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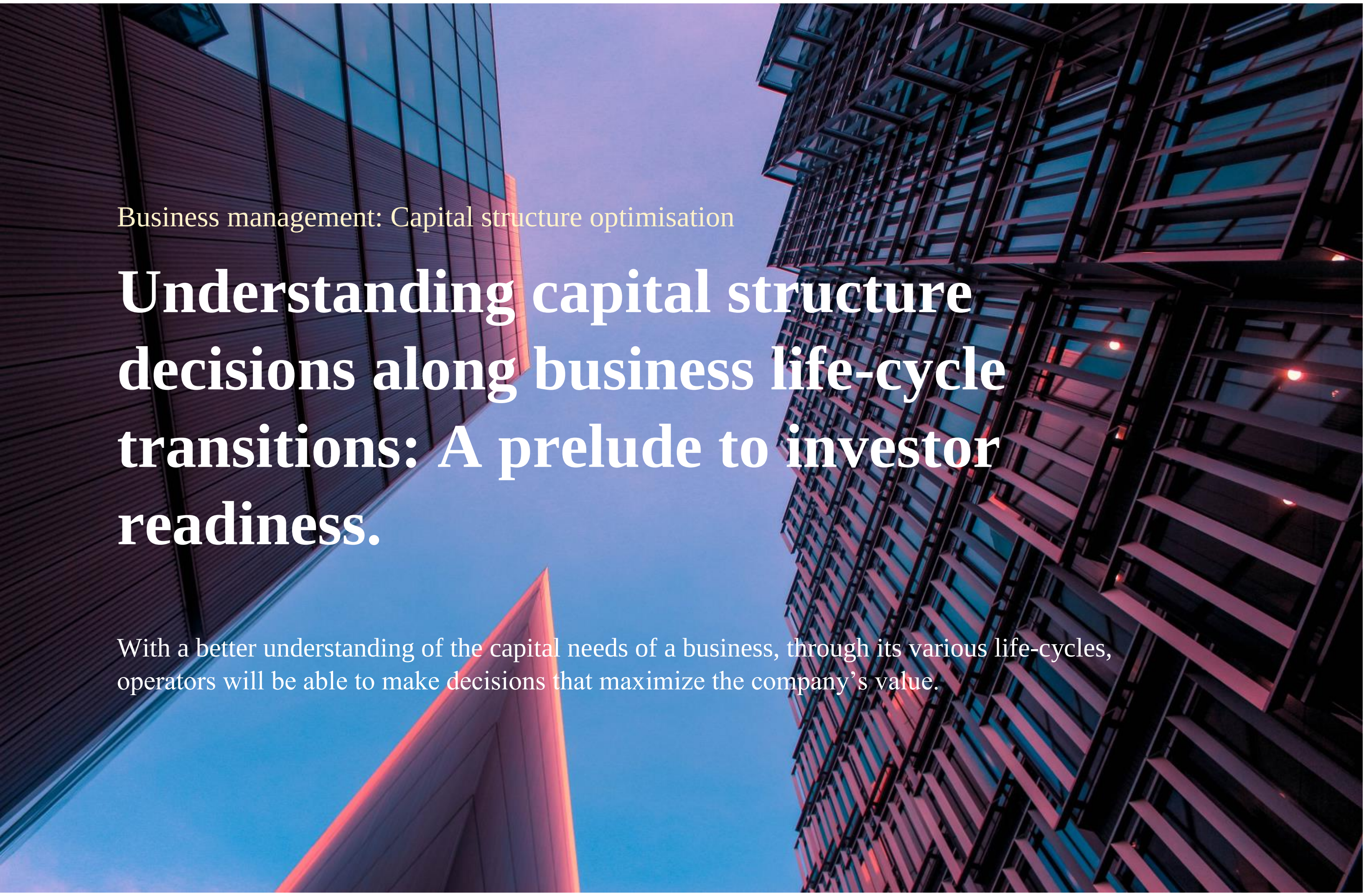

Business management: Capital structure optimisation

Understanding capital structure decisions along business life-cycle transitions: A prelude to investor readiness.

With a better understanding of the capital needs of a business, through its various life-cycles, operators will be able to make decisions that maximize the company's value.

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Many entrepreneurs and business operators rarely think about their long-term capital structure and hardly do they ever plan for it. The main objective of the capital structure decisions is to maximise a company's value by minimising its overall cost of capital. Every entrepreneur should aim to grow their business to what Chuck Blakeman calls stage 6 (significance-where the founders only involved in giving vision and guidance and managing through others) or 7 (succession-where the owners are only involved in casting the vision while everything is being managed by others) level of maturity.

