



Securities in an Insecure World Revisited

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Securities in an Insecure World

- That's the title of the last public lecture of Benjamin Graham, the guru of value investing
- It was delivered in November 1963
- Given the volatility in the markets lately, I thought it'd be good to revisit what Mr Graham said 55 years ago and see how markets have done since to find out if there is something history can teach us

Graham outlined three threats/dangers

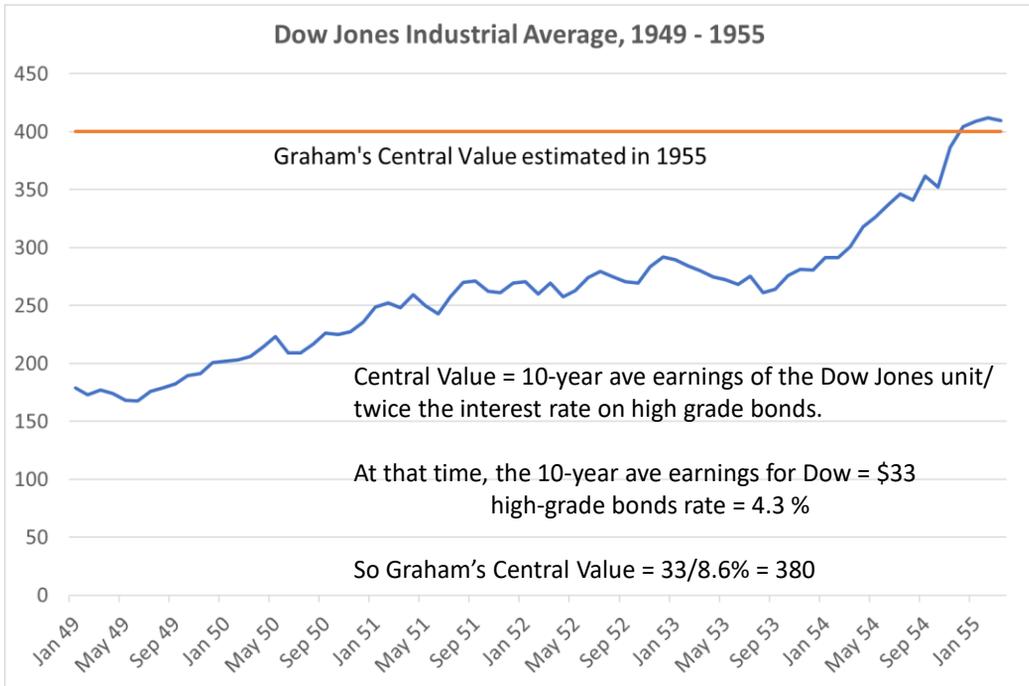
“I would say there are three kinds of threats or dangers that investors should recognize as possibly existing at the present time.

1. The threat of atomic war
2. The threat from inflation
3. Threat from severe market fluctuations up and down, and of course primarily down (*this is a very real risk, and it's a risk that equities investors are compensated for by way of higher returns*)

