

Cost of Capital Optimization

An optimal capital structure is the result of a calibration process and describes a mix of debt, hybrid instruments and equity with a view to maximize a firm's value by minimizing average Cost of Capital (CoC).

CoC is defined as the cost of the funds used to finance a business, in its crudest form a combination of debt and equity. Whereby company balance sheets may consist of various layers of debt, also include various types of hybrid instruments: These are funding tools sharing characteristics of both, debt and equity. Knowing a firm's CoC is important in running a business, as value will only be generated, once this hurdle rate is exceeded.

CoC is derived from a firm's funding mix, the relative proportion of – usually (just) – debt and equity. In calculating CoC, Cost of Equity (CoE) and Cost of Debt (CoD) must be weighted according to the respective market values of debt and equity - and not according to their relative book values (as per a firm's balance sheet). This seemingly minor aspect is important and often done wrong, though: In deriving CoC, the relative proportions of equity and debt have to be viewed from an investor's perspective – alas: the amount of funds an investor actually contributes or holds as an investment – and not from a mere accounting point of view. – As far as equity is concerned, for instance, investors typically pay more, perhaps even many times a share's book value. The rationale – in simple terms – is that book value is a backward-looking concept and based on numerous sets of regulations (i.e. accounting standards). Investors, such as shareholders, on the other hand, value an asset using different sets of methodologies, foremost by looking at the potential of future expected cash flows.

In narrowing down the corridor for an optimal funding mix with a view to minimize CoC, one may start with the assumption a firm's balance sheet was

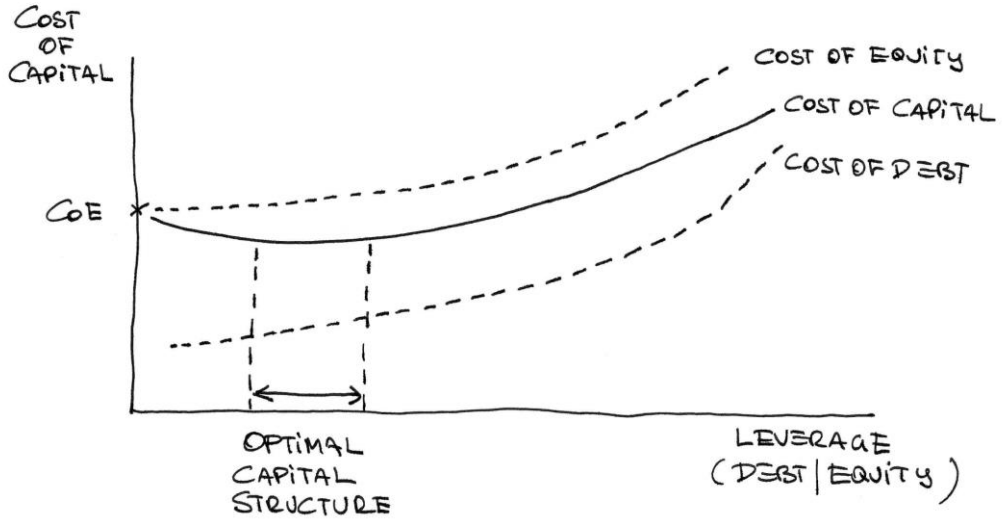
entirely funded with equity only: In this case, the CoC would simply equal that firm's CoE.

Adding debt to its capital structure would – at least up to a certain point – reduce the firm's average CoC, as CoD is always lower than CoE. This has to do with the fact that – regardless of a firm's funding mix - the position of a shareholder is always considerably more risky than that of a creditor or bondholder. This is best illustrated with a firm's bankruptcy and its subsequent liquidation: In such case, – next to employees, social insurance or the tax authorities - bondholders always rank first. Whilst shareholders will be allocated with what's left, which actually could be nothing at all.

Adding debt to a firm's overall funding structure will always increase both, CoE as well as CoD. – To start with, CoD will rise along a firm levering up its balance sheet, reflecting an ever enhancing risk of default: Hence, creditors and bond holders will want to be compensated with higher interest rates (i.e. higher default spreads). This will also be reflected by credit rating agencies awarding ever weaker (lower) credit ratings as a firm's leverage is increasing.

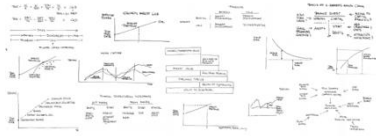
CoE will increase as well, though, as with a firm having to pay ever more interest – typically a fixed cost component causing additional cash outflows – a firm's net income and cash flows to equity will become ever more volatile (i.e. risky). And with the principle factor which measures volatility (i.e. the beta factor) increasing, so will CoE.

In many cases, a firm's optimal funding mix of debt / equity can be found in a corridor in the range of between 35/65 to 45/55 per cent as per the respective market values of debt and equity. - Trickier is the subsequent step, though: The actual implementation of an optimal funding mix. This requires a profound understanding of instruments available and a dialogue with the relevant investor clusters to assess their respective expectations and risk-return appetite.



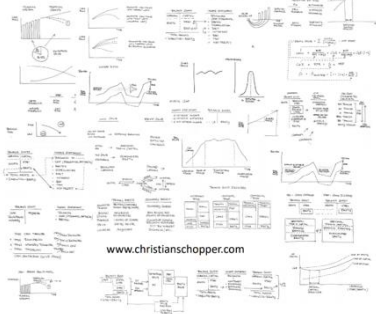
COPYRIGHT www.christianschopper.

For more concepts click on:



Corporate Finance Concepts

Christian Schopper



COPYRIGHT www.christianschopper.com - DO NOT COPY OR PASTE