Article 1; introducing MWACC™

Introduction

The aim of this series of articles is to promote the integration of corporate finance[1] theory into the decision making "DNA" of the corporate firm. It is a strange paradox that corporate finance can be surprisingly irrelevant in the corporate world. A few reasons why I say this are;

- The concept of risk weighted returns stretching off into the future isn't the most natural concept to grasp. Earnings in a discrete period are intellectually manageable, far easier to measure and therefore reward.
- The academic side of corporate finance has an unsatisfactory tendency to have no "right answer".
- In practice 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 never linked to the value the market assigns to the firm's strategic position and therefore expects the firm to achieve[2].
- 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[3] 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.

These articles cover ideas which the author believes can unlock the true value of corporate finance to the firm. The aim is to plant an idea or two in the reader's mind, 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…

[1] References to corporate finance (by which the author refers to the theories behind DCF, WACC and pay-out policy) and DCF (discounted cash flow) will abound this series of articles and need no further introduction!

[2] Who has sat through teachings on DCF where there has been anything more than little or no connection to a firm's strategy?

[3] "Evolution of Financial Indicators", p532, Corporate Finance Theory and Practice, 3rd edition, Vernimmen et al

The hurdle rate = WACC? Wrong!

WACC **is not** the right hurdle rate to use for investment decision making ***within*** the firm for two reasons;

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

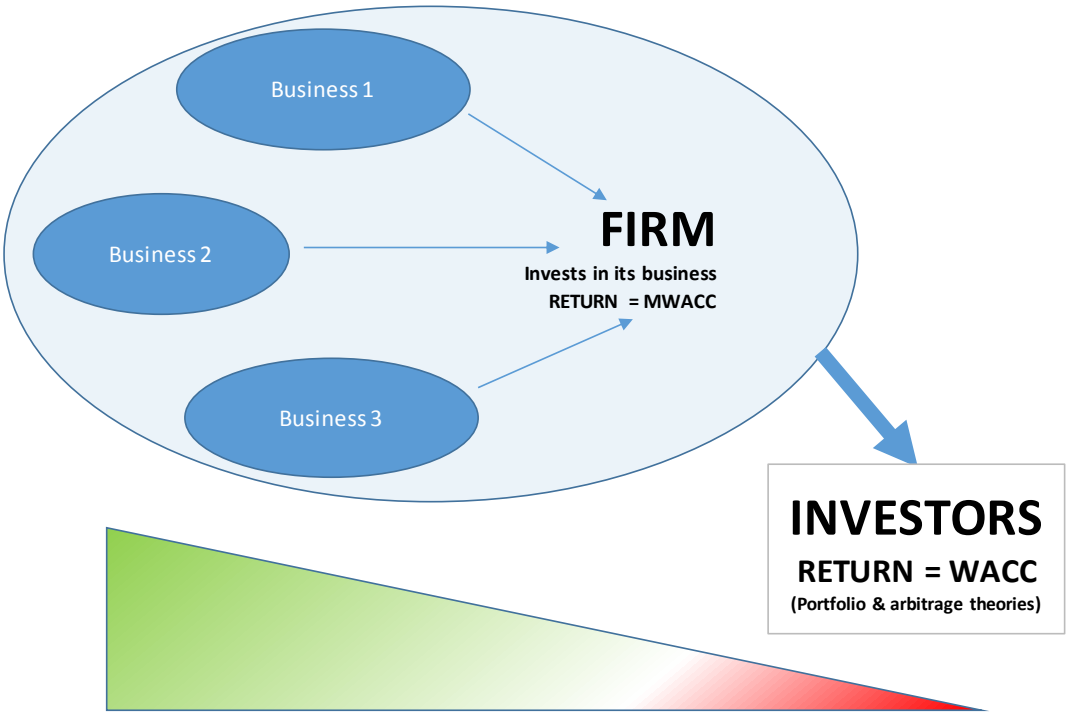
Strategic position creates or destroys value. Finding a niche, a product, a market, a place in the supply chain that gives you an advantage and creating the tools to defend that for as long as possible creates a nebulous thing called value. It's a sometimes tenuous process but markets look at the cash 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[4]. The difference, the gap, is the value of the firm's strategy. So a firm's value is both todays 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 controversial subject at all. For most firm's their 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™. A return at less than MWACC™ will destroy the value of the firm (i.e. its current worth) even though it is perfectly possible that it creates value in absolute terms (i.e. 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.

Figure 1 shows external investors passing the firm the message through their valuation that the business opportunity has the ability to produce an IRR of just under 15% on the 100 of capital available to it. By discounting this return at the WACC of 7.5% (remember no arbitrage in the capital markets) 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 over-estimated 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.

