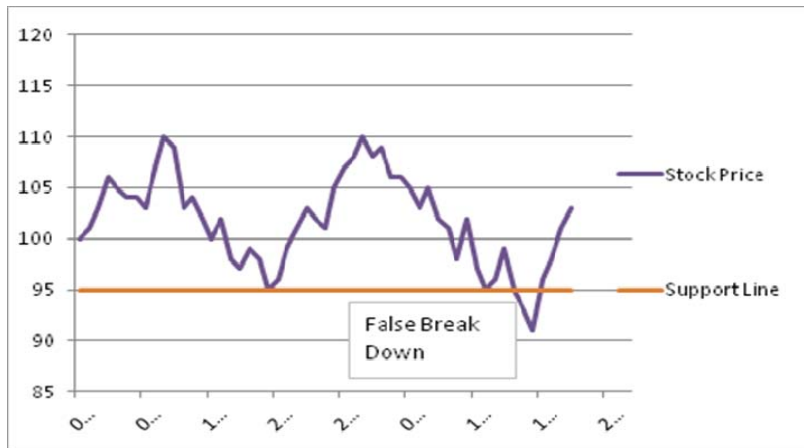
Chart: False breakdown

Four key concepts:
• Support/resistance levels
• Trading range
• Uptrend/downtrend
• Breakout/breakdown

CHART PATTERNS

The flag
• Resembles a downward sloping rectangle marked by two parallel trend lines.
• Usually followed by a breakout to the upside – continuing the uptrend as it was doing prior to the flag.
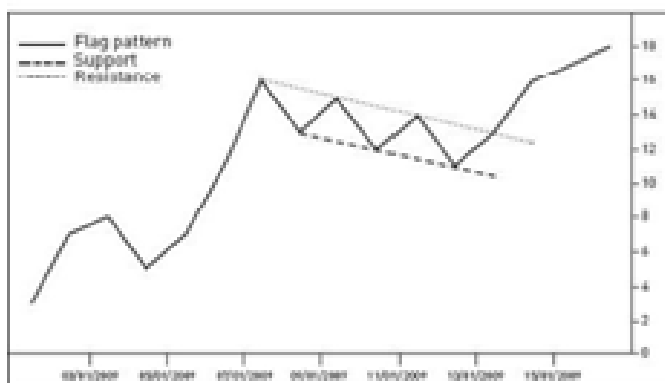
Chart: The flag

The pennant
• Resembles a tapering flag.
• Means the same as a flag: when the price breaks out of the pennant, it will continue in the direction of its original trend.
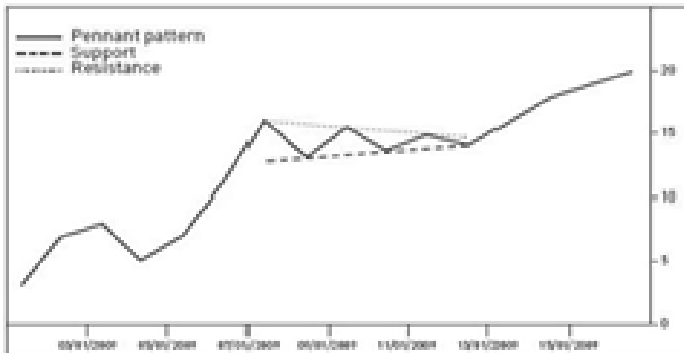
Chart: The pennant

The flag and the pennant are both **continuation patterns**.

The head and shoulders
• Resembles a head with shoulders on each side.
• Indicates the previous trend has ended and could be a good time to sell.
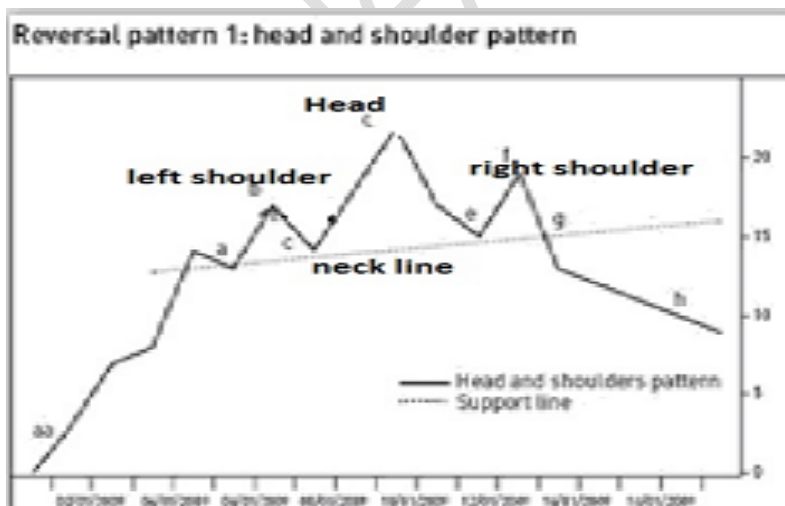
Chart The head and shoulders

The double top
• Comprises two consecutive peaks that are roughly equal, with a moderate trough in between.
• Indicates that support is likely to be broken and a negative trend will emerge in the share price.
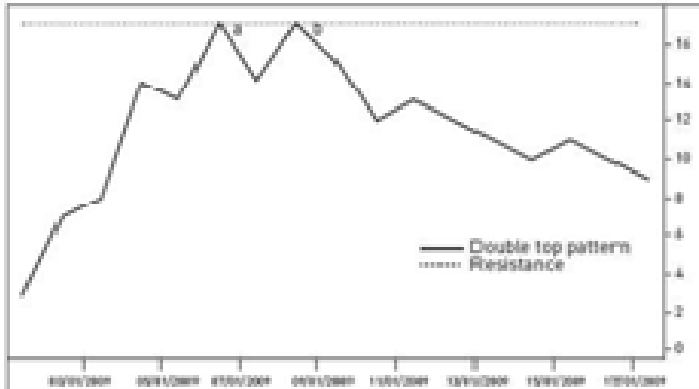
Chart: The double top

The head and shoulders and the double top are both **reversal patterns**, also called a **correction**.

The double bottom
• The opposite of a double top, and can be a good buy signal.
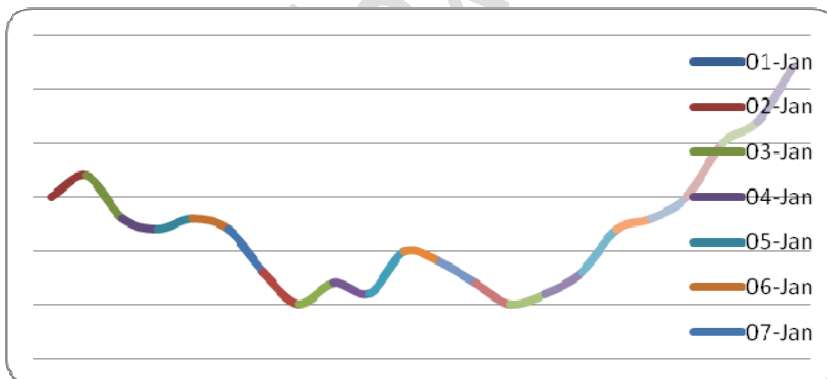
Chart: The double bottom

CHART PSYCHOLOGY
• The more time you spend studying charts and watching the markets, the more ingrained the patterns will become, and the more easily and quickly you will be able to respond to them.
• Charts are useful but remember to focus on the real world as well.

CANDLESTICK CHARTS

• Candlestick charts were developed in Japan over 200 years ago.

• They are built using the opening price, the highest price, the lowest price and the closing price, for a particular stock, for each time period you are interested in.

• They can be used to identify more chart patterns.

High
Price   ->

                    trad
-
>   ing
        ran
        ge

Low
Price   ->

Close Price   Close   Open   Close
                     higher   higher   is
Open Price   than   than   Open
                     Open   Close

