AF4 2023/2024
Asset Classes: Shares
Part 2: Technical analysis

Selecting which shares to buy (and which to sell) is the most basic issue facing an individual or fund manager. Unless you are just going to stick a pin into the share listings in the FT, your choice will involve some research and there are two main methods:

- Share analysis (Technical analysis)
- Company analysis (fundamental analysis)

The milestones for this part are to understand:

- The difference between technical and fundamental analysis
- How to calculate and interpret Price/Earnings ratio, Dividend Yield and Dividend Cover.

Pure technical analysis focuses on the share price and other key data linked to this. It does not consider the performance of the company itself.
Fundamental analysis looks at the company performance based on its trading figures and the general economic condition.

Most investors will use both but in this part we will focus on Share or technical analysis.

Share Analysis

This looks at data around the share itself to see if it represents good value. There are two key figures from which, together with the share price, we can derive useful data. These are:

- Earnings per share (EPS)
- Dividend.

A company exists to make profits and the shareholders expect to be rewarded by receiving part of the profits as a dividend.

EPS represents the profits or earnings that are attributable to the ordinary shareholders. It is not necessarily the same as the gross profits. For example, if a company makes £10m in profits but pays the Bondholders £2m in interest then the profit attributable to shareholders is £8m. If there are 40m shares then the EPS is 8m/40m = 20p. In other words each share has got 20p of profits behind it.

Both EPS and dividends are historic data. They record what happened in the last trading year. If the business or the economy is going through turbulent times, these may not be an accurate

indicator of the current year. Just because a company paid a high dividend last year doesn't mean it will be paid this year.

The following examples are based on historical data for real companies

	A	B	C
Share Price	321p	340p	236p
EPS	15.25	32.73	24.85

From this we can calculate an important figure the **price earnings ratio (p/e)**

The formula is **share price/EPS** so in this case it will be:

	A	B	C
Share Price	321p	340p	236p
EPS	15.25	32.73	24.85
p/e	**21.05**	**10.39**	**9.5**

Calculation is one thing, interpreting the figures is another!

All assets other than cash will fluctuate in price. If they produce an income one way in which we can assess their value is to compare its price with the income it produces. For example, an investment property might produce £26,000 in income. If it is bought for £260,000 the price would have been 10 times its income. If it were bought for £520,000, it would have been bought for 20 times its income.

The p/e of A is 21.05 which means the market is prepared to pay a multiple of 21.05 of its EPS for the shares. With company C it is only prepared to pay 9.5 times its EPS

A high p/e probably indicates a greater confidence in the future profits of the company whereas a lower p/e tends to indicate less confidence. Just by looking at the p/e it would seem to indicate that the prospects for A are better than C. Alternatively another analyst might conclude that A is overvalued and C is undervalued!

P/E is useful but it needs to be treated with caution. The EPS is based on historic figures. The share price is a current figure that changes minute by minute. Let's say that company B issued a profits warning and its share price slumped to 240p. The EPS would stay the same until the next profit figures were calculated but its p/e would have reduced to 240/32.73 or 7.33.

P/E can also be calculated on a forward basis. This uses an estimate of the future earnings.

Another formula is the **Cyclically Adjusted Price Earnings (CAPE)** This is the price divided by the average of the past 10 years earnings adjusted for inflation. This is seen as a better guide to performance of the shares over the longer term.

Another variation on the P/E ratio is the **Price Earnings Growth** or **PEG** ratio. The formula is: PE/anticipated growth so if the PE is 14 and growth is 7% the PEG is 2.

The case for PEG is that P/e is too simplistic. Two shares, A & B could have a P/e of 24 which implies they both have high growth potential. If the anticipated growth is 12% and 6% respectively then it can be seen that the P/e of A seems more justified than B because of its greater growth.

The PEG for A will be 2 and 4 for B. In general the lower the PEG the better as you are paying less for each unit of potential growth. A high PEG may indicate that the share is overvalued.

Companies could pay out all the EPS as dividend but in practice they will only pay out a part of it and retain the remainder to invest in the business.

	A	B	C
Share Price	321p	340p	236p
EPS	15.25	32.73	24.85
p/e	21.05	10.39	9.5
Dividend	14.76p	16.9p	12.15p

The next thing we can calculate is the dividend yield which is the **dividend/ share price expressed as a percentage**

	A	B	C
Share Price	321p	340p	236p
EPS	15.25	32.73	24.85
p/e	21.05	10.39	9.5
Dividend	14.76p	16.9p	12.15p
Yield	**4.6%**	**4.97%**	**5.15%**

This tells us what return the dividend is paying and naturally we would like to see this as high as possible. It also gives us a comparison with other investments.

As with p/e it needs to be treated with caution since dividend is historic and share price is current. A fall in the share price would increase the yield but one reason for the fall could be a profits warning and this would probably lead to a cut in the dividend at the next payment date.

The ability to sustain dividend is a key factor in identifying share value and can be measured by **dividend cover**. This is EPS/dividend.

	A	B	C
Share Price	321p	340p	236p
EPS	**15.25**	**32.73**	**24.85**
p/e	21.05	10.39	9.55
Dividend	**14.76p**	**16.9p**	**12.15p**
Yield	4.6%	4.97%	5.15%
Cover	**1.03**	**1.93**	**2.04**

In this case A is paying almost all its profits out as dividend and this may not be sustainable. B and C would appear to have a cushion so it is more likely that dividends will be maintained. In assessing dividend cover the higher the number the better.

These measures are in the main "snapshots" in that they reflect that day's statistics. Technical analysts will also be concerned with the way in which the share price moves over a period of time.

One key measure used by technical analysts is **moving day averages**. This measures the closing level of an index or the price of a security and averaged over a set period. The idea is to identify trends without it being influenced by short term fluctuations. The most common ones are 50 and 200 days with the former being used to pick out immediate trends and the latter for long term trends.

When the moving trend is rising the trend is bullish, if it is falling it is bearish and when moving sideways there is no trend. Significant trend changes occur when the short term average crosses above the longer term average. If the shorter term average crosses above the longer term average it signifies a new bullish trend. If the short term crosses below the long term it indicates a strong bearish trend.

Another measure is the **Relative Strength Indicator**. This is a mathematical formula that measures the average of the number of days an index or security rose or fell over a period of time.. It is a figure ranging from 0 to 100. If it is approaching 30 it may indicate it is undervalued and if over 70 it may be overvalued. It can though give false signals as large surges or fall in price will affect the RSI.

Share analysis in a Post Covid world

The immediate effect of the covid crisis was that share prices fell, companies issued profit warnings and cut or suspended dividend payments. This makes pure share analysis less useful. Earnings per share are based on historic data so p/e ratio may be distorted but using CAPE ratio may prove more accurate.

If dividends are suspended the yield will be 0% so a more relevant question is how likely the company will recover and resume dividend payments.

To do that we need to move to fundamental analysis which will be covered in the next part.

That concludes this part so you should now understand:

- The difference between technical and fundamental analysis
- How to calculate and interpret Price/Earnings ratio, Dividend Yield and Dividend Cover.