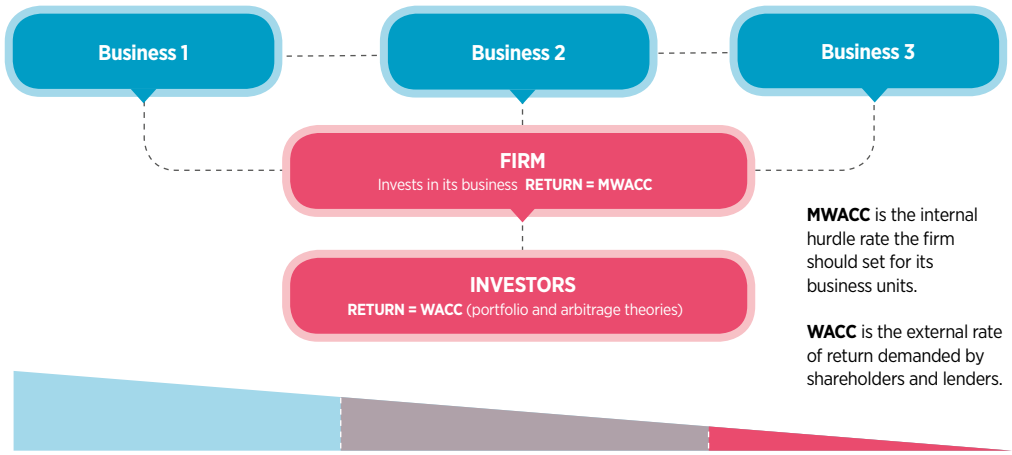
THE LURE OF RETURNS

CORPORATE FINANCE PRINCIPLES ARE POORLY UNDERSTOOD IN THE CORPORATE WORLD, TO THE DETRIMENT OF VALUE CREATION. IN PART ONE OF A THREE-PART SERIES, BEN WALTERS ELABORATES

FIGURE 1 HOW MWACC IS THE CORRECT HURDLE RATE FOR THE FIRM'S INTERNAL INVESTMENT DECISION

- Shows external investors passing the firm the message through their valuation that the business opportunity has the ability to produce an internal rate of return (IRR) of just under 15% on the 100 of capital available to it.
- By discounting this return at the WACC of 7.5%, investors arrive back at the firm's valuation of £17.5. If the business only produced an IRR of 11% on its capital, the firm's valuation would fall to £8.59 and the investors would have lost value, even while the business had produced a WACC-beating return.
- Investors would have overestimated the strategic position of the business and the returns it can make. Lastly, an IRR of 3% destroys both the investors' and the business's value despite still producing an accounting profit.
- A positive return above WACC on the business assets will of course still create value, but unless this beats MWACC, it will not create enough value to justify the external market's assessment of the level of return the business should be able to produce from its strategic position.



	CASH FLOW	P&L	CASH FLOW	P&L	CASH FLOW	P&L
Investment (T0)	**(100)**		**(100)**		**(100)**	
t1	30	10	27	7	22	2
t2	30	10	27	7	22	2
t3	30	10	27	7	22	2
t4	30	10	27	7	22	2
t5	30	10	27	7	22	2
IRR	**15%**		**11%**		**3%**	
NPV	**£18.00**		**£8.59**		**£10.22**	
Investors gain/(loss)	**£0.50**		**(£8.91)**		**(£27.72)**	
Cumm acc profit		**48**		**35**		**10**

MKT VALUE OF FIRM	**£17.50**
WACC	**7.50%**
MWACC	**15%**

It is a strange paradox that corporate finance can be surprisingly irrelevant in the corporate world. One reason for this is the concept of risk-weighted returns stretching off into the future, which isn't the most natural concept to grasp. Earnings in a discrete period are intellectually manageable, far easier to measure and, therefore, reward.

There are other reasons. The academic side of corporate finance has an unsatisfactory tendency to have no 'right answer'. What's more, in practice, discounted cash flow (DCF) evaluations inevitably involve the heavy use of assumptions; layered on top of each other, the result can feel unrealistic and superficial. It is very easy to arrive at the result you want to with just small tweaks to assumptions and the hurdle rate (how many DCF evaluations ultimately disagree with the CEO's opinion?). 'Value creation' is trotted out by all and sundry as the corporate holy grail, but it is incredibly difficult to measure and reward it.

Returns required from the capital the firm invests back into its business are often not linked to the value the market assigns to the firm's strategic position, and therefore expects the firm to achieve[1]. Additionally, there's a natural conflict in most DCF analysis; sponsors always present a winning case to decision-makers who mark up the discount rate in retaliation. The process often loses credibility under pressure from these influences.

The result has been the slow uptake of DCF in the corporate environment[2], and even today it is poorly understood and unimaginatively applied in many firms. Corporate finance should be at the heart of how firms think, report and incentivise. It is a genuine failure to date that the business world has not been able to bridge the gap between theory and application in a manner that makes corporate finance the driver and ethos of the firm's financial strategy.

