SPECIAL TOPICS

Valuation in Times of Corona: The Awkward DCF Approach

The Discounted Cash Flow Approach (DCF) is still deemed as the most relevant and "accurate" approach in valuing assets, and corporates in particular. However, there are good reasons why finance professionals undertake reality cross-checks of DCF outcomes by comparing those with multiple-based valuation techniques, such as those relying on (stock markets-based) Comps as well as (M&A transactions-based) Prepaids: Because all too frequently DCF-based NPVs have a tendency to overshoot. This is not least due the extensive period under consideration (in fact: till eternity), but also due to the principle sensitivity drivers embedded in the DCF model: Next to the (CoE and CoD-driven) WACC-based discount factor, foremost and most relevant the assumed perpetual growth rate. Even if that rate is anticipated to be just marginally higher than the long-term expected inflation rate, the NPV of a DCF is nevertheless almost certainly exceeding valuation outcomes based on Comps and Prepaids.

Therefore, DCF´s relevance is actually lesser in determining the "correct" value of an asset, but rather in taking advantage of the inherent complexity of its underlying financial model. And thereby promoting DCF´s core role in the due diligence process: Hence, assisting the investor by putting him in a position to formulate the "right" questions. The ultimate value-added of the DCF is therefore in providing a better understanding of the business mechanics of the very investment target as well as the drivers of the environment and the industry in which it is operating in.

Needless to say, even major consequences of the already visible devastating economic impact of the ongoing corona-related crisis are yet hard to assess. If merely the standard mechanics of a DCF are applied, thereby ignoring a corporate´s share price dynamics as a (market-based) value indication driven by factors such as – among others - sovereign-related aid and assistance programs, national bank support schemes or (more or less) (ir-)rational investor behaviour, then from a mathematical point of view the long term impact of the corona-related crisis should actually be quite digestible: Depending on the period of observation, though.

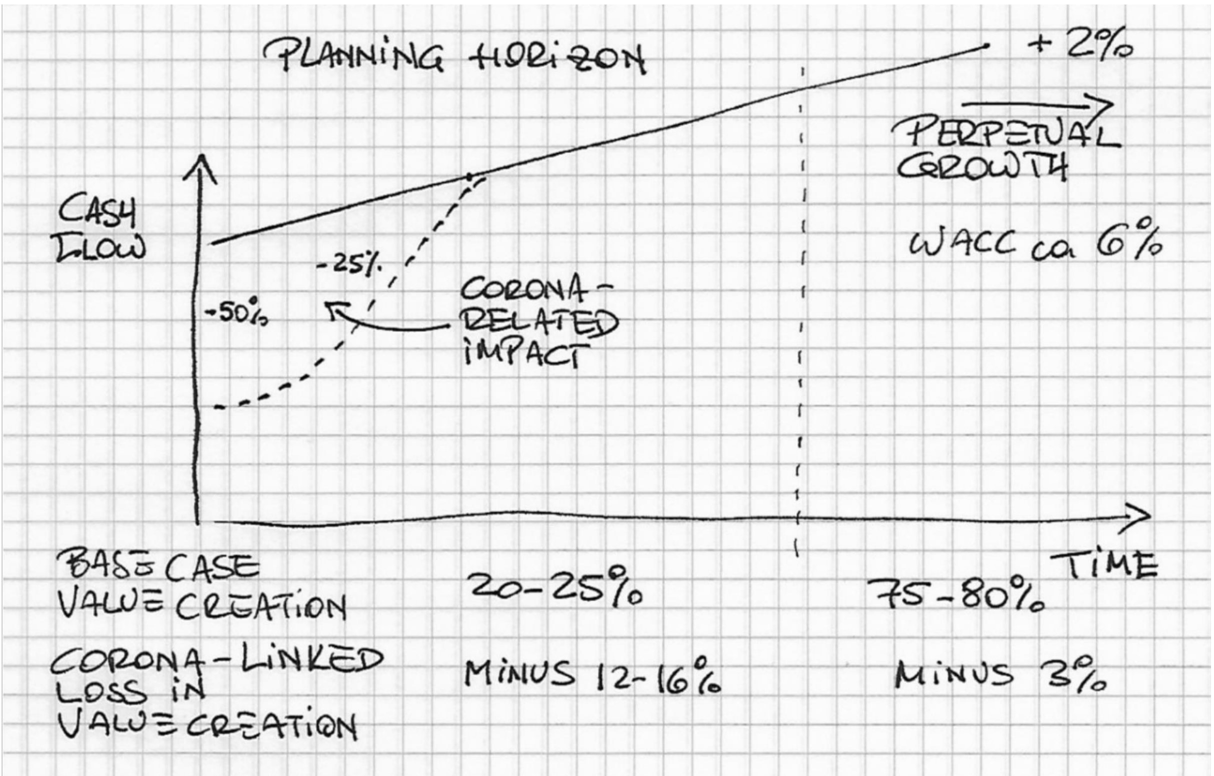
For illustration purposes, assume an entirely mature, stable corporate operating in an equally stable industry environment with a long term growth rate of annual cash flows of 2% (a common inflation rate target). And then, assume a discount factor (alas: WACC) of 6% (a seemingly reasonable assumption considering the ongoing low-inflation environment and – in historical context – relatively leveraged balance sheets). And finally, assume that most corporates focus on a planning horizon of between 5-7 years, and no longer than that.

As per assumptions made above, only approximately 20-25% of the corporate´s DCF-based value would actually accumulate within the planning horizon, hence until the year 5 to 7. The remainder 75-80% of the value creation would consequently be contributed by cash flows generated only after the planning horizon. This is due to the fact that the DCF accumulates all future expected cash flows: Hence, it reaches out far into eternity. This fact is all too frequently overlooked.

Assuming that the ongoing corona-related crisis would negatively impact cash flows by 50% this and by 25% next year (a reasonably pessimistic scenario), with all other parameters kept equal, then the long-term negative impact on the NPV as per DCF would merely result in a minus of just under 3%.

Having said this, within the planning horizon of between 5-7 years, though, DCF-driven value creation would be more severely impacted, somewhere in the region of minus 12-16%. But, suffice to say, the DCF-underlying financial model would technically envisage a catch-up, which would eventually (in eternity) limit the value creation loss to mentioned 3%.

Hence, the ongoing turmoil may also be a good time to critically re-assess the perception of DCF-linked value creation. DCF very much assumes a "happily-we-live-forever" scenario, whereby temporary external shocks, such as the corona-related impact, do hardly matter. (Whereby this valuation philosophy may even prove reality-right, looking back at current events from a point in time somewhere far, far out in the future). – And that´s just fine: As long as we appreciate what a DCF is really good for, and good at.


PLANNING HORIZON
+ 2%
PERPETUAL GROWTH
CASH FLOW
-25%
-50%
CORONA-RELATED IMPACT
WACC ca 6%
TIME
BASE CASE VALUE CREATION
20-25%
75-80%
CORONA-LINKED LOSS IN VALUE CREATION
MINUS 12-16%
MINUS 3%