High Price

                     Close Price
            Plus   equals
                     Open Price

Low
Price

High Price

                     Open Price
            Plus   equals
                     Close Price

Low
Price
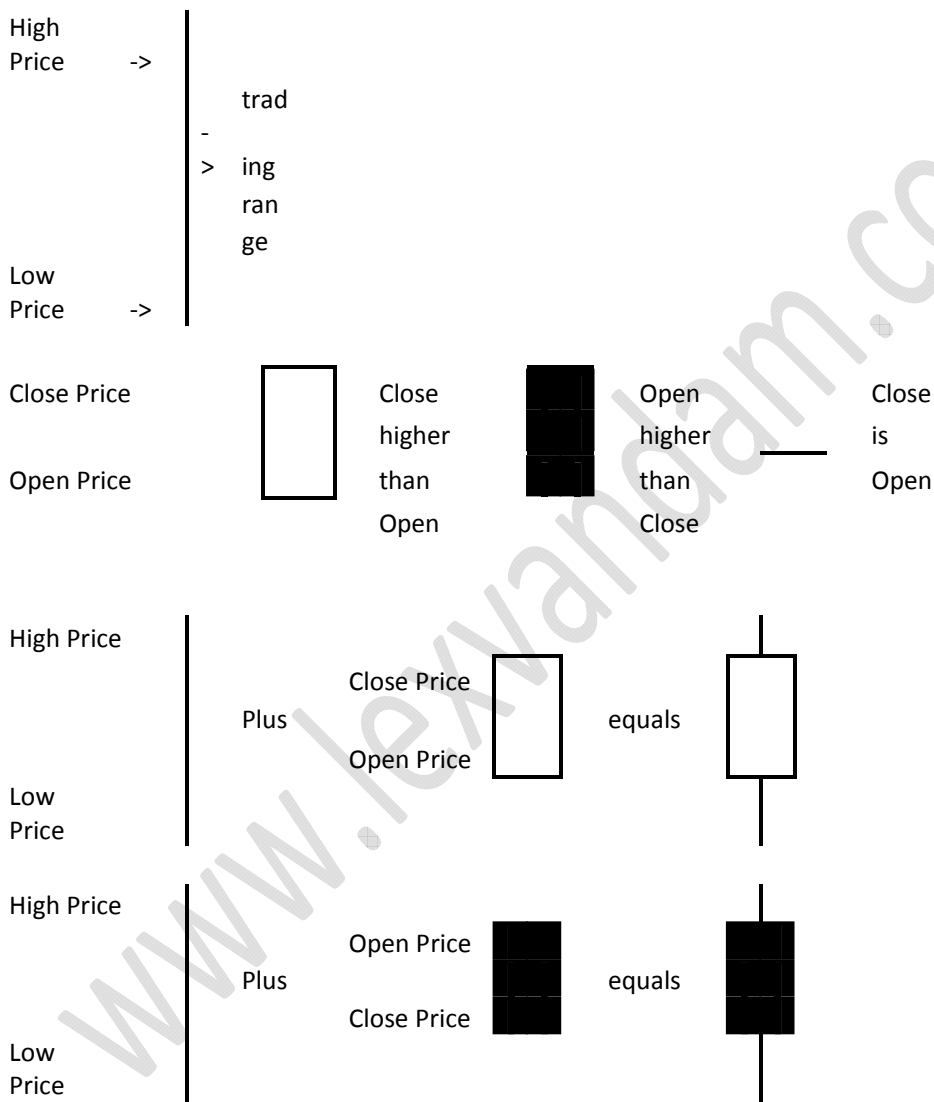
Chart: Candlesticks explained

• The **high** of the day is the **top** of the vertical line.

• The **low** of the day is the **bottom** of the vertical line.

• The length of the line shows the trading range of the stock over the day.

• The body of the candlestick is the **box** in the middle and this can be white or black.

• The **body** illustrates the **opening** and **closing** trades.

• If the stock closed **higher** than it opened, the **opening** price is at the **bottom** of the body and the **closing** price at the **top**, and the body is **white**.

• If the stock closed **lower** than it opened, the **opening** price is at the **top** of the body and the **closing** price at the **bottom**, and the body is **black**.

• If the stock closed where it opened there is a **horizontal stripe** rather than a box.

Chart: Candlestick chart

• When you put the line and the box together you get a candlestick chart; gives more insight than a straightforward line chart.
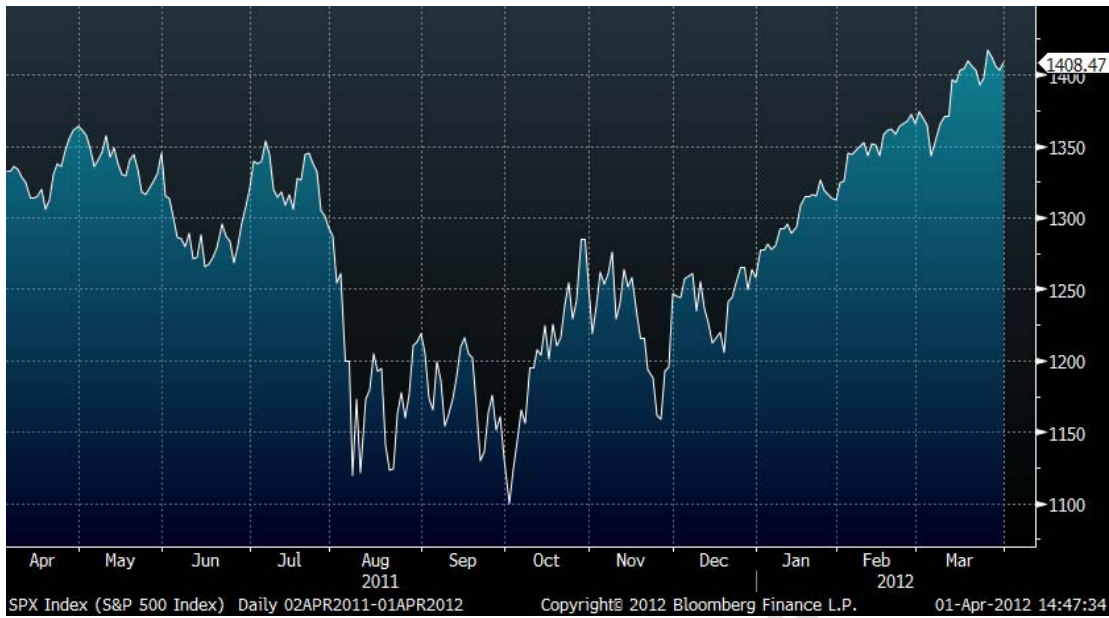
Chart: Line chart
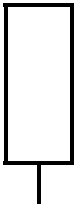
Candle 1: Good: close higher than the open; stock closed on the high.
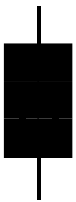
Candle 2: Bad: close lower than the open; closed near the low.

Candle 3: Very bad: opening at the high and closing on the low means buyers were not able to keep buying the stock over the day and the sellers won.
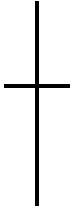
Candle 4: Doji: a close near the open indicates indecision; the Japanese call it a 'doji'.
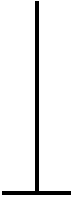
Candle 5: Gravestone doji: opening low, going up but then closing at the low is bearish.
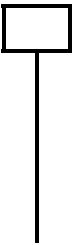
Candle 6: Dragonfly doji: opening high, going down a lot but closing at the high is bullish.
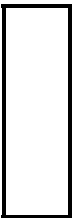
Candle 7: Very good: opening near the low and closing near the high is very bullish.

Candlestick patterns
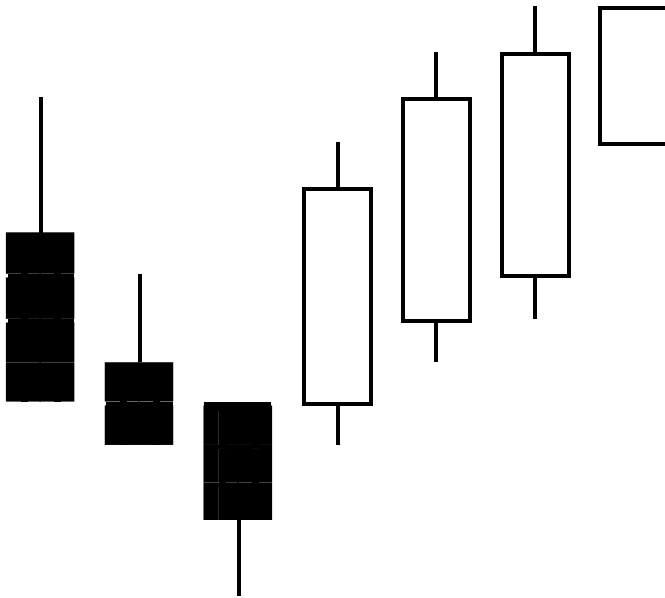
Three white soldiers: traders love this pattern because it normally signals higher prices to come.
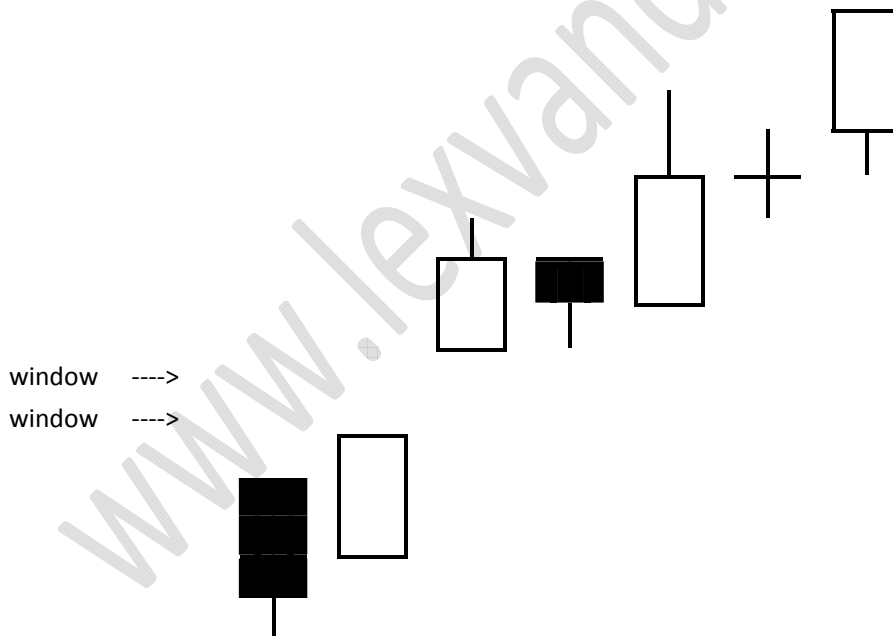
window ---->
window ---->