[4] 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.



	Return > MWACC **Business** creates value **Firm** creates value	**MWACC > Return > WACC** **Business** creates value **Firm** losses value	**Return < WACC** **Business** destroys value **Firm** losses value
MKT VALUE OF FIRM	£17.50		
WACC	7.50%		
MWACC	15%		

	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

Fig 1; how MWACC is the correct hurdle rate for the firm's internal investment decision.

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 is of the level of return the business should be able to produce from its strategic position.

MWACC™ is the internal hurdle rate the firm should set for its business units.
WACC is external rate of return demanded by shareholders and lenders.

Figure 2 shows how MWACC™ in very simple form, can be derived from the easily available inputs highlighted in yellow.

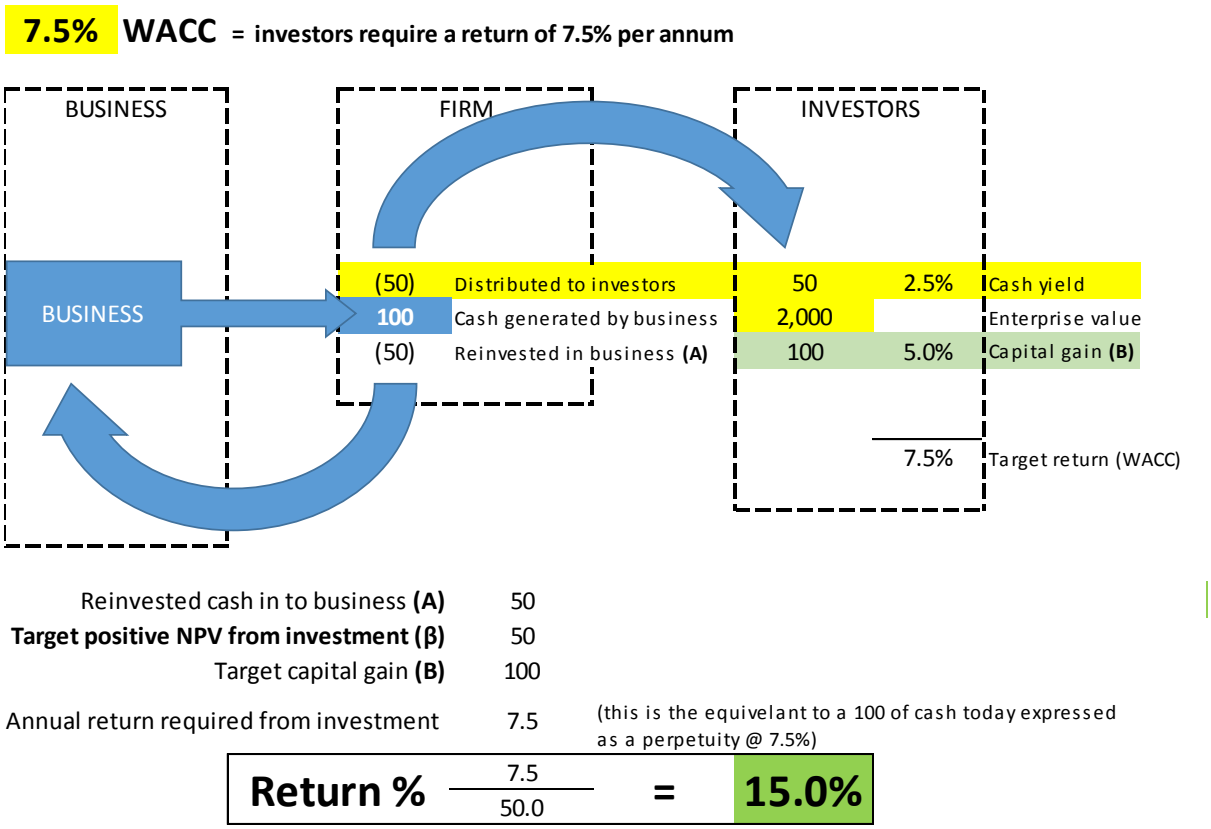


Fig 2. This is the firm's MWACC™ is 15% at this level of shareholder return. Cash retained and invested into the business must generae this level of return to justisfy the firm's current Enterprise Value (EV) of 2,000

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, etc., adjust basic Kequity 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 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 to 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!

We have identified in this article the correct hurdle rate to use within the firm. In the following articles we address MWACC™'s implications for the firm's pay-out decision and how it sets and appraises managements performance in creating value. Both areas, with the addition of MWACC™ style thinking can substantially increase the firm's value.

[5] In the authors 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.