The issue of capital structure and its impact on value maximization in business is an area that has been covered extensively. In this note, we look at how capital structure evolves as a business transitions from one business life-cycle to another. According to Franco Modigliani and Merton Miller's (famously known as the Modigliani-Miller, or simply MM) propositions of capital structure, a company's value is not affected by its choice of capital structure under certain assumptions. These restrictive assumptions – which relate to markets and expectations, are: *i) investors' expectations are homogenous*, meaning that all investors have the same expectations on cash flows from the same investments*; ii) that capital markets are perfect*, implying that the friction of transaction costs, taxes or bankruptcy costs does not exist; *iii) that it's possible for investors to borrow and lend at the risk free rate* which implies that they can create their own leverage structure (combination of debt and equity at the portfolio level*); iv) that there are no agency costs* implying an alignment between the interests of business operators and shareholders *and v) that the financing decisions and operating decisions are mutually exclusive*, which means that operating income is not affected by changes in the capital structure.

However, we know that in the real world, these assumptions do not hold. When relaxed, it's possible for businesses to maximise value based on their capital structure decisions.

There are two main theories that have been used to explain the thinking behind the capital structure decisions:

1) Pecking order theory: The theory, developed by Myers and Majluf (1984), doesn't prescribe an optimal capital structure. Business operators take into consideration the signalling effects their decisions. The operators therefore follow a systematic process in making capital structure decisions. They select financing methods based on a certain hierarchy that gives the highest preference to methods that have least potential information content (i.e internally generated funds) and lowest preference to the methods with the highest information content (i.e public equity listings). The complete hierarchy entails internal funds, followed by debt and finally equity. This is aimed at minimising the impact of capital raising through the various sources. According to Fama and French (2002), the inverse relationship between leverage and profitability supports the view that debt is only issued when the retained earnings are insufficient to fund investments. The theory suggests a high-low-high pattern of debt ratio across the life-cycle stages.

2) Trade-off theory: This theory does prescribe an optimal capital structure - the point at which the value of the company is maximised and the overall cost of capital is minimised. Beyond this point, the probability of any additional increases in value from value-enhancing effects to be offset by value-reducing effects is high. Consequently, firms, select the use of leverage by evaluating costs - with taxation and bankruptcy costs being the main ones. Some studies have shown that firms in pre-mature (launch and growth) stages can't afford debt due to the relatively high bankruptcy costs and unstable earnings. This also makes them unable to use the tax benefit of increased interest payments. At the later stages of the firm, use of debt may be lower due to lower earnings (and a decline in tax shield benefit from use of debt). Hence the theory suggests a low-high-low debt use in the capital structure across the life cycle stages of a business.

A deeper look into the business life-cycle stages

The determination of the number of business life-cycle stages has been a contentious issue for a long time. There has been no conclusive consensus on the empirical definition of life-cycle stages.

The life cycle of a business has been evaluated based on different metrics, such as age, size, growth, cash flow patterns among many others. Some (Bulan and Yan 2010) have distinguished between two life-cycle stages (growth and maturity); with the findings that pecking order theory (premised on the information asymmetry between investors and operators) better describes the financing behaviour of mature rather than growing firms. A research by Paula Castro, Maria T. Tascon, Borja Amor-Tapia and University of Leon, on the role of life-cycle stages on firms' capital structure, combined insights from strategy management and corporate finance and added the element of business life-cycle and its impact on a company's leverage. Their findings demonstrate empirical evidence on the introduction of business life-cycle as an explanatory factor in a firm's capital structure.

Other findings include:

- Agreement with the pecking order theory of less debt with higher profitability for firms in the growth and maturity stages
- Higher leverage during introduction, shakeout and decline stages, in line with the pecking order theory to fund investments.

