



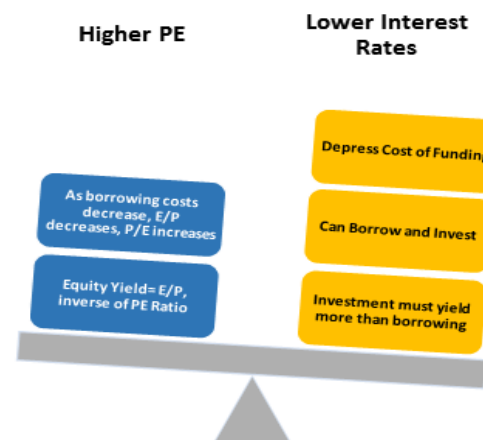
INVESTMAP

MARKETS CANNOT LIVE ON CENTRAL BANKS ALONE

A few months back we came across an interview the legendary investor, Warren Buffett, had given to CNBC, where two of the things he said piqued my interest:

“If the government absolutely said interest rates are going to be zero for 50 years, the Dow would be at 100,000.”

“If you had zero interest rates and you knew you were going to have them forever, stocks should sell at, you know, 100 times earnings or 200 times earnings.”



While this seems to support the current narrative of a desperate search for yield, driving investments into equity at higher and higher valuations (See illustration to the left), a closer reading, for us revealed the key phrases 'for 50 years', and 'forever' in the two quotes respectively.

Higher valuations, Mr. Buffett seems to be saying, are justified if there is a clear rationale for interest rates to stay low for a long time, perhaps forever.

Is the current situation 'lower for longer', and does it justify rising valuations?

Is it really 'different this time'?

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Chart 1: Italian 10-Year Bond Yields

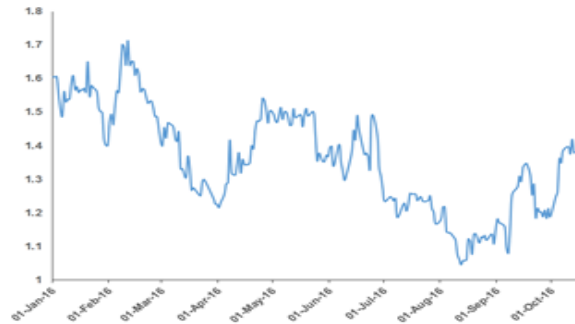
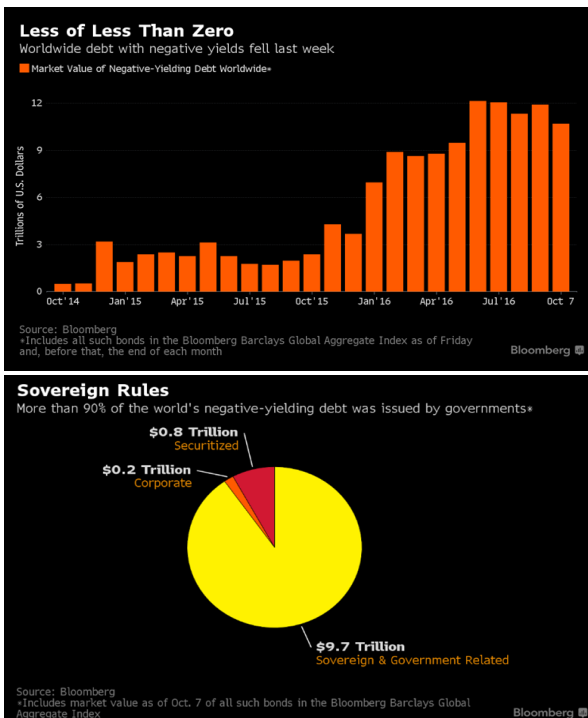


Chart 2 & 3 Negative interest, anyone?



Source: Chart-1: investing.com Charts 2 & 3: Bloomberg.com

The Wonderland of interest rates: Deeper down the rabbit hole we go

Alice fell down a rabbit hole, and reached Wonderland, where many of her logical beliefs were routinely questioned, from talking animals to the mad hatter to the march hare.

