# The price is right

Why equity valuations are so important for investors



Calculating the value of shares can be a complicated process. We explore why it's so important to overcome behavioural bias when it comes to investing in equities and take a look at some of the ways we can help determine a company's fair value.

If I were to ask 100 amateur investors why they held a certain stock in their investment portfolio, I suspect a common answer would be "because I hope it will go up". At first blush, this appears entirely reasonable. After all, the reason we accept the risk of investing in the stock market is in the hope of growing our savings and that isn't going to happen if the price of the stocks you own goes down. But, if we use the context of our life savings to re-examine the response, we might start to question it a little – is *hope* really an appropriate strategy when our financial objectives and wellbeing are at stake?

#### What is a stock?

Before we consider how to assess the outlook for a stock, it is important to go right back to the beginning: what actually is a stock? Perhaps the first picture that comes to mind when we think of stocks is a ribbon of red and green numbers scrolling across the bottom of the business news. This image encourages us to think of a stock as something intangible – just a number that goes up and down, that causes people in fancy jackets to shout "buy" or "sell" at each other, and that makes us feel either good or bad when, from time to time, we check our financial accounts.

The reality – at least for the long-term investor, as opposed to the short-term speculator – is very different. The term 'stock' comes from the notion of a 'joint stock' company: a company in which the owners can sell their share of the company's stock without impacting the operations or existence of the company. Rather than requiring the company to liquidate its assets, the stockholder can transfer ownership of those assets to a third party by selling his or her share of the business.

This is a simple but crucial observation: a 'stock' or 'share' represents partial ownership of a company. Even if you own just one share of a market behemoth like Amazon, you are entitled to consider yourself an owner of that business.

### Key takeaways

- A 'stock' or 'share' represents partial ownership of a company, and the stock market provides a regulated environment in which shareholders can easily sell their share of a company to a willing buyer.
- Investors should hold stocks in their portfolio where they believe the share price is lower than the fair value of the portion of the business it represents, and avoid those where the inverse is true.
- Calculating a company's fair value is a difficult task, and there are various methods used, including discounted cash flow models, price-to-earnings ratios, price-to-book ratios and free cash flow yield.

# What is the stock market?

The stock market provides a regulated environment in which shareholders can easily sell their share of a company to a willing buyer. This is extremely convenient and avoids the complex and costly negotiations involved in the change of ownership of a private business.

So far, so benign. But the stock market introduces investors to numerous pressures and temptations that can distract us from our position as joint owners of the businesses in which we have invested.

Benjamin Graham is often considered the grandfather of investment analysis. Working and writing through the Great Depression and World War II, Graham developed innumerable important investment concepts. Among the most accessible and informative is his parable of 'Mr Market':



"Imagine that in some private business you own a small share that cost you \$1,000. One of your partners, named Mr Market, is very obliging indeed. Every day he tells you what he thinks your interest is worth and furthermore offers either to buy you out or to sell you an additional interest on that basis. Sometimes his idea of value appears plausible and justified by business developments and prospects as you know them. Often, on the other hand, Mr Market lets his enthusiasm or his fears run away with him, and the value he proposes seems to you a little short of silly.

"If you are a prudent investor or a sensible businessman, will you let Mr Market's daily communication determine your view of the value of a \$1,000 interest in this enterprise?"<sup>1</sup>

Guided at times by enthusiasm and at others by fear, the market is volatile and neurotic. It is also reliable: every day it will make an offer to buy your share in the company. But there is no need for you to take it up on this offer – in as much as anything, its offer is there simply for your convenience.

#### **Investment matters**

So why do we hold certain stocks in our investment portfolios?

We have seen that, as stockholders, we are joint owners of the businesses in which we have invested. We also understand that we can, on any given day, take up the market up on its offer to sell our stake in those businesses, or to buy more. And we heavily suspect that the market is emotional and frequently irrational.