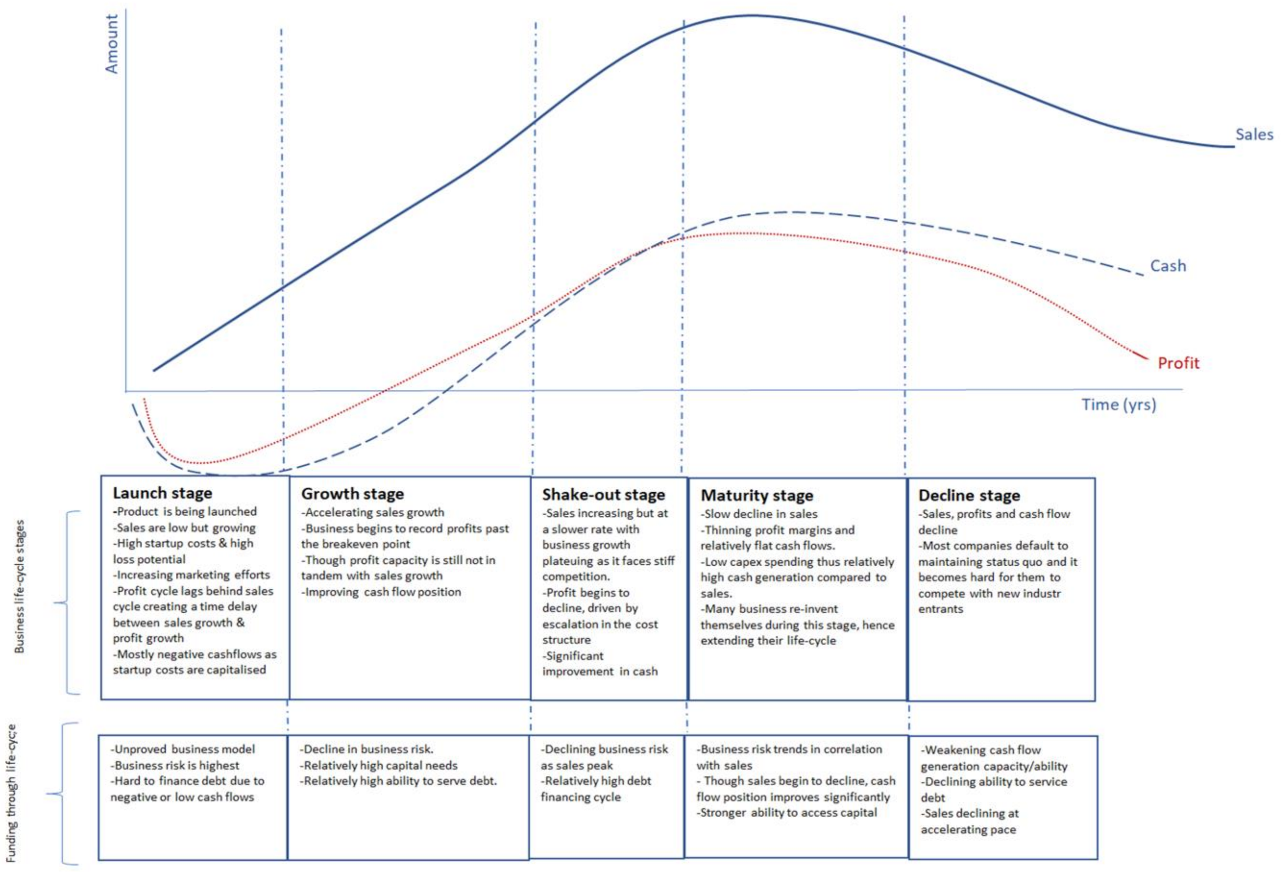
However, in our analysis on capital structure decisions through the various business life-cycles, we select the use of cash flow patterns in characterising the various phases as we believe it best captures the transitions from one phase to another. Following the work of Dickinson (2011), life-cycle stages are built starting from accounting information on operating, investing and financing cash flows. A common characterisation (e.g. by Corporate Finance Institute) is the Five phases of business life-cycle, further discussed below:

The 5 phases of business life-cycle

They are:

1) Launch stage
2) Growth stage
3) Shakeout stage
4) Maturity stage
5) Decline stage

Capital providers look at the level of business risk, among other financial metrics such as sales, profits and cash flows. It's been found that business risk is inversely related to sales and debt funding cycle. As sales and cash flows grow, debt becomes a significant component of a business' capital structure. The chart below elaborates more on theses phases:



Source: CFI & AAC analysis

It is paramount for operators to lead their firms with a long-term focus, especially with regards to their sources of capital. This is a significant source of value-creation.

About Algum Africa Capital

We are a pan-African Management Consulting and Business Advisory firm. We partner with SMEs and Large Enterprises to help them overcome various business challenges. We position them to achieve success through tailor-made solutions to overcome strategic, financial, organizational, managerial and operational challenges.

Our suite of offerings includes but not limited to strategy, investor readiness, capital raising, mergers and acquisitions, financial modeling, business analytics, business restructuring, business plans, due diligence and operational optimization. We also offer research and analytics services, private equity deal pipeline development and training and capacity building.

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