IKON IMAGES

The aim of this article, the first in a series of three, is to suggest a way forward, provoke a debate about the role of corporate finance in the commercial environment and open up the black box to genuine commercial applications.

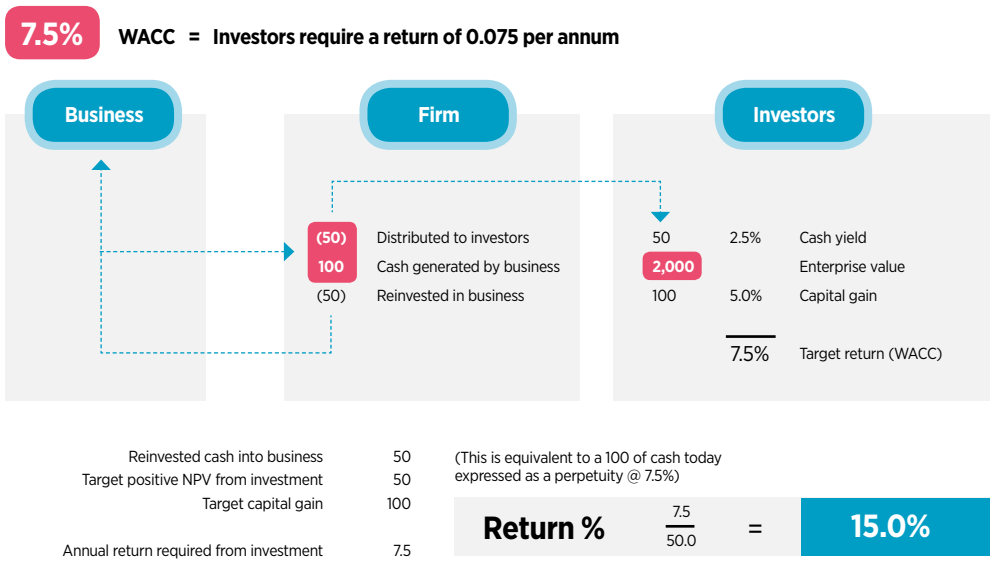
Let's start with something a little controversial...

The hurdle rate = WACC?

Wrong! I strongly believe that the weighted average cost of capital (WACC) is not the right hurdle rate to use for investment decision-making *within* the firm for two reasons:

FIGURE 2 MWACC IN VERY SIMPLE FORM CAN BE DERIVED FROM THE EASILY AVAILABLE INPUTS (HIGHLIGHTED IN MAGENTA)

- The firm is committed to return 50 to investors (dividends and interest), has a current enterprise value (EV) of 2,000 and measures WACC at 7.5%. The business generates 100 of cash before any reinvestment.
- So, after returning cash of 50 to investors, the firm has 50 to invest in the business.
- It must create a capital gain (increase in EV) of 5% from this investment in order to return 7.5% to investors overall.
- The capitalisation rate on 7.5% (the risk-adjusted rate of return for this business's assets) of 13.3 and dividing the target capital gain of 100 by this gives an annual cash-flow target of 7.5. This is the annual return the firm must demand from its investment in the business in order to justify its EV today.
- The target return as a percentage then is 7.5 over the capital reinvested of 50, which gives a result of 15%. This is the firm's MWACC™.



SEVERN TRENT WATER AND THE WACC

Severn Trent Water (STW) is a FTSE 100 water and sewerage company serving around 4.3 million customers in the English Midlands and parts of Wales. The company is a regulated monopoly provider and is subject to five-yearly price reviews that determine the revenues we can collect from customers. The current price control period (called AMP6/PR14) runs from 2015-2020.

At each price review, Ofwat, the industry regulator, calculates our allowed revenues using a building block approach. This involves calculating the revenues an efficient company needs to operate its assets and finance its operations.

One key component is the return on capital, which is calculated by applying a weighted average cost of capital (WACC) against the regulatory asset base (known as the RCV in the water sector).

Allowed revenues = Totex (opex and capex) + Return of capital (depreciation) + Tax + Return to capital

The WACC is a core element influencing the financial strategy in the water industry. Ofwat uses a traditional capital asset pricing model to set the WACC. Ofwat sets a vanilla real WACC of 3.6% per annum for AMP6 based upon an assumed gearing for a notional water company of 62.5%. This is significantly lower than the 5.1% per annum allowed return in the previous price control period (notional gearing of 57.5%).

The WACC plays an important role in the development of our financing and business strategy. At the time of the last price review, detailed financial modelling was undertaken that considered various scenarios, sensitised for changes in inflation (a key element of the company's revenue and costs) and interest rates. The focus of the modelling was to assess the impact of the business plan upon key metrics, including earnings, dividend cover, credit metrics and debt covenants.

