## Twitter Thread by **Dinesh Sairam**





1/ Howard Marks once said that before buying an asset, above anything, he wants to know "the amount of optimism that's in the price."

All investors can do this with a handy tool: The Reverse DCF.

I'll also leave a download link to my compact DCF Model at the end of this thread.

2/ We all know a regular DCF. But's what a "Reverse DCF"?

If we consider that a DCF is a Linear Equation, we could say the 'X' (The unknown variable) is the Intrinsic Value.

In a Reverse DCF, we start with the Market Price and try to find some other variable, say Sales Growth.

3/ Let's start by taking an example: VST Industries, a Cigarette-maker based in India.

I valued them on my blog a while ago. I'll be retaining the old assumptions, but using the latest financials.

So please note that the Valuation isn't accurate now.

## https://t.co/dfK3idroWA

4/ This is a "Regular DCF" of VST Industries. The Assumptions I've made indicate an Overvaluation.

The Intrinsic Value is Rs. 3,012, but the Market Price is Rs. 3,492.

Let's not dwell on whether this is correct, since we discussed earlier that this isn't an accurate Valuation.

5/ If we want to do a "Reverse DCF" instead, we need to pick a different variable to 'find'. Say, I will pick the Sales Growth numbers.

I will now remove the Sales Growth numbers from the Model and assume that Sales Growth is the same across the years for ease of calculation.

6/ The next step is to figure out "At what level of Sales Growth does the Intrinsic Value match the Market Price?"

We can do a manual trial and error. But an easier option is to use the MS Excel Solver Add-in. Here's a short tutorial from Microsoft:

## https://t.co/LLr3lzIRoK

7/ Put simply, I am telling Solver: "Change Sales Growth (C10) until Intrinsic Value (K16) matches up with Market Price (3491.79).

When I click 'Solve', Solver will auto-populate the Sales Growth number.

8/ According to Solver, at 10.90% Sales Growth across the board, the Intrinsic Value equals the Market Price (You can see they match in the bottom right corner).

Click 'Ok' to retain Solver's solution.

You can also revert back to the old numbers if you wish.

9/ That's "Reverse DCF" done and dusted.

Now the difficult question to answer is "Can VST Industries grow Sales at 10.90% for 20 years?"

Personally, that's close to the Sustainable Growth Rate and offers no Margin of Safety. This confirms the result of my "Regular DCF" too.

10/ Of course, you can repeat the exercise for other variables like Operating Margins, Taxes, Reinvestments or Cost of Capital too.

As promised, here's my 'Compact DCF' Model: https://t.co/XqdfGx54pS

It's free. So, I'd appreciate it if you liked and re-tweeted this thread.