Putting these two facts together, we now have the opportunity to replace hope as the determinant of our long-term financial wellbeing. Rather than simply hoping a share price might rise, we can aim to buy stocks where the price offered by the market seems to be less than that share of the business is worth, and to sell them when his offer appears fair or even generous.<sup>2</sup>

What should you expect if you buy a share at a price above its fair value? It is possible that you might persuade some 'greater fool' to buy the stock from you at an even higher price. This possibility rises at times when investors are collectively gripped by a compelling narrative ('technology is going to change the world' in 1999, for example) or strong emotions ("capitalism is finished – run for the hills!" in 2008). However, as far as we know there is no way to assess your chances of finding a buyer and turning a profit. An investor who knowingly buys shares above their fair value should reasonably prepare themselves for a loss.

In summary, we should hold stocks in our portfolio where we believe the share price is lower than the fair value of the portion of the business it represents, and avoid those where the inverse is true. Warren Buffett, protégé of Benjamin Graham and one of the most successful investors of all time, sums this up neatly: "Price is what you pay, value is what you get".

# What is fair value?

This is the debate on which the whole of the investment industry rests: what is the fair value of a business and, by extension, how much is a share of it really worth? Suffice to say, this is not an easy question to answer.

Our answer starts, perhaps surprisingly, in the bond market. As we have discussed in our previous *Investment insight*, '<u>Exploring the</u>risks and opportunities in the corporate bond markets', the price of a bond should reflect the present value of all the future cash flows it will deliver to the investor. This concept can be applied to the valuation of stocks.

Before we go any further, we should explain what we mean by the 'present value of all future cash flows'. Unless the issuer defaults, a bond with a 5% coupon and a value of £100,000 that matures in 10 years' time will pay the bond holder £5,000 a year for 10 years, plus the original £100,000 at maturity – a total of £150,000.

However, you would be in good company if you were to argue that £5,000 received today is not worth the same as £5,000 that you might receive in 10 years' time. There are three main reasons why this is so:

- The time value of money: if you can invest today and earn a
  positive rate of return, money you have at your disposal now
  is worth more than an equal sum received at a later date. For
  example, if you can earn a return of 5%, you would need to
  invest just £3,070 today to have £5,000 in 10 years' time.
- Risk: 10 years is a long time. How can you say for sure that the issuer of the bond will remain solvent – or even exist – a decade from now? The further the bond is from its maturity date, the more uncertainty there is likely to be.
- Inflation: if prices rise between now and when the payment is received, you will be able to buy fewer goods then than you will now.

We therefore need to 'discount' each of the future cash flows by a factor that accounts appropriately for these three concerns. If we can earn a 2% rate of return on our investments, if we need an extra 2% to compensate for the risk of this bond, and if we expect inflation to average 2%, a reasonable discount rate would be 6%. Figure 1 shows this discount process in action for our £100,000 10-year bond.

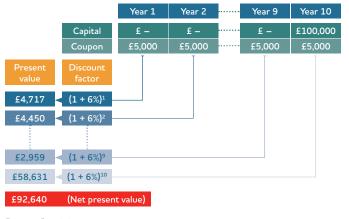
Discounting the bond's future cash flows at a rate of 6% brings us to a 'fair' present value of £92,640. If we increase the discount rate, that present value falls (a 7% discount rate results in a fair value of £85,953). Similarly, the fair value will decline if we push the payments further out into the future.

<sup>&</sup>lt;sup>1</sup> The Intelligent Investor, Benjamin Graham, first published in 1949.

<sup>&</sup>lt;sup>2</sup> It is reasonable to ask why we should sell at a fair price if the market is likely, at some point, to offer us a generous one. First, we don't know if or when a generous price will be offered. Second, if we believe the market price of some other shares is too low, there is an 'opportunity cost' to retaining shares that are fairly valued – if we don't sell the fairly valued shares, we may not have the money to buy the ones that are attractively valued.

# Figure 1: Discounting a bond's cash flows to their present value

Discounting the bond's future cash flows at a rate of 6% brings us to a 'fair' present value of  $\pounds$ 92,640.



Source:: Omnis Investments.

