CREDASSIST

WELCOME TO A BRIEF TUTORIAL ON :

The Sustainable Growth Rate

1. Importance of Ratio

It is imperative that when we examine the gearing of the business, we compare the sustainable growth rate of the business with the projected growth rate to satisfy ourselves that the company can grow at its current rate without taking on excessive external financing.

The main objective of any business is to SURVIVE. In order to survive, the business must make sure that it grows, but at a sustainable rate. If a business grows too fast, it often is not able to fund this growth and thus overtrades. This is one of the biggest causes of business failure and the Sustainable Growth Rate can assist us in determining whether the business is growing sustainably or not.

In order to grow the turnover and make more profits, a business needs assets. These assets represent "MONEY OUT" of the business and need to be funded. There are two ways of funding the growth of assets:

- Using the profits retained in the business
- Borrowing from the bank or other non- trade creditors

If the business relies too heavily on borrowed funds, this can lead to unsustainable growth when they start having difficulty in servicing and repaying the debt.

2. What is the Sustainable Growth Rate?

- The Sustainable Growth Rate (SGR) of a business is the rate at which the business can grow while keeping the Debt / Equity Ratio constant.

- In other words, assuming we calculate the SGR of a business to be 16%. This means that next year, the business is able to grow by 16% and maintain their Debt / Equity Ratio. If the business grows by a lot more than 16% in the next year, they can only fund the additional growth by taking on more external debt and thus causing their Debt / Equity Ratio to deteriorate.

- Therefore it is clear that the Sustainable Growth Rate is a FORWARD LOOKING Ratio. It determines what WILL happen to the Debt / Equity Ratio in future. Thus, it is a waste of time to calculate this ratio for previous years, as this has no relevance whatsoever.

- In order to use SGR correctly, we need to know the Projected Growth Rate (PGR) of the business. This is simply the rate at which the owners project their growth to be in the forthcoming 12 months. This can best be determined by asking the owners what they are projecting their growth in turnover to be for the next period. If the business is projecting to grow at a much higher rate than SGR, we can expect the Debt / Equity to increase next year, which is an additional credit risk.

- We can therefore say the following:

If SGR > PGR	Debt / Equity Ratio should improve next year
If SGR = PGR	Debt / Equity Ratio should remain the same next year
If SGR < PGR	Debt / Equity Ratio should deteriorate next year

- The purpose of calculating the sustainable growth rate is to give us an indication of the future gearing of the business. We may be comfortable with the existing levels of gearing, but if the business is growing at a rate in excess of its sustainable growth rate, it would indicate a need for a higher proportion of borrowing in relation to internal funding, thus causing the gearing to increase.

- If, for example, the level of gearing is relatively low, the sustainable growth rate is not as critical. However, where an analysis shows high levels of gearing and there is a rising trend, this ratio will assist us in determining whether the trend will continue upwards to unhealthy levels or not.

3. How is the Sustainable Growth Rate calculated?

The formula used to determine the sustainable growth rate is as follows :

$$\textit{Sustainable Growth Rate} = \frac{ROE \times b}{1 - (ROE \times b)} X100$$

Where : ***ROE*** = ***(NPAT / Ordinary Shareholders Equity) x 100***
b = ***Retention rate of profits***
= ***Retained Earnings for Year / NPAT***

We can see from this formula the following:

- SGR depends on two primary variables – profit and retention of profit.
- The more profit a business makes combined with retaining that profit in the business, the higher the Sustainable Growth Rate will be.
- When using the profit figure, we use the Return on Equity (ROE) ratio as this is the "geared" profit. This includes the profit the business makes by borrowing outside funds.
- If a business is not growing at a sustainable rate, they must either improve profitability (ROE) or retain more of the profits (b) or a combination of both.
- Because SGR is a Growth Rate, we need to use the **x / (1-x)** formula to factor in the growth.

- We multiply by 100 in order to bring the ratio to a PERCENTAGE. This makes it easier to compare with the Projected Growth Rate of the business.

4. Example

Assume the following for X Stores for the 2XX1 period :

2XX1 :	Net Profit After Tax	=	150,2
	Dividends Paid	=	134,5
	Retained Earnings for Year	=	15,7
	Ordinary Shareholders Equity	=	611,5
	Return on Equity	=	(150,2 / 611,5) x 100
		=	**24,6% or 0,26**
	Retained earnings	=	15,7
	Retention rate (*b*)	=	15,7 / 150,2
		=	**0,1045**

Sustainable Growth Rate	=	[0,246 x 0,1045 / 1 – (0,246 x 0,1045)] x 100
	=	[0,0257 /(1 – 0,0257)] x 100
	=	(0,0257 / 0,9743) x 100
	=	0,0264 x 100
	=	**2,64%**

Please note again that because the Sustainable Growth Rate assists us in understanding the future of the business, there is no real need to calculate this ratios for previous years. It is a forward looking ratio and tells us what to expect. Looking at the ratio for the previous year is therefore redundant.

We see that for 2XX1, the Sustainable Growth Rate (SGR) is 2,64%. This means that the business can grow in 2XX2 by 2,64% and maintain its gearing. If it grows by more than 2,64%, it can only do so with higher borrowings in relation to internal financing. If it grows by less than 2,64%, the gearing should improve. If the owners project a growth in turnover for next year well in excess of 2,64%, we can expect the Debt/Equity Ratio to increase thus increasing the risk of the business.

Please also note that the SGR is a guideline only and we would only be concerned if it was considerably lower than PGR.