The rising window: the trend has been up and now the open is above the high of the previous day. Bullish and an example of a continuation pattern.
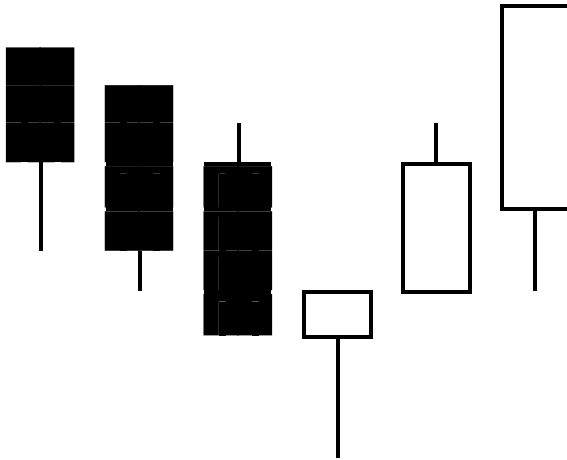
The hammer: appears after a downtrend and can signal that the downtrend is over and that the stock might be reversing.
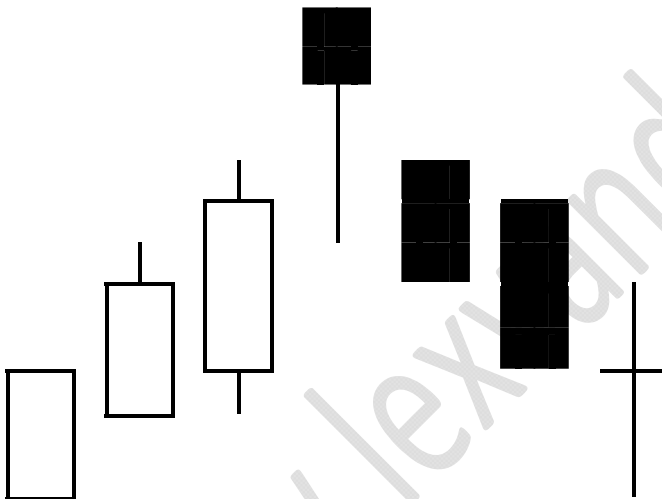
The hanging man: where a stock makes a new high after an uptrend but the stock closes below the open.
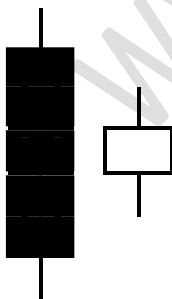
The bullish harami: 'harami' means 'pregnant'; pattern consists of a body that is contained within the preceding large candle's body. Shows two days of trading and indicates the current trend is losing steam and may be coming to an end. The bullish

harami can appear at the end of a bearish or falling price trend, i.e. prices are about to turn around and now start rising.
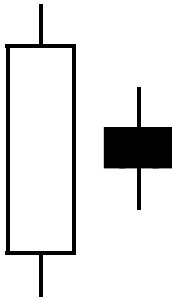
The bearish harami: signals the end of a bullish or increasing price – indicating prices will now start going down. The harami is a useful pattern to look for if you are indecisive about whether to buy or sell.

Island   ----->
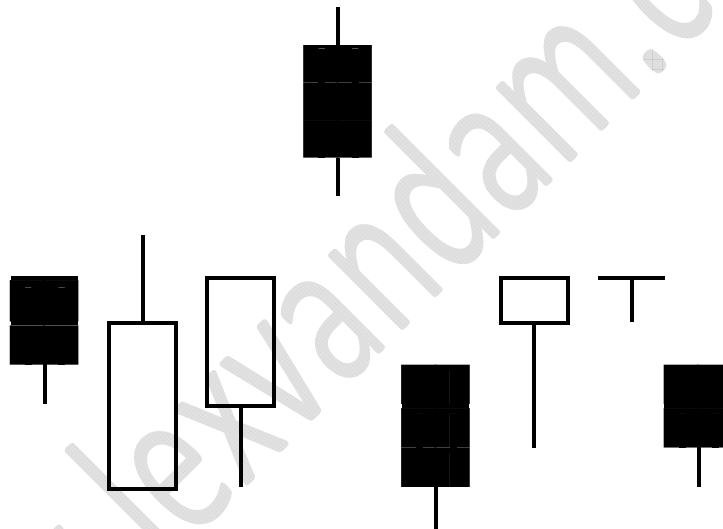
The island reversal: when a stock gaps to the upside and ranges for a number of days before gapping back to the downside. The sign of a trend reversal and potentially a good trading signal.

VOLUME

• **Volume**: the amount of shares traded on any one day.

• Volume is plotted below the price chart.
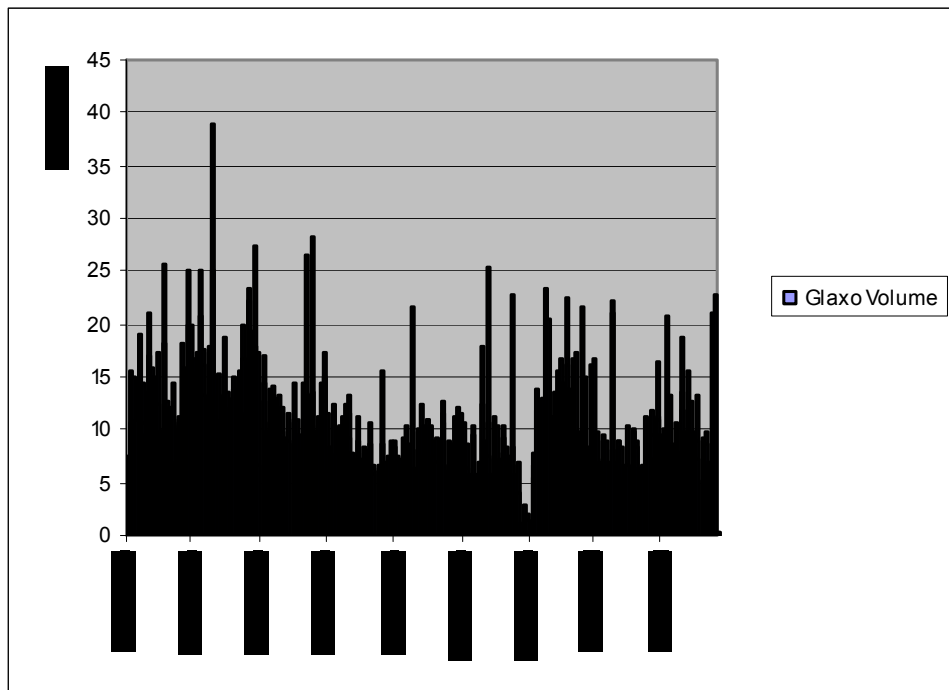
Chart: Volume

• High volume trading conditions mean chart patterns are more meaningful.

• Low volume trading conditions mean chart patterns should be treated with care.

• **Divergence**: volume is decreasing but stock price continues to rise.

• A warning signal – make sure you see volume confirming the move in the stock price.

Chart: Volume versus price divergence

VOLATILITY

• **VIX (volatility) Index**: tells us how volatile the market is.

• High VIX readings occur during big moves, or in anticipation of big moves in the markets, often before market crashes.

• Low VIX indicates complacency.

Chart VIX Index
RELATIVE STRENGTH INDEX

• **RSI**: a formula that tries to capture what has happened to a stock in the short term.

• RSI is plotted in a separate box under the stock chart.

• Ranges from 1–100.

• Levels to look for are 30 and 70:
Asset is **overbought** when RSI is above 70.
Asset is **oversold** when RSI is below 30.

Chart: Relative Strength Index

• Note: when a stock breaks out it can remain overbought for a long time, especially when it breaks out through technical resistance.

Chart: Stock can remain overbought

• Be careful when a stock moves on no volume.

If a stock breaks out to a new high but the RSI is not making a new high – divergence.

Chart: Negative divergence

SEASONALITY

• Certain stocks and sectors perform better at different times of the year.

• Markets tend to go down in the summer – however not every summer!

• Historically December and January are the best two months to be long equities.

• October can be a nervous time.

TARGET AND STOP-LOSS

```
`
                                    ┌──────────────────────────┐
                                    │                    Take  │
                          ----->    │    Target          Profit│
                                    └──────────────────────────┘
        ┌──────────────┐
        │  Buy Stock   │
        └──────────────┘
                                    ┌──────────────────────────┐
                                    │                   Sell at │
                          ----->    │    Stop-Loss       Loss   │
                                    └──────────────────────────┘
```
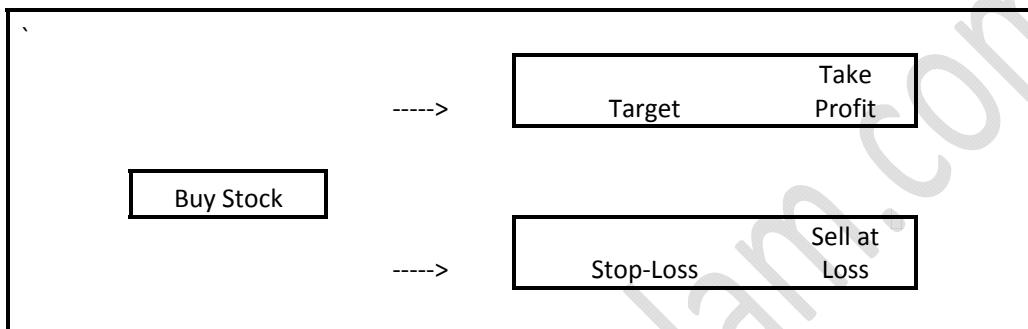
Table: Target and stop-loss

• Chart analysis can be used to decide when to **enter** and **exit** a trade.
• When you use a broker remember to set up a **stop-loss order**; always know where your exit is.

WORKBOOK QUESTION: Should you trade purely based on charts?

WORKBOOK QUESTION: Do charts contain all the possible information about the future stock price?

WORKBOOK QUESTION: What is the strength about candlestick charts?

WORKBOOK QUESTION: What is a gravestone doji?

WORKBOOK QUESTION: What is a harami?

WORKBOOK QUESTION: What is negative divergence?

WORKBOOK QUESTION: What is seasonality?

WORKBOOK QUESTION: What does an RSI of 50 mean?

WORKBOOK QUESTION: Why is volume important?

WORKBOOK QUESTION: Why do you need to always have a stop loss?

STEP 4: SELF CHECK

• Trading is an emotional activity and if you fail to take account of that then you will burn out very quickly.

It is the mental game that ultimately determines who wins and who loses.

MENTAL TOUGHNESS

1. Motivation

• Why do you trade?

• A general interest in financial markets and companies is a good basis for long-term survival.

2. Self-confidence

• You need courage to follow your own convictions.

3. Focus

• Trading requires total focus.

4. Composure

• To trade rationally you have to control your mood.

5. Resilience

• You have to be able to bounce back from a bad trade.

Overcome your instincts

• Fear vs greed: both of these emotions must be controlled.