Since Mr Buffett's interview in May 2016, the global interest rate outlook has only gone more into 'Wonderland' territory,

1. Italian 10 Year Bond yields declined steeply till Sep 2016, before regaining some semblance of sanity (Chart-1). Remember, this was one of the fragile Eurozone economies, with currently an even more fragile banking system
2. Over \$10.7 Trn out of the \$47 Trn that the Bloomberg Barclays Global Aggregate Index tracks is negative-yielding (Chart-2)
3. More worrying, \$ 1 trn of negative-yielding paper is corporate debt (Chart-3).

But who would willingly buy debt that promised to pay them less at maturity than today's value?

The answer is traders who expect to sell this debt to others at higher prices (meaning

even more negative yields), as opposed to investors, who would expect to hold that debt to maturity and earn interest for their patience.

At the moment, the world of fixed income investing, then, is tilted towards traders, rather than investors

Any system that holds out an advantage to traders over investors cannot sustain; sooner or later, the rational notion of investors being compensated via interest for holding debt of companies and governments must prevail.

Making predictions on the relative long-term attractiveness (and consequently "fair" valuations) of equities versus debt in such a scenario is not likely to work well.

We may see more of the current rally continuing, but expect a correction at some point in the future. The faster and higher the climb, the steeper the fall.

In the short-term, liquidity, driven by ultra-low yields is all powerful. Over the medium to long-term, sanity must prevail. As the next section illustrates, growth, rather than artificially low rates or 'financial engineering' is the best sustainable driver of valuations.

Chart 4 GDP Growth (Select Countries)

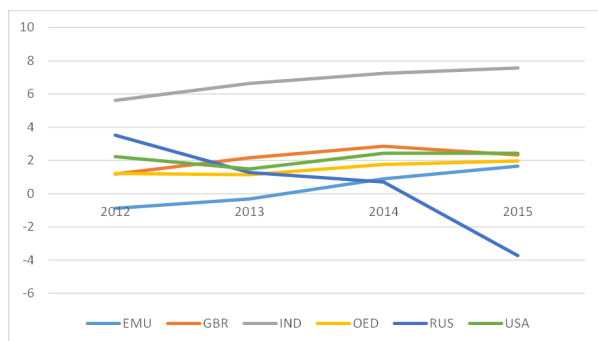


Table 5 More Debt, Lower P/E

	U	L
No of Shares (Cr)	10	5
Price	₹ 10	₹ 13
Equity Value (Cr)	₹ 100	₹ 65
Expected Return from Equity	10%	12%
Borrowing (Cr)	₹ 0	₹ 50
Rate of Interest	6%	6%
Expected Profit	₹ 14.3	₹ 14.3
Interest Cost	₹ 0.0	₹ 3.0
PBT	₹ 14.3	₹ 11.3
Tax@ 30%	₹ 4.3	₹ 3.4
PAT	₹ 10.0	₹ 7.9
P/E	10.0	8.2

Source: Chart-4: World Bank Data. Table-5: Internal Workings, for illustrative purposes only

Causes and Effects, and horses before carts

Why did central banks continue to keep rates low and flood markets with liquidity for so long?

Chart-4 shows the reason; global GDP growth has languished, with the exception of a few bright spots like India (if the new GDP numbers are indeed representative of the economy).

In this scenario, while stock valuations can get a jump-start thanks to lower interest rates, over time, unless growth revives, such valuations cannot be sustained. We ignore this fundamental truth at our own peril.

But while the intent of low rates and high liquidity was to encourage companies to borrow and produce, many companies have been accused of borrowing to buy back shares– i.e. replace debt with equity. What happens in this scenario?

Lower rates lead to more debt, and that should reduce the PE. The extent of reduction depends on how risky the market perceives the additional debt to be.

Table 5 illustrates this, through a firm that has Rs.100 Cr market value of assets, wholly funded by equity. (10 Cr shares trading at Rs.10 per share, Column “U” in Table 5) These assets are expected to produce a

profit after tax of Rs.10 Crores a year forward, leading to a forward P/E of 10 for the firm, and a cost of equity of 10%.

This firm now chooses to borrow @ 6% p.a. and buy back half of its outstanding shares at the current price (Column “L”).

The textbook approach would be to argue that as interest can be deducted before tax, it creates a tax shield of $T \times D$, where T is the tax rate and D is the amount of debt. At a 30% tax rate, the tax shield would be $30\% \times 50 \text{ Cr} = \text{Rs. } 15 \text{ Cr}$. The value of the firm's equity increases to this extent.

