

Assumptions of Cash Flow Models for LG Years 2018 - 2028

Nyles Mendez

The Model Goal:

To obtain a price per share similar to LG’s current share price of 70,000 krw. Using the discounted cash flow model, the price per share will be valuated through LG’s P&L, balance sheet, and a cash flow sheet which will be made for the model. Inputs are mostly from LG’s finance reports as well as Yahoo Finance and Owler.

The Assumptions:

Starting in the ‘drivers’ page, we are assuming the numbers for a ten-year treasury yield, the Korean market risk premium, LG’s beta number, share price, a Korean government bond yield, and Korean expected inflation of the Korean won had not changed since late May. This can be adjusted at any point for different values at a later date. The main assumption in this model is how future revenues past the historical data is predicted. Due to the fact that the rest of the model is predicted in conjunction to revenues, one can assume that Price per share can be largely tied to this. COGS, gross profit, EBIT, and net income are likely to follow the same behavior that revenues does. Another assumption that was made was that investments in capital expenditures would stay constant, with the addition of the short useful life of capex forecasted, this would highly affect the share price. In the ‘PP&E’ tab with a 5-year useful capex lifespan in mind, to constantly invest 23% of capex in new PP&E is high and can be adjusted to fit a longer lifespan and less investment as that is unrealistic investment which affects unlevered free cash flow. Another assumption that affects the model’s unlevered free cash flow is the forecasted other liabilities, which is assumed to be most of the current liabilities for the forecasted years less trade payables and borrowings.

The Conclusion:

It should be noted that there are two different versions of the model that are used due to not having a product release schedule to predict divisional revenues off of. With that in mind, the fill model is closer to LG’s short term revenue goal of 64 trillion krw by 2021, but the regression model uses the historical data to give a more balanced prediction of future revenues. The regression model is a more balanced look at revenue increase, but it should be noted that without a product release schedule the model itself is liable to inaccuracy. This model is not a perfect prediction as it overshoots LG’s price per share considerably, but the model serves as an input map to see what outputs will affect the price per share in the future based on prediction.

Any questions can be sent to [nylesmendez@gmail.com](mailto:nylesmendez@gmail.com?subject=Re:%20LG%20DCF%20Model)