• Overconfidence: can lead to badly thought-out trades

• Consensus positions: it is in our nature to be part of the herd, but we need to think for ourselves.

Key traits of a good trader

Mental toughness	You need the right motivation, self-confidence, focus, composure and resilience.
Ability to listen	You learn more from listening to other people than continually talking yourself. Trading is one-dimensional: you either make money or you lose it. The prize goes to the person who makes money, not the one who talks the most.
Ability to analyse	You need to do a lot of different things before you trade. To go through all the steps and process all the information takes analytical ability.
Ability to realise when things don't add up	You might have done all the work and the trade looks good. However, there is this little voice in the back of your mind that tells you not to trade. I call it trader's instinct – it is often wise to listen. If it looks too good to be true, it probably is
Ability to be sometimes flexible and sometime stubborn	If you change your mind too often as a trader you will go mad. However, sometimes you just have to admit you are wrong, change your mind and move on.
Numerical skills	These are important as you need to be able to make calculations quickly. Speed comes with practice.
Desire to keep learning	Always keep learning: economics, the markets, global issues, and especially learn from your mistakes.
Ability to be decisive	Essential, as after all the preparation you still have to make the decision to put on that trade

COMMON ISSUES FOR TRADERS

1. Not making money/sleep issues

• Evaluate your trading to determine why you are not making money: is it market conditions or is it a personal issue?
• Stress can be tiring; look after yourself, find other activities that can help you relax.

2. Not being able to pull the trigger

• Often due to the fear of being wrong.
• Accept that as a trader you will often be wrong.
• To minimise losses have a good trading plan, trade small positions and keep tight stops on those positions.
• If your risk is smaller it will be easier to pull the trigger.
• Visualisation can help.

3. Volatile markets and stress

• Fast-moving markets can mean losses happen quicker than usual, causing stress.
• Simple answer is to stop trading when markets are volatile.
• Build up confidence and experience of volatile markets by trading very small positions.
• Deep breathing can help calm you down in stressful situations.

The 5-Step-Trading® process works so well because it removes a lot of the emotion out of trading.

COMMON TRADING MISTAKES

1. Overtrading

Putting on too many trades can lead to emotional frustration, paying too much commission to brokers, large trading losses.

Why do people overtrade?

• Gambling and excitement
Treating the stock market like a casino is a common mistake and will cost money.

• Money matters too much
If you are desperate to make money it can lead to too much pressure and you are likely to lose money.

• Boredom
Trading is often boring; do not trade just for something to do. Use the time to do more reading and analysis.

• No strategy
Using a consistent strategy or plan will help you trade successfully.

• Lack of patience
Impatience means that you will execute your trades at prices that are worse than the ideal.
Put an emphasis on the right entry and exit points for your trades and stick to them.

• Revenge
You can't trade to try and get your own back on the market – it is not an enemy. It is time for a rest: take a holiday from trading and come back refreshed.

2. **Overconfidence**

• Usually follows a profitable trade or a wining run; you will tend to trade larger positions with less preparation.
• Stop trading before you lose money!

3. **No discipline**

Can be due to:

• Lack of a trading plan
You must have a framework for trading and an execution strategy that you stick to.

• Personality
You might hate following rules but in trading you have to set your own rules and keep to them.

• Loss of composure
Often based on a combination of inexperience, lack of preparation and some emotional element; if you panic you will make bad decisions.
Build up your experience; make sure you are prepared; think through scenarios; take a walk if things are going wrong.

Having control over your emotions whilst under pressure is tough but with practice, it does become a lot easier.

4. **Taking profits too quickly/not getting rid of losing trades**

• It is psychologically easier to close a winning trade and lock in a profit, than to lock in a loss.
• Make sure you have a stop-loss in place when you trade and stick to it.

The Trading Zone
1. You will be physically and mentally relaxed.

2. You will feel in control.

3. You will be calm.

4. You will be energized.

5. You will be positive.

6. You will be focused.

7. You will be confident.

8. It will all feel effortless.

WORKBOOK QUESTION: Why are you trading?

WORKBOOK QUESTION: What traits will make you a successful trader?

WORKBOOK QUESTION: Are you mentally tough?

WORKBOOK QUESTION: How do you know if you are in the Trading Zone?

WORKBOOK QUESTION: Name a few typical trading mistakes and how to deal with them.

STEP 5: RISK MANAGEMENT

• Risk is an inherent part of trading. Without taking risks you will not make much money.

• You have to make sure you stay on top of the risks you take and in control of them.

Month	Portfolio Value
Jan-07	$100,000
Feb-07	$98,000
Mar-07	$92,000
Mar-09	$50,000

Table: Value of portfolio over time

• Stocks do not always go up in the long term.
• A typical portfolio lost over 50% of its value between 2007 and 2009.

	No Margin	Margin Portfolio Value
Month	Portfolio Value	
Jan-07	$100,000	$100,000
Feb-07	$98,000	$96,000
Mar-07	$92,000	$84,000
Mar-09	$50,000	$0

Table: Value of portfolio over time with margin

• **Margin**: borrowing money to invest in the stock market.
• If you had used margin over the same period you would have lost even more money.
• Be careful when trading with borrowed money.

The 2007 crisis and many crises before that, shows that risk management is crucial, whether margin is used or not.

HEDGING

Bank of America $3,000, no hedge			
Scenario	BoA	Profit – Loss	Total Profit
1	Up 5%	$150	$150
2	0	0	0
3	Down 5%	-$150	-$150

Table: Bank of America unhedged

• **Hedge**: a position established to protect the value of another position and reduce risk.
• Here you are long $3,000 of Bank of America:
If the stock goes up 5% you make $150.
If the stock goes down 5% you lose $150.

Barclays $3,000, S&P 500 Hedge					
Scenario	BoA	BoA Profit - Loss	S&P 500	S&P 500 Profit - Loss	Total Profit
1	Up 5%	$150	Unchanged	0	$150
2	Down 5%	-$150	Down 15%	$450	$300

Table: BoA hedged with market

• If you are worried about the general stock market you could hedge your risk by shorting $3,000 worth of the S&P 500.
• You are removing the general market risk, but keeping the BoA specific risk.
• If the stock falls 5% but the market falls 15%, you lose $150 on BoA but make $450 on your short, giving a profit of $300.

BoA $3,000, JP Morgan Hedge					
Scenario	BoA	BoA Profit - Loss	JP Morgan	JP Morgan Profit - Loss	Total Profit
1	Up 5%	$150	Up 3%	-$90	$60
2	Down 5%	-$150	Down 8%	$240	$90

5.5 BoA hedged with JP Morgan

• You can also hedge with another stock as opposed to the whole market.
• If you are really worried about your long position, sell it.
• Make sure you think carefully about your hedge – it is another trade.

LONG AND SHORT POSITIONS

Stock	Long
Company A	$5,000
Company B	$4,000
Company C	$5,000
	$14,000

Stock	Short
Company X	-$3,000
Company Y	-$2,000
Company Z	-$3,000
	-$8,000

Long	$14,000
Short	-$8,000
Net	$6,000

• This portfolio contains six stocks, three longs and three shorts:
Total value of longs = $14,000
Total value of shorts = $8,000

• **Net position:** the difference between the value of your long positions and the value of your short positions.
Portfolio is net long $6,000

WORKBOOK QUESTION: What is the point of hedging?

WORKBOOK QUESTION: When is it better to hedge with the whole market?

WORKBOOK QUESTION: When would you hedge within the sector?

TEN RULES FOR RISK MANAGEMENT

WARNING: These are rules designed to help you stay in the game as long as possible. Your individual situation might allow you to take more or less risk.

Rule 1: Never be net long more than 50% of your capital

• If you buy stocks worth half your capital, then you have reached your limit and can't buy more stocks unless you sell something against it.

• If you have $100,000 to invest and $60,000 of long stock ideas, you are 60% long which breaks rule 1.

Capital	$100,000
Long	$60,000
Short	$10,000
Net	$50,000

Table: Portfolio example rule 1

• In this example you are balancing $60,000 of long positions with $10,000 of short positions.

Capital $ 100,000				Net as Percentage	Allowed
Scenario	Long	Short	Net	of Capital	Portfolio
1	$50,000	0	$50,000	50%	√
2	$60,000	-$10,000	$50,000	50%	√
3	$70,000	-$20,000	$50,000	50%	√
4	$75,000	-$25,000	$50,000	50%	√

Table: More portfolio examples rule 1

• Where the long position is larger than 50% there is always an offsetting short position to ensure that the net position is never larger than 50%.
• If you are at your limit and want to buy a new stock you must sell something else out of your current portfolio or find a good new short idea.

NOTE: if you use 5-step-trading® to build a long-only portfolio with a specific pot of money then of course you can go long 100% of your capital. However, it would still be best to stick to rule 1 to start with.

Rule 2: Do not use leverage

• **Gross exposure**: the value of the longs plus the shorts.
• High gross exposure means a lot of large positions and your portfolio can be risky.
• Again assume you have $100,000 to invest.

Capital $ 100,000						Allowed
Scenario	Long	Short	Net	Gross	Leverage	Portfolio
1	$10,000	-$10,000	$0	$20,000	0	√
2	$20,000	-$20,000	$0	$40,000	0	√
3	$30,000	-$20,000	$10,000	$50,000	0	√
4	$50,000	-$50,000	$0	$100,000	0	√
5	$60,000	-$60,000	$0	$120,000	20%	X

Table: Portfolio example rule 2

• Once the gross is over $100,000 it breaks our leverage rules.

Rule 3: Don't be net short

• **Net short**: the total value of your short positions is larger than the total value of your longs.

Long	$20,000
Short	-$20,000
Net	0

Table: Portfolio example rule 3

• This example is fine, net is zero.

Long	40,000
Short	-$60,000
Net	-$20,000

Table: Another portfolio example rule 3

• This example has a net short of $20,000 which breaks rule 3.

