

BETA CALCULATIONS AND THEIR USE IN VALUATIONS

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In times of commodity price volatility, how does one give a fair value to a company based on a future commodity price? How does one give a fair assessment of a company when the market indicators are going down at the same time as the share price of that company is going up, or vice versa? How do we, at Venmyn, adjust the valuation curve, taking into account a future commodity price, assuming everything else remains the same?

One of the best statistical tools to use is the Beta of the companies that make up a particular index. Taking the example of platinum in South Africa, the J153 (the platinum index on the JSE) would be the index to look at together with the companies that make up the J153. To put things into perspective, a Beta of 1 indicates that the security's price tends to move with the market. A Beta greater than 1 indicates that the security's price tends to be more volatile than the market, and a Beta of less than 1 means it tends to be less volatile than the market. Therefore, a platinum company that has a Beta closest to 1 is taken as the proxy of the platinum market. A mathematical model is then constructed that links the share price of that company to the platinum price. The purpose of the model is to predict the percentage change in the value of the proxy company when the platinum price changes from x to y. This has been done at Venmyn with an error of $\pm 3\%$ over a two-year period. This percentage change is then taken as the adjustment factor of the valuation curve, as it is assumed that the J153 (represented by the proxy company) represents the state of the South African platinum market at that point in time. Therefore, Venmyn can quickly estimate, with a degree of certainty and confidence, the change in the value of a platinum company or project for any change in the platinum price.

For further discussions, please contact Munyar