The modelling allowed STW to set an appropriate financial strategy commensurate with a sustainable investment grade rating and to communicate its dividend policy for a five-year period to 2020.

Once the business plan has been set, the focus of the company is to outperform the WACC and other assumptions. This allows STW to generate returns above the WACC. In AMP6, there are three sources of outperformance (or underperformance):

1. **Total expenditure (TOTEX) outperformance** – this involves achieving efficiencies through a focus on the cost structures, for example, through savings in the supply chain and identifying more innovative ways to deliver services.
2. **Financing outperformance** – this is achieved through financing the business efficiently and sustainably. Since 2015, STW has taken advantage of low interest rates and secured new funding from the European Investment Bank, the bank market, US private placement and the sterling bond market.
3. **Output delivery incentive outperformance** – this is a new incentive regime introduced by Ofwat where the company is rewarded or penalised if it achieves or fails to achieve certain key operational targets. For example, reducing the number of incidents of internal sewer flooding.

Outperformance enables STW to generate additional returns, which it can invest in its networks to improve its service to customers and which it can return to shareholders.

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1. Part of the firm's value derives from its strategic position; and
2. The capital available to any firm is, in reality, limited.

Strategic position creates or destroys value. Finding a niche, a product, a market, a place in the supply chain that gives you an advantage and creating the tools to defend that for as long as possible creates a nebulous thing called value. It's sometimes a tenuous process, but markets look at the cash flows they expect a firm to be able to generate over a long period of time from this strategic position. They then discount them at WACC to arrive at a fair value for the firm. This is almost never the value of the firm's existing cash flows valued as a perpetuity.[3] The difference, the gap, is the value of the firm's strategy. So a firm's value is both today's cash flow as a perpetuity *and* future value from opportunities the firm hasn't even invested in yet, but which will derive from the strategic position the firm occupies.

Capital availability is not a controversial subject at all. For most firms, the supply of capital is a mixture of retained cash flow after shareholder returns and any change in levels of debt. As treasurers, we are well aware that debt capacity is finite with covenants, management time and credit ratings, all limiting its availability. Very few firms go out and raise equity unless they are start-ups or in financial difficulty. Capital for reinvestment in the business is limited to all intents and purposes.

Now combine the value assigned by the market to the firm's strategic position with the limitation placed on capital for reinvestment and there is a logical outcome: the firm has to reinvest its limited sources of capital at a certain rate of return to realise this value. This rate of return is the true hurdle rate for the firm, and I am going to call it MWACC[4]. A return at less than MWACC will destroy the value of the firm (ie its current worth), even though it is perfectly possible that it creates value in absolute terms (ie when compared to WACC). Returns greater than MWACC increase the firm's worth and create value for shareholders. MWACC is always higher than WACC where investors view the firm as having some strategic value. Figure 1 shows this graphically (see page 35).

MWACC

But is the MWACC secret out of the bag already? Is it just that the academic and corporate worlds haven't identified it or come up with a way of measuring it until now?

WACC is very rarely the internal hurdle rate set by the firm because:

1. Statistical and complex adjustments such as coefficients to emerging markets, oil, small firm bias and so on adjust basic equity and WACC on the grounds that this gets closer to a theoretically true position of the cost of capital.[5]
2. A lot of corporates simply add a few % to adjust for 'risk' (such as knowing that project sponsors will have inflated the cash flows).
3. Corporates also know they cannot take on every net present value (NPV) positive project because capital and management time is limited, so they adjust the hurdle rate to cherry-pick the best projects.

Embracing the concept of MWACC into the corporate environment builds trust with the business because everyone can see where the hurdle rate is coming from. Intuitively, the drivers for the gap between MWACC and WACC, such as strategic position and available capital, make perfect sense. This meshes instinctively with the views of many people tasked with the actual job of making investment decisions. Furthermore, this situation reflects the reality of business; if you are in a better position than your rivals, the market will expect the firm to make better returns on its invested capital compared with those rivals. The better a firm's strategic position, the greater value placed on it by the market, the higher the MWACC will be. There is no such thing as a free lunch.

Having identified here the correct hurdle rate to use within the firm, in future articles we look at MWACC's implications for the firm's payout decision, and how it sets and appraises management's performance in creating value. Both areas, with the addition of MWACC-style thinking, can substantially increase the firm's value.

1 Who has sat through teachings on DCF where there has been anything more than little or no connection to a firm's strategy?
2 'Evolution of Financial Indicators', p532, *Corporate Finance Theory and Practice* (3rd edition), Vernimmen et al.
3 Even growing the perpetuity at inflation rarely gets close to the value placed on many firms. However, many industries may not even be considered perpetuities.
4 The term MWACC is trademarked to the author, Ben Walters.
5 In the author's humble opinion, no one has the right answer, and the myriad and confusing array of adjustments bandied about is a distraction from the real job of analysing the investment itself.

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