Capital $ 100,000						Allowed
Scenario	Long	Short	Net	Gross	Leverage	Portfolio
1	$15,000	-$15,000	$0	$30,000	0	√
2	$30,000	-$20,000	$10,000	$50,000	0	√
3	$80,000	-$10,000	$70,000	$90,000	0	X
4	$40,000	-$60,000	-$20,000	$100,000	0	X
5	$60,000	-$60,000	$0	$120,000	20%	X

Table: Portfolio examples summary rules 1–3

• Portfolio 1: follows rules 1–3.
• Portfolio 2: follows rules 1–3.
• Portfolio 3: is more than 50% long and breaks rule 1.
• Portfolio 4: is net short and breaks rule 3.
• Portfolio 5: is leveraged and breaks rule 2.

Rule 4: Your potential profit should be three times larger than your potential loss

One of the hardest things in trading is to run your winners and cut your losers.

Cakes4U		
	Price	Profit / Loss
Purchase	120p	
Target	150p	30p
Cut	110p	-10p

Table: Portfolio example rule 4

• Say you buy one share of Cakes4U at 120p.
• Target is to sell at 150p, profit = 30p.
• Rule 4 means you can risk a 10p loss, so you must sell at 110p.
• **Stop-loss**: an advance order with your broker to sell a stock at a specified level in order to minimize losses.
• In this example your stop-loss is at 110p.

Rule 5: Size your positions according to your level of conviction, but never put more than 5% of your capital into any individual position

• Invest somewhere between 5% and 1% depending on your conviction.

Capital $100,000	
Max - 5%	$5,000
Min - 1%	$1,000

Table: Portfolio example rule 5

• With $100,000 to invest, rule 5 means:
max. individual stock position $5,000
min. individual stock position $1,000

Capital $100,000 Volatile stock	
Max - 3%	$3,000
Min - 1%	$1,000

Table: Portfolio example rule 5 for volatile stock

• If a stock is volatile impose a limit of 3% even when you have max. conviction.

Can you be a successful trader?
You need to be able to answer 'yes' to the following questions:
Do you consider yourself a risk-taker? (This one is debateable though...)
Do you accept that trading has a non-guaranteed probable outcome?
Do you believe you are taking a risk when you are trading?
Have you accepted the possible consequences of your behaviour?

REMEMBER:
• Embrace risk.
• Train yourself to run your profits and cut your losses.
• Trade to make money, not to be right.
• Notice when you are getting overconfident and pay special attention to your risk management decisions.

WORKBOOK QUESTION: What are the first five rules of risk management?

WORKBOOK QUESTION: What do you do with these rules when you only want to go long?

Rule 6: Don't put more than 10% of your capital in one single sector or theme

• This protects you from too much exposure to one particular industry or theme, and helps keep your portfolio diversified.

Capital $100,000	
Company	Long
Cakes4U	$5,000
Food 2	$3,000
Food 3	$2,000
Other Food	Zero

Table: Portfolio example rule 6

• Assume investment of 5% or $5,000 because of max. conviction.
• Rule 6 says we now have only $5,000 left to invest in the food sector.
• Cakes4U + Food 2 + Food 3 = $10,000 or 10% of our capital.

Rule 7: **Trade at the right price**

• Don't rush into trades, wait for a good price to enter and exit your trades.

• Company analysis and chart analysis help determine what the right price is.

• **Buy** at the **lower** end of the P/E range and the **lower** end of the trading range.

• **Sell** at the **upper** end of the P/E range and the **upper** end of the trading range.

Rule 8: Ensure that you have lots of different ideas in your portfolio that are uncorrelated

• You want a portfolio with as many ideas as possible not linked by one particular theme, sector or country.

• **Diversification** is key.

Rule 9: When you have lost 10% of your capital, you should stop trading for one month

• Having a stop limit on your overall portfolio is essential for your survival as a trader.

• Keep a trading diary divided into six parts, one for each of the five Steps, together with the trade details and targets and stop-loss levels.

Taking the time to analyse your trades and what was good and what was bad about them is going to be crucial to your success as a trader.

Practice portfolio
• Total capital of $100,000

Company	Long	Short	% Long	% Short
Cakes4U	$5,000		5%	
Car 1	$2,000		2%	
Car 2	$2,000		2%	
Car 3	$2,000		2%	
Tech 1	$4,000		4%	
Tech 2	$2,000		2%	
Pharma 1		-$3,000		-3%
Pharma 2		-$3,000		-3%
Tobacco 1	$2,000		2%	
Mining 1	$3,000	-$3,000	3%	
Mining 2				-3%
Oil 1	$1,000		1%	
Oil 2		-$1,000		-1%
Total	$23,000	-$10,000	23%	-10%

Table: Practice portfolio

• Assume we have the following views:
Long $5,000 of Cakes4U
Long $6,000 of three different car companies.
Long $6,000 of two technology companies
Negative on healthcare with a short of $6,000
Positive on tobacco being long 2%
2% pair trade within the mining sector
2% pair trade within the oil sector

• Portfolio follows the rules.

Company	Long	Short	% Long	% Short
Cakes4U	$5,000		5%	
Car 1	$2,000		2%	
Car 2	$2,000		2%	
Car 3	$2,000		2%	
Tech 1	$4,000		4%	
Tech 2	$2,000		2%	
Pharma 1		-$3,000		-3%
Pharma 2		-$3,000		-3%
Tobacco 1	$2,000		2%	
Mining 1	$3,000	-$3,000	3%	
Mining 2				-3%
Oil 1	$1,000		1%	
Oil 2		-$1,000		-1%
S&P 500	$37,000		37%	
Total	$60,000	-$10,000	60%	-10%

Table: Practice portfolio maximum long

• If you think the market is going up you can buy up to $37,000 of the S&P 500 before reaching the max. long limit of 50% ($50,000).
• As you come up with individual stock ideas on the long side you can sell out of your S&P 500 and put them into the individual stocks.

Company	Long	Short	% Long	% Short
Cakes4U	$5,000		5%	
Car 1	$2,000		2%	
Car 2	$2,000		2%	
Car 3	$2,000		2%	
Tech 1	$4,000		4%	
Tech 2	$2,000		2%	
Pharma 1		-$3,000		-3%
Pharma 2		-$3,000		-3%
Tobacco 1	$2,000		2%	
Mining 1	$3,000	-$3,000	3%	
Mining 2				-3%
Oil 1	$1,000		1%	
Oil 2		-$1,000		-1%
S&P 500		-$13,000		-13%
Total	$23,000	-$23,000	23%	-23%

Table: Practice portfolio hedged

• If you are worried about a war affecting the markets and want to hedge your portfolio quickly, sell out of your S&P 500 and a bit more as seen here, to make yourself **net neutral**, i.e. not long and not short but completely hedged.

Rule 10: **Run your portfolio at such a level that you can still sleep at night**

Knowing you have a risk management strategy in place will help you maintain the composure you need if you want to be a successful trader and investor.

WORKBOOK QUESTION: *What are the last five rules of risk management?*

WORKBOOK QUESTION: *Why do you need risk management rules?*

WORKBOOK QUESTION: *What does it tell you when you can't sleep at night?*

Appendix A: Glossary of terms

5-Step-Trading® is a method that tries to make the whole trading decision as easy and transparent as possible.

Here I will explain some some basic concepts and terms. Many of you will already be aware of terms such as short selling and margin, and if so I would understand if you skipped this module and moved straight on to Step 1: Idea Generation.

I am not going to discuss exactly how the City works: an explanation of this appears in my book *How to Make Money Trading*, so please read that if you would like to find out about it in more detail.

Lets start with talking about **stocks** or **shares** or **equities** – whatever you want to call them. When you own a stock you become a shareholder of a company and part of the profits belongs to you.

The company might pay you part of the profits in the form of a **dividend**, or **reinvest** it to grow the business. Hopefully that will then be good for the share price.

What is a stock?

STOCK = SHARE = EQUITY

Owner of part of the company

How does the shareholder make money?

Dividends

Rising stock price

The company might also want to borrow money. It will pay interest on this loan. This is called a **bond**.

The **bond holder** has no right to the profits of the company, but if things go wrong and the company is unable to afford any more interest payments, than the bond holders end up owning the company, and the shares might be worth zero. The ratio between the value of the bonds and the value of the equity is called **gearing**. The higher the gearing the more bonds a company has outstanding and the higher the risk in a company.

What is a bond?

<div style="background-color:yellow">

Bond = Loan

Lender to the company

</div>

Stocks are traded on a **stock market**; these are the places where buyers and sellers come together. These days most stock markets are electronic. Some people are able to trade directly on the electronic market, but most will use a **broker** or a **spread betting** firm.

<div style="background-color:yellow">

24 hour trading

London

New York

Tokyo

Hong Kong

London

</div>

The London stock market is open 8am–4.30pm, when London closes the New York stock market will already have been trading for several hours, followed by New Zealand, Japan and Hong Kong. And when Hong Kong closes London is about to open again. Most large stocks operate their businesses globally, with global suppliers and global customers. That is why you have to keep your eye on the international economy and not just the economy of the country where you live.

Sometimes the same stock will trade in London, the US and Asia. And all these markets will look at each other to get a feel for what the general market sentiment is like all over the world. Trading really is a 24-hour business.

When you buy a stock you are not alone. The shareholder register is normally made up a number of **different kinds of shareholders**:

• The person who founded the company and his family.
• Pension funds that invest on behalf of retirees.
• Asset management companies who invest on behalf of groups of individual investors.
• Insurance companies who invest premiums to ensure they can pay out the claims at a later date.
• Computer models (black boxes) that trade based on complicated statistical models.
• Proprietary traders who trade on behalf of large banks.
• Hedge funds that trade on behalf of their clients.
• Day traders who buy and sell within the same day.

• An army of small retail investors.