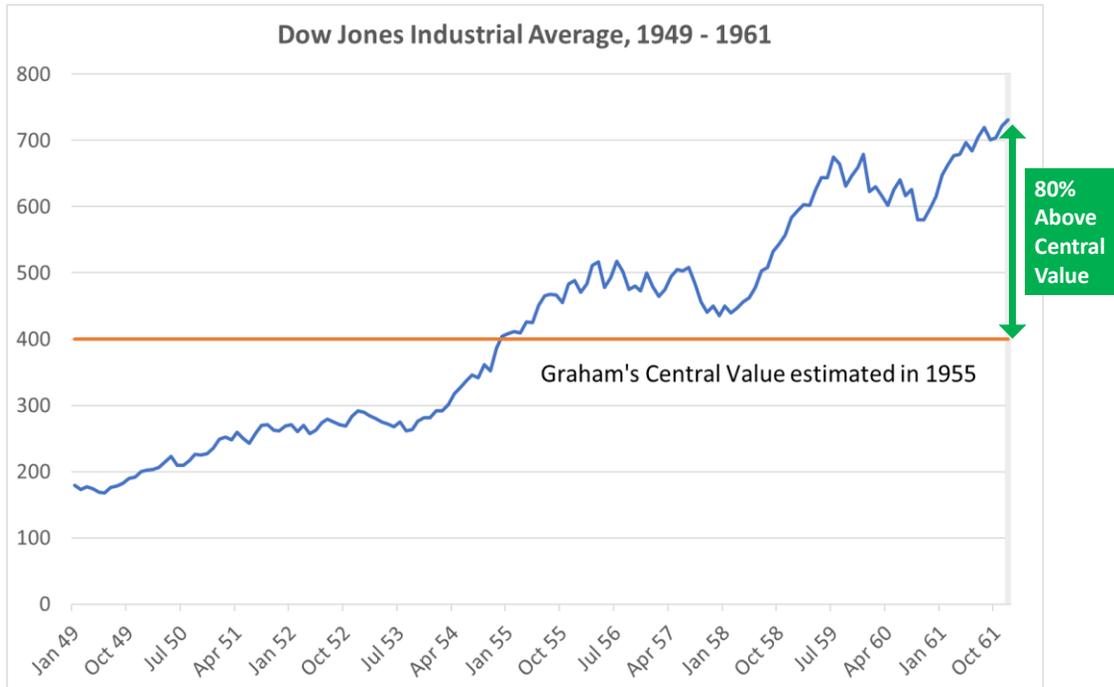
Back track eight years

In early 1955, Mr Graham testified before the Fulbright Committee

His “Central Value” for the Dow was around 400. The stock market was then about 400. The valuations of other “experts” using other methods all seemed to come to about that level.



Seven years later in end 1961...