But how can we apply this model to stocks? We know that most companies aspire to make a profit. We also know that those profits belong to the companies' owners – their shareholders – us! In theory, we can work out how much profit<sup>3</sup> a company will make each year in the future, divide those profits by the number of shares the company has issued and discount the result back to the present value using an appropriate discount factor in exactly the same way we did for the bond example above. If the shares currently trade below that value in the market, we can buy them in the reasonable expectation of making a gain, either as the share price rises to reflect the fair value of the company's profits, or through our ownership of a proportion of those profits.

#### Theory vs practice

The discounted cash flow model works superbly in theory. However, if you try and put it into practice you will quickly discover some fairly serious limitations.

For example, we can see from our bond model that more than half of the present value comes from the repayment of the initial £100,000. But whereas bonds have fixed maturities, stocks are perpetual securities with no specified repayment date. Even if you accurately map out the company's earnings for the next 10 years, what then? What value should you attach to the company, assuming it is still in business?

That raises its own questions. How are you meant to accurately forecast a company's earnings when the events of the next week are unknown to us, never mind those of the next decade?

To deal with these questions and others like them, stock analysts make some simplifying assumptions. Using knowledge gained through deep research, some might feel confident to forecast a company's earnings for, say, the next three years. After this point, an assumption will be made about the average pace at which the company can grow its earnings into an unending future. This perpetual growth rate can then be used to calculate a 'terminal value' for the company.

These assumptions keep the discounted cash flow model viable. But, as assumptions, they can of course be proved wrong. And if the inputs into the model are wrong, the output will also be wrong. It is fair to say that calculating an accurate fair value of a company and its stock is very, very challenging.

# Why accept the challenge

At this point, we could be forgiven for giving into despair. If calculating a company's fair value is so difficult – seemingly verging on impossible – why should we bother? Our answer has three main components:

- First, we don't need to be exactly right just more right than the capricious market.
- Second, by understanding even roughly the determinants of a company's fair value, we can help protect ourselves against the worst behavioural temptations to which all investors are susceptible.
- Third, because history tells us that identifying companies that are worth more than the current share price implies is a sound strategy for the long-term investor to pursue.

# Challenging the market

As Benjamin Graham acknowledged, the market price of a stock can often appear quite reasonable. However, at other times the market price can swing wildly from day to day, scaling unprecedented heights or plummeting to unreasonable depths. In these circumstances, we do not necessarily need to know exactly how far above or below fair value the share price has moved.

If we think a share of Company A is worth £5 but notice that the share price has fallen to £1, we can be 80% (or £4) wrong in our assessment of fair value and still end up with an investment that is no worse than fairly priced. This is the concept of margin of safety. So even if Company A were worth £3 instead of the £5 we expected, we would still be in profit. If we can secure a margin of safety, we can invest in the expectation of profit even if our outlook subsequently proves a little too optimistic.

<sup>3</sup> We have used profit here for simplicity, but whether profits, free cash flow, dividends or some other accounting identity is the best foundation for the present value model is subject to valid debate.

# Avoiding temptation

An accusation often levelled at economists and investment theorists is that their models don't work in a world that is not neatly contained in a carefully specified box. None of us can possibly know everything there is to know about any subject – including the factors that will determine a company's future profitability and, therefore, its present fair value. Even if we were all-knowing, could we rely on ourselves to use the information rationally and act in our own best interest?

Behavioural finance is a fascinating subject, and one that perhaps merits an *Investment insight* of its own. The growing body of research recognises that investors are continuously bombarded with any number of temptations, most of which boil down to abandoning reason and acting on emotion. Contemplating valuations can help us guard against these temptations.

For example, let's take a look at Unilever. Unilever is one of the UK stock market's heavyweights. It owns a huge number of household brands, including Dove, Persil, PG Tips and Marmite. For the most part, these are goods that make their way into your weekly shopping basket come what may. This makes Unilever's earnings relatively reliable. For example, though its earnings per share dropped after the global financial system went into meltdown in 2007, the company remained profitable throughout the crisis.