<table>
<tr><td>The founder and his family</td></tr>
<tr><td>Pension funds</td></tr>
<tr><td>Asset management companies</td></tr>
<tr><td>Insurance companies</td></tr>
<tr><td>Computer models</td></tr>
<tr><td>Proprietary traders</td></tr>
<tr><td>Hedge funds</td></tr>
<tr><td>Day traders</td></tr>
<tr><td>Retail investors</td></tr>
</table>

The reason I am going into so much detail here is to emphasise the fact that the stock market includes so many **different investor groups**, each with their own reasons for buying or selling a stock, and with their own timeframes for investing. This will cause moves in stocks that can sometimes hurt you, but can also help you buy a stock at a low level, or sell at a high level at other times.

Normally a company is originally owned by the founder. When he needs money he might sell some of his stock in the form of a private placing initially to a select few investors. When he needs more money, he might float his company on the stock market, in what is called a **primary offering**. At some later date he might issue more shares in what is called a **secondary offering**.

Private placing ---> select few investors

Primary placing ----> stock market debut

Secondary placing ----> more shares sold to public

Once the company is listed there are a number of of rules the company needs to follow. It needs to **publish its results** and its earnings at least every six months so that the shareholders and the bond holders can see how the company is doing. The company also needs to hold an **annual general meeting** where any shareholder can attend to ask questions of the management of the company.

Buying stocks

To trade yourself you need to have an **account** with a bank, stockbroker or spread betting firm. You can communicate with your broker by phone or via the Internet. You will have your own account with your money deposited in this account to pay for shares that you might want to buy. When you buy a stock they will hold the stock for you. When you buy shares it is also known as **going long**.

Your broker might also give you **margin** to trade on. This is a loan that enables you to buy more shares than you have money for in your account. If you have £10,000 in your account with the stockbroker, but you are allowed to buy stocks worth £20,000, then this is called a leverage of 2. This will allow you to make money twice as quickly when you are right. Unfortunately leverage is very dangerous – when things go wrong, they will go wrong twice as fast if you have used a 2 times leverage. When you trade on margin and things go wrong you might get a margin call where you have to deposit money into your account or the broker will sell your stock in the market on your behalf so it can get its loan repaid.

No leverage	Two times leverage
Stock up 5%: you make 5%	Stock up 5%: you make 10%
Stock down 5%: you lose 5%	Stock down 5%: you lose 10%

More on short selling
If you think a company is going to have a bad period and the stock is going to go down, you can sell the shares you own and not lose your profits. But even if you do not own shares in the company you can still benefit from the falling price – this is called **short selling**.

This sounds complicated, but all that matters to you is that when you sell short you will benefit from the stock price falling. This is not immoral as you might sell short to protect your portfolio. This is also known as **hedging** your portfolio. You might also sell the stock short of a company that is very overvalued – imagine if you had done that at the height of the Internet boom: one day stocks were trading at sky-high prices, and a few years later they were worthless. Was it immoral to sell these stocks if you didn't believe there was a real business there? I don't think so, that's what I would call great trading!

Stock going up?	Stock going down?
	Sell the stock: go short
Buy the stock: go long	

Stocks are usually part of a larger **index**. In the UK the largest 100 stocks are members of the **FTSE 100**. In the US it is the **S&P 500**. The weight of each stock in this index is based on the total market value of each company. This is also called the market capitalization. You can find this by multiplying the number of shares outstanding by the stock price. The index serves as a quick indicator of the performance of the underlying stocks.

Country	Sector
UK	FTSE 100
USA	S&P 500
USA	Dow Jones 30
USA	Nasdaq 100
Germany	Dax 30
France	CAC 40
Japan	Nikkei 225
Hong Kong	Hang Seng

In addition to country indexes there are sector indexes. These give an idea of the performance of individual sectors within the general market index. The market index might be unchanged but oil stocks might be up 2% and healthcare stocks 2%. This might be valuable information as it might help you decide what kind of trade you should be doing.

Country Index	Sector Index
British Petroleum 8%	HSBC 50%
HSBC 8%	Barclays 19%
Vodafone 5.2%	Standard & Chartered 16%
etc.	etc.

5-Step-Trading® will help you in your decision-making process of how to find a trade and hopefully it will protect you when things go wrong. It will help you set targets for the stock where you are happy to take profits, and levels where you will unwind your position when things go wrong, also known as stop-loss levels.

Target: take profits

Stop-loss: 'cut' your losses

Sometimes you will hear the term **bull market**. This means the stock market is going up, like a bull lifting you with its horns.

The opposite is a **bear market**, where stocks keep going down.

When you call your broker to buy or sell a stock you should know beforehand the approximate price you are prepared to deal at. In general there are two types of orders: **market orders** and **limit orders**. **You should only use limit orders**. A market order has no price attached to it and you could get filled at completely the wrong price.

When you call the broker to buy some shares of British Petroleum you could for example say 'Buy 1,000 shares of British Petroleum at 440p'. If the broker is able to execute at that price he will, as it is mandatory by stock exchange regulation. If he cannot he will put the order on the electronic stock exchange, so that when it trades below 440p you will be guaranteed of owning the 1,000 shares. Always repeat an execution after the broker has told you your trade execution. It always involves the words 'buy' or 'sell'! I am considering running a separate module on trading language to explain all this in more detail, as an incredible amount of mistakes are made when people are stressed and tired.

More terms will be added as you go through the 5-Step-Trading® process, but you are now ready to start learning how to improve your financial future.
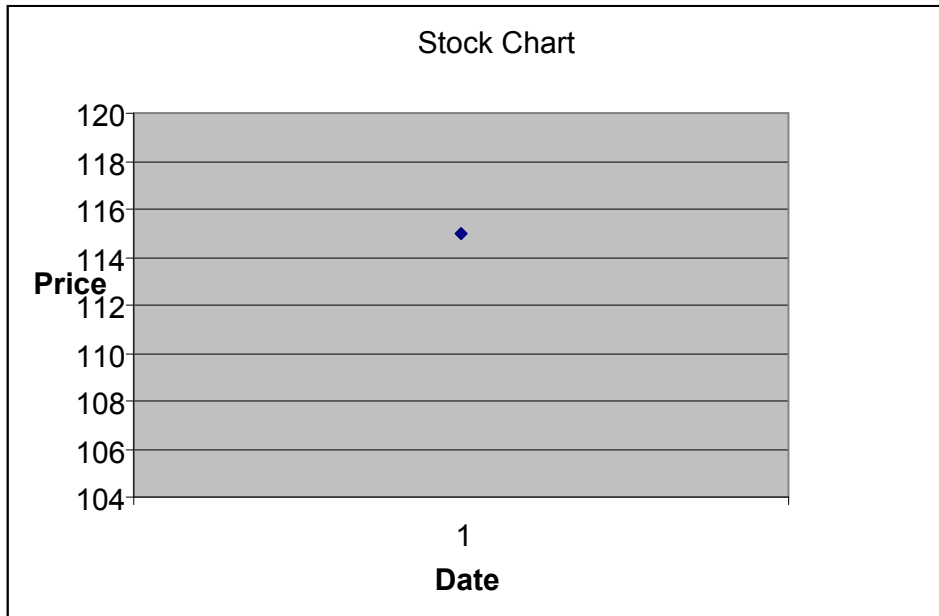
Appendix B: Charts – the basics

Let's look at how a stock chart is put together, and how to read it.

Basic chart: price and time

We start by drawing a horizontal line at the bottom that represents the time in days and a vertical line that represents the stock price in pence. The price can either start at zero, or higher if the stock trades much higher than zero.

In the case of our stock trading at 115p, let's assume the scale is between 104p and 120p. Before we look at the history we have to be able to show where a stock is trading today.

At the bottom of the chart we go to the right and add in today's date. Then we find the 115p level on the vertical line and then draw a point on the grid. We now have our first point on the chart. This only gives us limited information obviously: i.e. where the stock is now.

Stock Chart
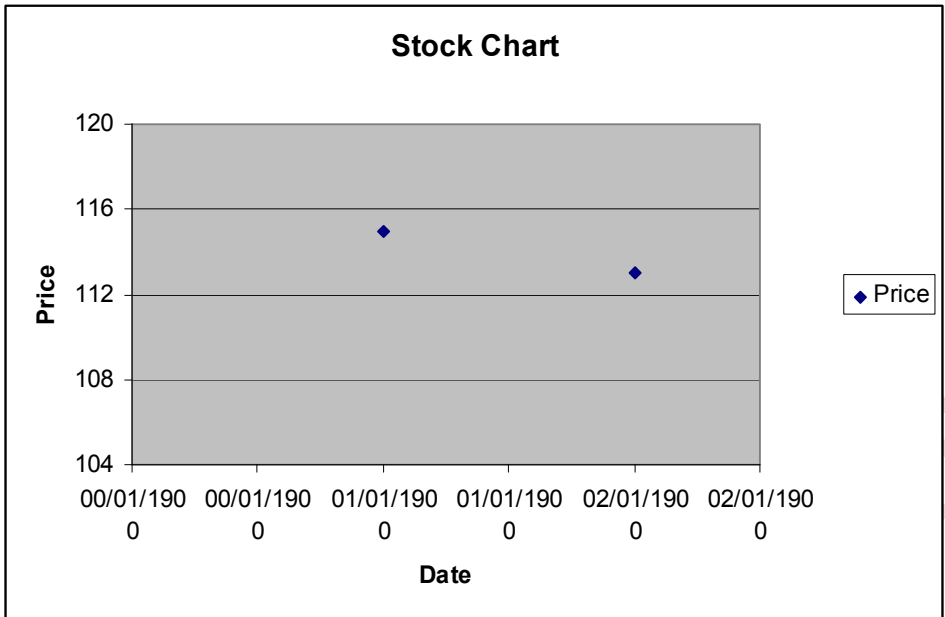
Basic Chart: stock price today and yesterday

However, the stock price has a history: there have been different levels at which the stock has traded in the past. We can now start to add additional information to our chart.

