Have I made an error, or is it true? The anchor rate of growth in corporate earnings.

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If you are a weight watcher like me, you would be guessing your weight every time you step on the weighing scale, in anticipation. I do, and eight times out of ten my estimate is more optimistic than what the scale shows. Despite knowing that if someone asks I give my estimate instead of the reading on the scale.

I wondered if something similar might be the case with corporate earnings growth. An investor may hold an unquestioned estimate about the growth rate in corporate earnings. Let's call it the anchor growth rate. 'Anchor' is in the sense that we take it as the mainstay growth rate and then adjust for the stocks we own to arrive at expected fair valuation. So before you read further, let me ask you to put down somewhere your estimate of the anchor growth rate.

Let's now find out what the real anchor rate could possibly be

You would agree that a reliable anchor rate for earnings growth is the earnings growth rate demonstrated by a representative set of listed companies over a representative period of time. The constituents of the set may change to represent the changing universe without affecting its value. In other words one company may be replaced by another / s for equivalent market value. Measuring the earnings growth of this set over the last ten years will also carry the full share of economic ups and downs making it representative thus giving us the anchor rate.

How do we go about creating such a representative set?

Fortunately there are proven experts who create and test such sets from the universe of listed companies and sell it as a true reflection of the stock market. They monitor, maintain and ensure that it reflects the market at all times. '*Nifty 50*' is one such set created and managed by India Index Services and Products Ltd (IISL). IISL claims the 50 stocks comprising the Nifty 50 accounts for 65% of NSE listed market capitalization. It covers major sectors of the Indian economy and offers <u>listed India</u> in one portfolio. In other words this is the perfect portfolio to figure out the anchor rate of earnings growth.

The Nifty 50 portfolio of 50 stocks originated in 1995 with each constituent stock in a calibrated proportion (called weights). The market value of all these stocks multiplied by respective weights was adjusted with a 'factor' to give Nifty 50 a value of 1,000 on Nov 03 1995. Subsequently the Nifty 50 moved mostly in line with the weighted market value of its constituents. Typically two stocks are replaced twice or more in a year to reflect the Indian market universe. Studies show that active fund managers have difficulty beating this portfolio over time. So Nifty 50 can be that representative set whose earnings growth rate over the past 10 years (i.e. from April 2004 until March 2015) will give us the anchor rate that we may assume for the market in general.

Computing the anchor growth rate

I took the Nifty 50 constituents every quarter from April 2004 onwards, calculated the weighted quarterly earnings until Sept 2015. The changes in the Nifty weights and constituents over time are reflected from the nearest quarter of the date of such change. We take the annual growth rate of these quarterly earnings over time as the anchor growth rate. We have also assumed that the Nifty 50 'factor' used to ensure Nifty 50 value is constant during portfolio changes does not vary too much. Rough calculations show it doesn't*. I undertook this exercise found that Nifty 50 weighted earnings grew by just 2.38 times from FY 05 to FY 15, which is an annualized rate of just 9.1%. That's right, 9.1%. I am still rubbing my eyes. I rechecked my data, thought my methodology was wrong and tried some other incorrect ways of computing just to get a higher number! Ultimately I could find no error in either the process or the numbers. If you are keen to verify I will be glad to supply my figures. I requested for the Nifty EPS growth rate from Bloomberg to triangulate. The Nifty EPS growth rate (from Jan 2004 – Dec 2014) works out to 11% per annum. Of course every computation needs to make some assumptions. For instance if Nifty changes on 29th September would you take Nifty constituents

prior to Sept 29 for JAS quarter earnings or the new one, since earnings are released only quarterly. I do not know what assumptions are made in Bloomberg's source. In any case I am reasonably certain the anchor rate is much lower than your estimate. However, if you think I have made an error I will be glad to have it pointed out.

But don't they all say it is 15%+

I too keep getting research reports that tell me to expect base growth rate of 15%+ and I wonder why. The reports also estimate Nifty 50 EPS for FY 17 / FY 18 but how can they do that without knowing what Nifty 50 constituents will be in the future? The sensible assumption to make is that the constituents don't change. Similarly I guess the current Nifty 50 constituents are pulled back into the past to measure historical earnings growth rate. *If* so we are biasing the Nifty 50 earnings growth. That's because almost always the outgoing Nifty 50 constituents have poorer earnings in the recent past than the incoming ones. So the recent past track record of *current* Nifty 50 will be better than if Nifty 50 earnings were taken based on what Nifty 50 was then. This gives the earnings growth rate a fictitious upward nudge. You will see it better if I tell you that once upon a time Nifty 50 portfolio had MTNL, Jet Airways, Unitech and of course Satyam. Their earnings nose-dived and were replaced by better earning constituents. But they were the blue chips *at that time* and with the benefit of hindsight it looks laughable *now* to have them in a blue chip portfolio.

Note: I see even the well known brokerages put out incorrect Nifty weights on their website. They put out the ratio of the market cap of all the constituents as weights whereas Nifty 50 weights are not that. Nifty 50 are carefully determined by the experts based on the index objectives. For instance TCS is shown with a weight of about 8.5 when the actual weight for Oct 2015 is 4.44.

We are also told that nominal GDP grows on average at 15 - 17% making it quite reasonable to expect earnings growth to be in line with GDP growth at 15 - 17%. So let us see if that's indeed true in this period. I pulled out corporate earnings of about 27,244 companies as on date from Prowess and compared it with GDP. We should expect the contribution of profits to GDP to remain broadly constant over a period of time if this proposition is valid.

year	PAT to GI
ending	PAI to GI
Mar-05	5.24%
Mar-06	5.53%
Mar-07	6.77%
Mar-08	6.95%
Mar-09	5.10%
Mar-10	5.43%
Mar-11	5.09%
Mar-12	3.65%
Mar-13	3.50%
Mar-14	3.43%
Mar-15	3.15%
Source: Prowess, RBI	

Well the results are shown in the adjoining table. During this period nominal GDP grew by 14.5% annually even as corporate profits' contribution to GDP fell by more than half of its peak contribution a few years ago. Thus the proposition of earnings being in line with nominal GDP is plainly invalid, at least over this 10 year period.**

What are the ramifications on valuations?

Suppose 10 years ago you bought a Fixed Deposit, re-investment option, whose interest you thought increases by 15% annually and it turned out you made an error and it gives you only 10%. You will find that today interest earnings at 35% less than what you expected. In reality your equity investment is not a full re-investment option as you get dividends but then these dividends which have 20% removed for taxes before you get them will also need to find a compounding home, which will not be a 15%. So the effect may be worse.

About Kimi

Kimi or Krishnaraj Venkataraman is based out of Bangalore and he would welcome comments, especially if you think he has made an error, at krishnaraj.v@kimiandpartners.in.

^{*} The changes due to the 'factor' can be measured by the changes in weighted MCap of Nifty constituents to Nifty value. On average these changes were around 1%

^{**}You may argue that the nominal GDP is with the new controversial GDP series. But that's the case only with the GDP figures for FY 15.