Nonetheless, the share price fell more than 35% between January 2008 and March 2009. As shown in figure 2, the subsequent gains have swamped this drawdown and, with the benefit of hindsight, it is clear that March 2009 represented a golden opportunity to buy Unilever at a price below its fair value.

# Valuation without the spreadsheets

Only committed professionals are likely to build complete discounted cash flow models for each of their investments. But there are other measures that can help us gain insight into the value the market is attaching to a given company:

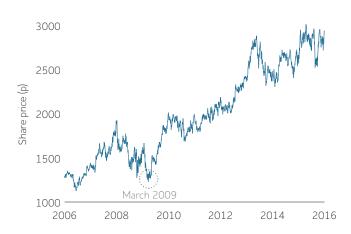
- Price-to-earnings ratio (P/E): an expression of a company's share price as a multiple of its earnings, most commonly either over the past 12 months (trailing earnings) or the next 12 months (estimated forward earnings).
- Price-to-book ratio (P/B): an expression of a company's share price as a multiple of the value of its assets. Assets include things like buildings, machinery and loans owed to the company.
- Dividend yield: represents a year's dividend either trailing or a forward estimate – as a percentage of the current share price. Dividends have historically accounted for a substantial proportion of long-term stock market returns.
- Free cash flow yield: the free cash flow yield aims to resolve a weakness of the dividend yield. Rather than looking only at the dividend, it uses all the cash flow left to the company after all the year's expenses, charges and commitments have been met

Though each of these measures has its strengths and weaknesses, they can still be incredibly useful for valueconscious investors. First, we can use them to help compare one investment opportunity with another. Second, we can use them to assess the market's current state of fear or greed.

# Figure 2: Unilever's forward P/E ratio (left) and share price (right)

It became clear in 2015–16 that March 2009 represented a golden opportunity to buy Unilever at a price below its fair value.





Source: Bloomberg.

Of course, anyone can tell you where you *should* have invested after the race has been run. Was there anything that could have compelled us to make an investment ahead of time? One option might have been to look at the forward P/E multiple (see 'Valuation without the spreadsheets' box).

Before the financial crisis, the market was willing to offer us £18 for every £1 of profit Unilever was expected to make the following year. However, as banks collapsed and fear overwhelmed greed, the market reduced its offer until it was willing to pay less than £10 for every £1 of the company's expected profit.

Unilever, lest we forget, earns a relatively dependable profit stream from selling household items people want or need largely irrespective of the health of the global economy. Had the financial crisis really altered the company's long-term prospects to the extent that investors should consider its earnings nearly half as valuable as they had just 15 months previously? A disciplined investor might perhaps have concluded the decline in the share price had outstripped any potential deterioration in the company's fair value.

This is not to say it is easy to maintain discipline in the midst of something as cataclysmic as the financial crisis – far from it. However, if we at least ask the question of whether events have altered the fair value of the company as much as they have its share price, we give ourselves a better chance of doing so. As a result, we might manage to resist the temptation to sell when the market's offer is low but loud, or to buy when it is high but enthusiastic.

# Evidence for the defence

Throughout this note, we have argued that 'hope' is not a sensible foundation on which to build your financial objectives. Instead, setting out to buy shares when the market price is below your estimate of fair value can help turn hope into a reasonable expectation of profit. Furthermore, the discipline may also protect you against the worst of the emotional highs and lows of investing.

So far, we have talked exclusively about individual stocks. But we believe the lessons can be equally well applied to decisions about which stock markets to invest in, or whether to invest in stock markets at all.

When we look at data for entire stock markets,<sup>4</sup> we find a very meaningful relationship between starting valuations and the future returns delivered by the market from that point. As figure 3 makes clear, the less expensive the stock market<sup>5</sup> at the point of investment, the greater the returns that investment has delivered over the next 10 years.

#### Where are we now?

This is a particularly tricky time for valuation-conscious investors. The economic ravages of the Covid-19 pandemic mean there is little to be learned from valuations based on last year's profits. Equally, though there are grounds for optimism that vaccines are slowly gaining the upper hand over viral mutations, there can be little certainty about corporate profitability this year or even next.