Let's assume yesterday's closing price was 113p. So we go back from today by one day on the bottom of the chart to show yesterday's date. We then look for the 113p level on the vertical line and we found our second point on the intersection of price and date,

Stock Chart

81
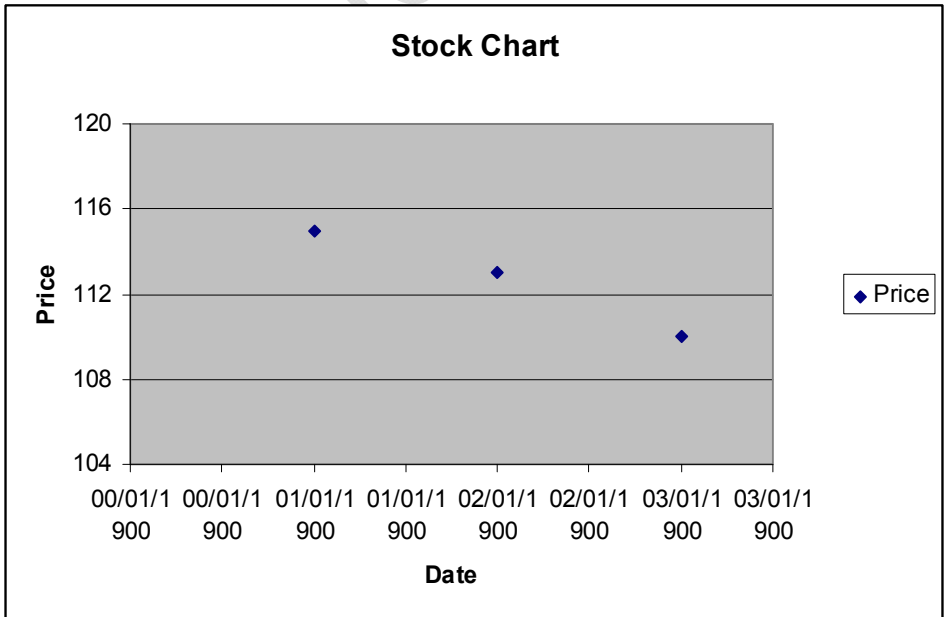
Basic chart: 3-day stock prices

If two days ago this same stock was trading at 110p, we can plot one day further back along the horizontal axis and go to the 110p level on the vertical axis, and add in another point.

Stock Chart
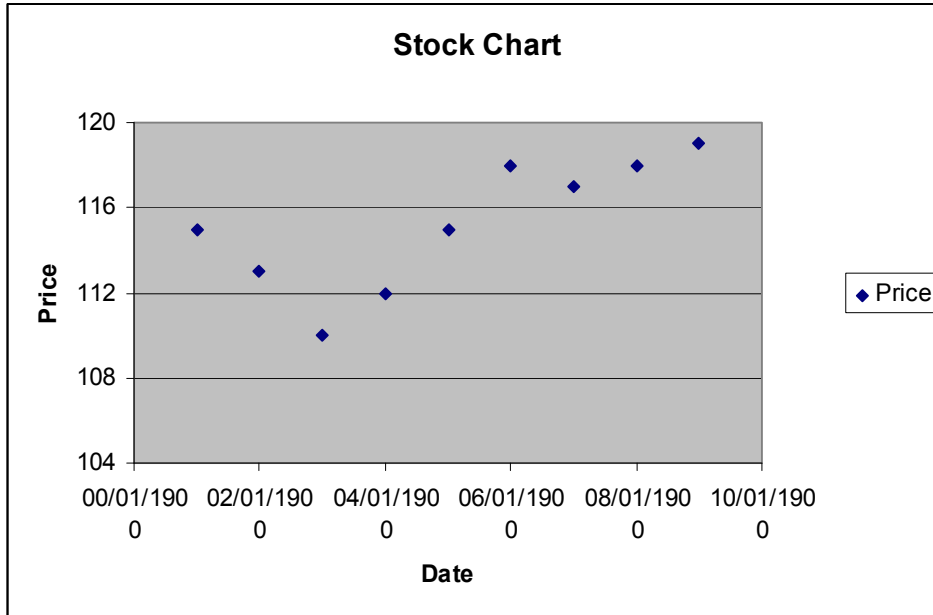
Basic chart: price and time for a series of dates

We can continue to do the same with the closing prices of the stock over a given period, and this will give us a graphical representation of movements in the stock's price.

Stock Chart
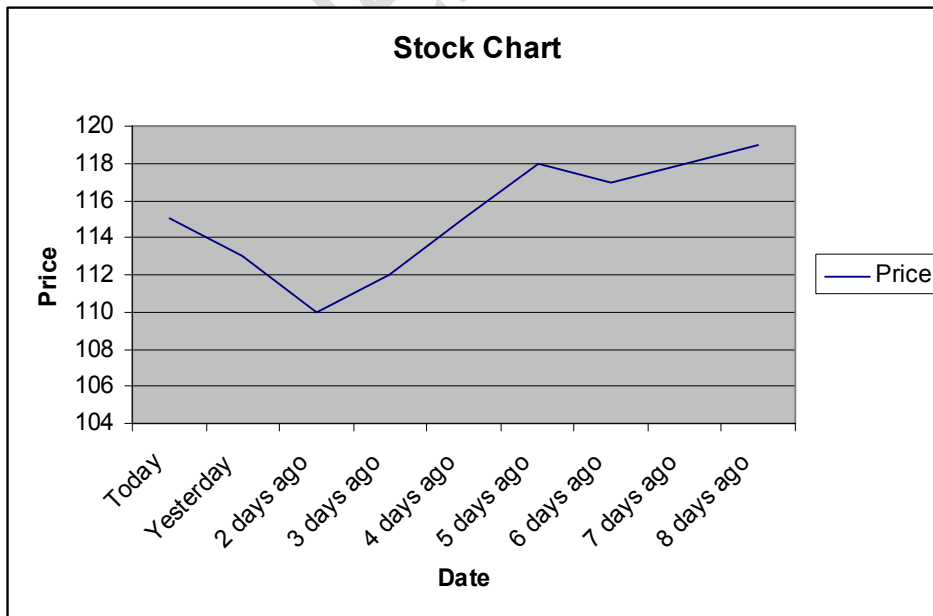
Basic chart: price and time: the dots connected!

To make the picture even clearer we can connect all of these points to form a line. We now have a story which unfolds in front of our eyes, the levels at which a stock price has closed over each day during a certain time period.

It is now visually much easier to see what has been happening with the stock: up and down movements become apparent and you can compare these movements with those of other stocks and see which announcements have influenced the price of the stock.

Appendix C: Financial health continued

Evaluating the financial health of a company involves a lot of research, and it can be hard to find the time to do it every time you trade. If you want to do company analysis work, and are happy to do more than just look at the earnings, then I suggest you do the following: use this checklist of ten financial indicators, that taken together will give you a very good picture of the financial status and health of a particular company.

You might not be able to find all this information for every trade, but if you don't you could be taking unnecessary risks. All good companies should be able to provide these details.

1. EPS (Earnings Per Share)

This is the amount of profit made by the company that belongs to the shareholder. We have already seen this at the bottom of the income statement for Cakes4U as £14.64 million for the whole company or 14.64p per share. How has this developed over time? We obviously like to see this go up.

2. EBITDA (Earnings Before Interest, Tax, Depreciation and Amortisation)

The cousin of EPS, but before paying out interest and tax and depreciating buildings etc. It is frequently used to make comparisons between companies in different countries easier, because different companies use so many different tax and depreciation policies. Assume that for Cakes4U the EBITDA is £42 million.

3. Dividend yield

This is the amount of dividend you get as a percentage of the stock price. Cakes4U has a payout ratio policy; they pay out 50% of the earnings as a dividend each year, which for this year is £7.32 million. We like to see a dividend that is going up a little every year and that is affordable for the company. There is no point in getting paid a high dividend if the company is losing money.

4. Debt

This is how much the company is borrowing. Once again, this is the notes payable, (the short-term debt), plus the long-term debt, i.e. £30 million plus £70 million equals £100 million. You need to try and find out the interest rate the company has to pay on this debt. In this case it is £7 million interest, which we saw on the income statement, and which equates to an interest rate on average of 7%.

5. Equity

This is how much of the company belongs to the shareholders after everybody else has been paid off. Also called book value. It is £15 million. Again, this equity is not the same as the market value of the company. The market value was £115 million.

Current Assets	£ 30 Million	
Non-Current Assets	£ 115 Million	Plus
Current Liabilities	£ 50 Million	Minus
Non-Current Liabilities	£ 80 Million	Minus
Book Value = Owners' Equity	£ 15 Million	

6. Debt/market value of equity

This is how much debt the company has relative to the market value of the equity. The higher this number, the more geared the company is, and the more it is affected by changes in interest rates. Here is it 100/115 i.e. 90%.

7. Return on equity

This is the amount of money earned by one unit of equity on the balance sheet. The return on equity for Cakes4U is £14.64 million for the £15 million of equity. This is almost 100% – that's a lot!

8. Return on capital employed

This is how much money all the capital in the business generates, this is equity plus debt. The higher the better. It is 14.64/115 or 12%, a more realistic number to look at.

9. EV (Enterprise Value)

If someone wants to buy the company, they won't just have to buy all the shares, but will also have to take on the debt and a pension deficit if there is one. The enterprise value is £115 million market capitalization, which is the number of shares outstanding of 100 million, times the stock price of 115p, plus £100 million debt on the balance sheet, which equals £225 million.

10. EV/EBITDA

This is the number of years before the company has earned its enterprise value. It is 225/42, which equals 5.4. You can use this number to compare the company to its competitors.

A company can have good earnings but it might not necessarily have enough cash to pay its debts. That is why it is also useful to look at a cash flow statement as well to see how much money the company generates. This is not a number that is manipulated for tax purposes, such as the earnings per share number, but is supposed to show the real cash that a company produces. The more cash your company generates the better it is. Let's look at the cash flow situation at Cakes4U.