The PAT reduces from Rs.10 Cr to Rs.7.9 Cr, but this is divided amongst half the shares, resulting in a EPS of Rs.1.6 vs Rs.1 earlier.

So while both the share price and EPS increase as the firm takes on debt, the PE reduces. This is because more debt makes the firm risky, and shareholders demand a higher return (12% instead of 10% in our example) as a result.

There are more sophisticated models of how debt affects PE– this is only an illustration to showcase the basic theory.

If higher valuations need growth, then what can we expect going forward?

Chart-5: Earnings Growth

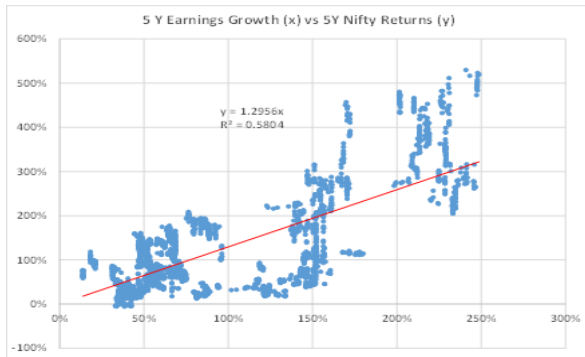


Chart 6: Quality of Returns

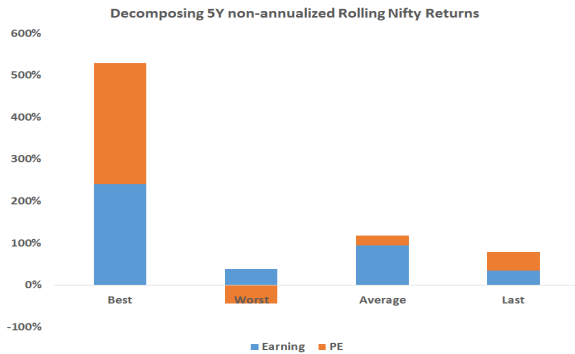


Table 7: The effect of PE-Led Returns

PE Contribution to Returns	Average forward 5 Y Return p.a.	No of Return Instances
<0%	18%	664
<20%	9%	51
<30%	8%	265
<50%	6%	406
>50%	8%	548

Source: www.nseindia.com, in-house analysis

'This time it's different' - Really?

The one tenet we must hold sacred in equity investing is that **stock prices follow earnings growth in the long term.**

Our in-house study, comparing 5-year rolling returns of the Nifty Index versus its earnings growth (Chart 5) provides a rule of thumb that 5 year returns follow 5 year earnings by a factor of 1.2959.

To put it differently, in a 5-year cycle, we should expect 77% of the returns (1/1.2959) to come from earnings growth, and the balance 23% (0.2959/1.2959) to come from an expansion of the P/E.

Of course, as chart-5 shows us, this is only a best-fit line equation; actual results can be above or below this.

But when results deviate significantly from this average, we should start looking at the underlying fundamentals again; for the 5-year return as on Oct 5, 2016 56% of the return is from the P/E expansion, and only 44% is from earnings growth (Chart-6). Table-7 further shows that best returns come when previous returns are driven by earnings.

It will be increasingly difficult to justify higher valuations on the basis of lower interest rates, the longer earnings growth stagnates.

The higher markets jump on lower rate justifications, the steeper they will fall if earnings growth hopes are postponed.

PUTTING IT TOGETHER:

1. Markets are currently riding high on liquidity caused by low rates; these are in turn used to justify high valuations even as growth remains absent.
2. This regime of low rates cannot be justified on a continued basis, as it rewards traders over investors.
3. While liquidity remains, it will be a powerful short-term driver of markets. But for any up-move to sustain, we need earnings growth to visibly improve to justify valuations.
4. While markets can trend higher for longer than we expect, this is likely to be volatile with 'risk-on' and 'risk-off' bouts based on global factors that can be very unexpected in occurrence and predictability
5. Earnings growth remains, to borrow a phrase from Sir Winston Churchill, "a riddle wrapped in a mystery inside an enigma". Experts have predicted a rebound for the last two years now, and are doing it again, this year.
6. If valuations trend much higher, pushing the EquiMax indicator truly into a "6" zone (it is now between 4 and 5), tactical retreat from equity to preserve capital and returns may be in order.