The extraordinary policy response to the crisis has also presented investors with a challenge. As central banks have slashed interest rates, the time value of money has fallen. This has reduced the discount rate, resulting in higher estimates of fair value (see 'Finding value during uncertain times' box). These estimates may be justified while interest rates remain low, but may prove susceptible if rising inflation forces interest rates – and therefore discount rates – higher. However, if rising interest rates reflect healthier economic conditions, earnings forecasts can be revised upwards, offsetting the negative impact of the higher discount rate.

#### Figure 3: S&P 500 Index P/B ratio at the point of investment vs subsequent 10-year returns

The less expensive the stock market at the point of investment, the greater the returns that investment has delivered over the next 10 years.



<sup>4</sup> We tend to default to the US stock market in these discussions, where the historical data are most complete. However, the case we are making here is certainly applicable to markets in other regions too.

<sup>5</sup> As measured by a weighted average of all the underlying company's P/B ratios.

Within the Omnis Managed Portfolio Service, where we have the flexibility to change portfolio allocations, we currently favour equities over bonds. Though aware of the risk posed by rising interest rates, we do not think it applies equally to all markets. The market for large US companies is dominated by technology names which we believe are vulnerable if rates rise, particularly as they trade at elevated valuations relative to other markets and to their own history. Conversely, if rising interest rates go hand in hand with stronger economic growth, this ought to benefit smaller companies in the US. We also favour markets such as the UK and Europe, where valuations provide a greater margin of safety against the uncertain economic outlook.

# The importance of active investing

If nothing else, I hope this note has helped make clear how far removed stock market investing is – or should be – from buying a share because you hope it might go up. If its only impact is to at least give you pause for thought the next time you receive a 'hot tip' from a well-meaning acquaintance, or the next time you see a stock price rocketing upwards or down, that would, I think, count as some sort of success.

Trying to determine a company's fair value can be a challenging enterprise. When it comes to equity investing, it's important to remember the lessons presented by the parable of Mr Market. We should aim to buy stocks where the price offered by the market seems to be less than that share of the business is worth, and to sell them when his offer appears generous or fair. When investing, we shouldn't be swayed by the market's volatile and emotional nature, instead taking into account the relevant data and staying focused on the long term.

We know that not everyone has the time or inclination to analyse share prices – that's why the Omnis funds are managed by specialist fund managers that have a strong track record of adding value through their skills and expertise. Omnis actively monitor our fund managers on behalf of you, the investor, and make changes where needed, without investors needing to take any action.

#### Finding value during uncertain times

These are challenging times for those seeking to invest at a price below their estimate of fair value. How do we suggest investors cope with this challenge?

First, when uncertainty is elevated, it is prudent to widen your required margin of safety. Whatever an investor's style,<sup>6</sup> we get uncomfortable when the assumptions required to support a position appear to be at the limits of feasibility. There is little margin of safety in a share priced on the basis of the perfect outcome for the company.

Second, we should recognise that conditions – and valuations – are not the same in all markets, in all industries, or even among companies competing against each other. Implementing a disciplined valuation-conscious approach can encourage us towards the areas of the market where prices are likely to be too low, and away from those likely to be too high.

Third, we believe it pays to hire an expert. It takes enormous skill, diligence and experience to methodically conclude whether a stock's price is above or below the company's fair value. We believe each one of the fund managers running Omnis funds possesses these necessary attributes.

Our investment managers have deep expertise in the areas they invest in and spend time analysing companies to find attractive investment opportunities with good margins of safety. Aside from spending copious amounts of times looking at numbers, the teams also meet companies to understand how different industries work in order to better assess fair value. This is the value that Omnis, as active managers, will deliver for you.

If you'd like more information about our approach to investing, please get in touch with your financial adviser.

<sup>6</sup> This, again, is a big topic. For now, it is enough to recognise that buying shares at a price below their fair value is not the exclusive preserve of either 'growth' or 'value' investors. Whichever style you or your manager associate with, you should be asking some very pointed questions of anyone who aims to buy shares at a price above fair value.

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