Cakes4U had an EBITDA of £42 million. This was the number after costs had been deducted, but before tax, depreciation and interest payments. Let's say it needs £4 million more cash to run its business, which is an extra demand on cash. The depreciation of £5 million is not really cash. It is a tax-deductible expense but not a movement of money. This gives you an operating cash flow for Cakes4U of £43 million. But the company still has to pay £7 million in interest and a £15.36 million tax bill. They are also building a new factory for £10 million. All this is bad for cash flow, so the company has decided to raise some cash by selling some shares to the public in what is called a secondary placing, thus raising £5 million.

	Value £ million
EBITDA	42
Change in working capital required	-4
Add back depreciation	5
Trading/ operating cash flow	43
Interest/ returns on investment	-7
Tax	-10.36
CAPEX/ Investments	-10
New Shares/ Loans	5
Net Cash inflow	20.64

Cakes4U: cash flow statement

The bottom line is that Cakes4U generates £20.64 million cash. That is plenty to be able to pay out the dividend of £7.32 million. However, other companies may not have enough cash flow; their business might sell an amazing product but if their costs are too high, or they don't generate the cash when they need it, they could still go bankrupt! That's is why you need to know the cash flow situation of the companies you invest in.

The problem with looking at financial statements is that accounting is highly complex and not very transparent. This is because every public company has whole departments of accountants to ensure that the company looks as good as possible to the outside, and by the time you get to see the financial statements a lot of things will have happened. Unfortunately this is life: as an individual investor you have limited resources and for the initial analysis you will just have to rely on the data that you are given.

So once we have all these numbers, what do we use them for? We use them to get a snapshot of the company at this point in time. We use them to get an idea of how the company has developed over time. And we use them to see how this company compares to other companies, and the market as a whole. There are often good reasons why certain companies are more expensive than other companies Sometimes the quality of the business is better with more sustainable growth, good management and a great franchise. But sometimes there is a genuine mis-pricing and our job is to look for that!

What have we learned?
• We find and calculate the earnings from the income statement.
• We can find the assets and the liabilities of the company on the balance sheet.
• The cash flow statement shows if the company has enough cash to pay its short-term debts or if it is going to run out of cash soon.
• There are ten financial indicators that together tell you 90% of what you need to know about a company's financial health.
• Always look at financial data presented to you with a healthy dose of scepticism.
• And if this is too much to take in, don't worry. It takes time to become a company expert.

Appendix D: More on ISM

What do I mean by the ISM being a lead indicator?

The ISM moves in cycles in the same way as GDP, and it usually leads movements in GDP by several months. This helps us to predict changes in GDP, which then help us to predict changes in the stock market.

The ISM almost always oscillates from its peak to a trough below 50, indicating a recession is imminent. If you remember, the chart of GDP appeared to do the same, as it moves from the peak to its trough below zero. When the ISM is above 50 the economy is expanding, and when it is below 50 the economy will soon start to contract, or is contracting already. The health of US business drives US stock prices, and those of almost all countries in the world, except perhaps the secular movements in the emerging economies. The year-on-year return on equities almost exactly matches that of the business cycle, as you see in the chart. If you know how to analyse the chart you can see how the stock market should have performed in theory over the last 12 months, versus how it actually did perform. If there is a discrepancy, this can help you decide about the direction of the market over the near future.
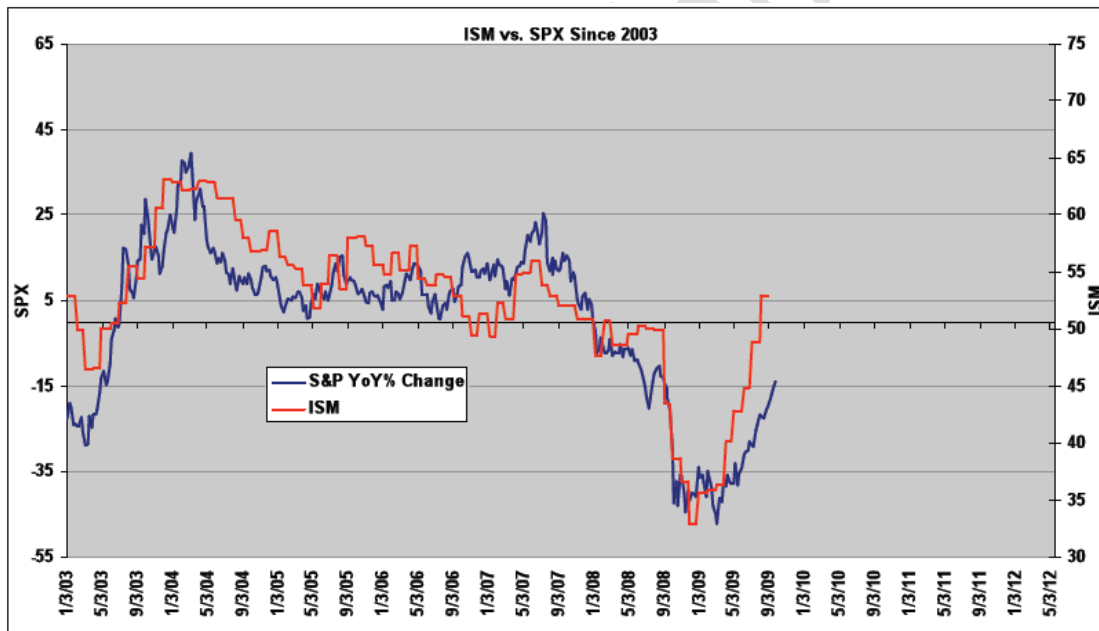


Chart: Correlation ISM and US stock market from 2003

This can be shown in a table like this:

ISM	S&P 500 Change on Year
35	-45%
40	-25%
45	-15%
50	5%
55	15%
60	35%
65	50%

When the ISM is below 50 the US stock marker tends to be lower than where it is today and vice versa.

For example the chart above, which ended in Sep 2009, indicates that the S&P shares index in the US should be about 5% above the level it was 12 months ago. Let's say the level of 12 months ago was 1166, so now it should be 1166 plus 5% i.e. 1224. If the market is actually at 1062 then it is 13% cheaper than it should be, and it could be a great time to buy stocks. It turned out it was, as the S&P rallied to about 1220 in early 2010. Of course you should treat it with absolute caution, and don't make any investment decisions based on a single indicator when I the idea is to go through five steps before you invest in a stock. Here is a longer-term chart.
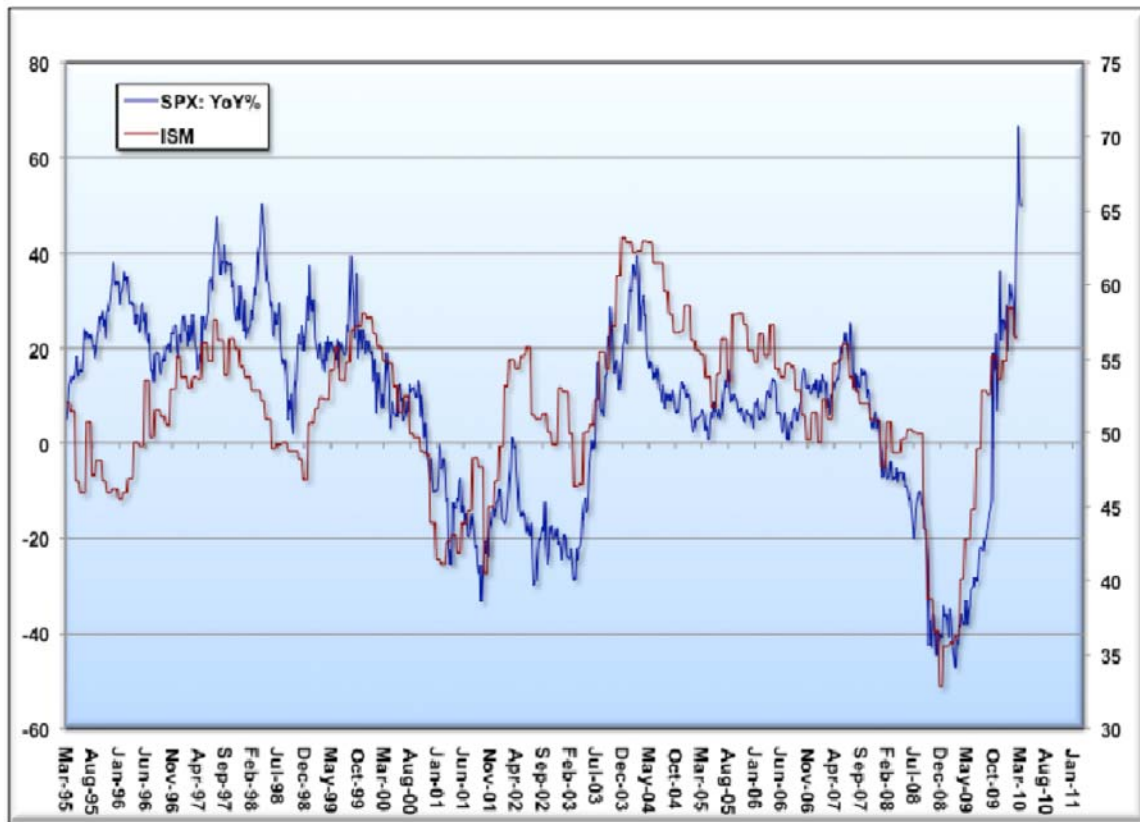
Again, what you need to do is look at the level of the ISM, and then look at the table above to see what the normal S&P change should be. If the ISM is 60 then the

markets 'fair' value (according to this method   ) is 35% above where the market was a year ago. So you need to go back and find where the market was at that point and add 35%. Then compare this to the current market and that will tell you whether the market is cheap or expensive.