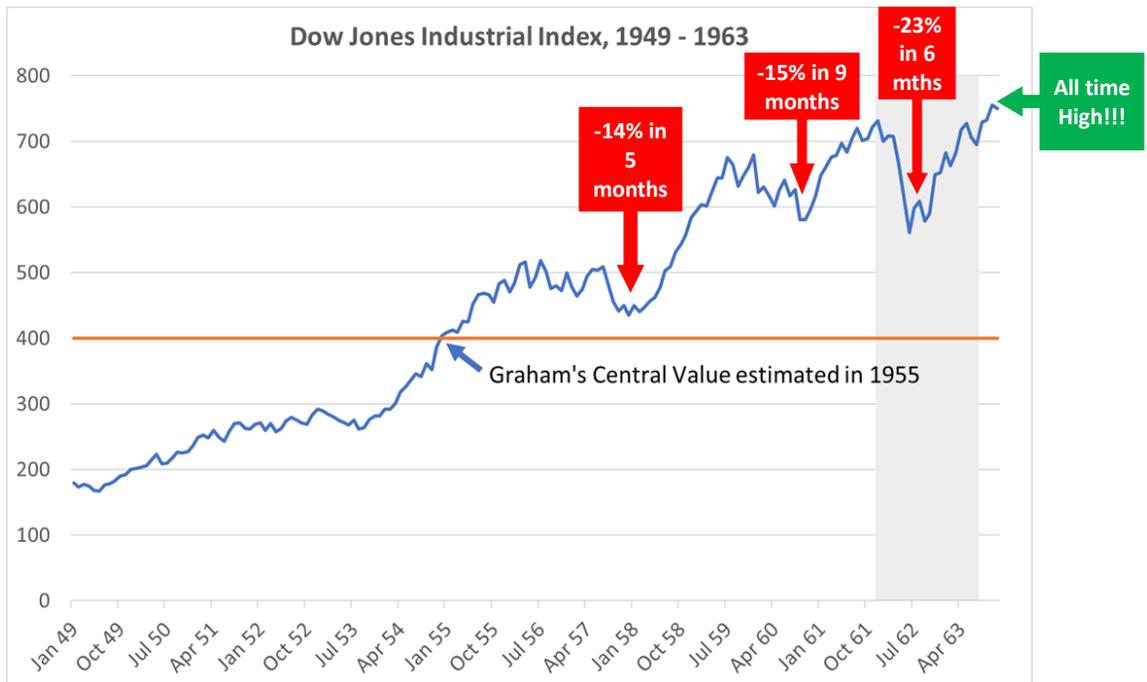


He discussed this at the American Finance Association in December 1961

- He said the market was really adrift on a sea of unsettled standards.
- “The **old standards of value**, which had been well-established for decades and perhaps generations, **no longer seem to be tenable, as much too conservative**; but the proper new standards of value could certainly not be worked out either by somebody’s inner consciousness or by mathematical calculations.
- “We shall have to wait, probably for a considerably length of time, before we can determine dependable new standards. **In the mean-time it seemed to me that the stock market will have to carry out its calculations by a process of trial and error, which could lead to large fluctuations around what in the end will turn out to be the new central value.**”

Another two years later, in end 1963

- The Dow was 100% above Graham's Central Value!!



Graham's reading of the market in his lecture in November 1963

- What happened since December 1961 bore out his interpretation that the market was entering a new regime to some degree
- “Certainly the big decline in 1962 represented a sharp fluctuation of one kind, and the impressive recovery since June 1962 may represent a fluctuation of the other kind.”
- *In other words, the markets were trying to find the fair values. After every decline, the climb subsequently established a new high. The big volatility is market's way to find its fair value*

Validity of the Central Value

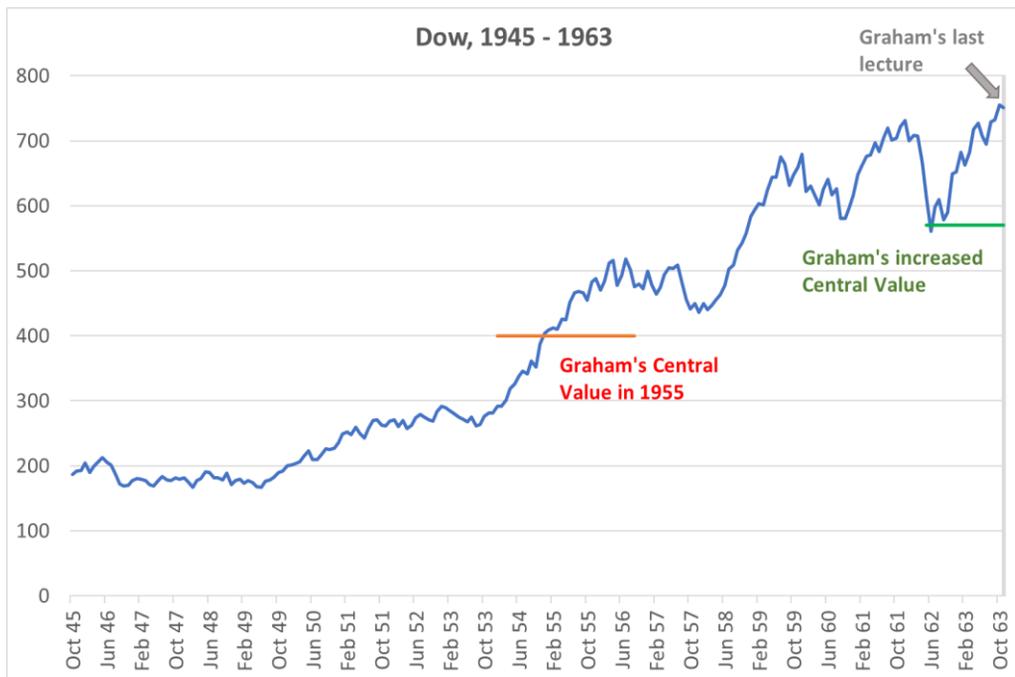
- Mr Graham said the action of the stock market since 1955 would appear to demonstrate that these methods of valuation were ultra-conservative and much too low, although they did work out extremely well through the stock-market fluctuations from 1871 to about 1954, which is an exceptionally long period of time for a test.
- “Unfortunately in this kind of work, where you are trying to determine relationships based upon past behaviour, the almost invariable experience is that by the time you have had a long enough period to give you sufficient confidence in your form of measurement, just then **new conditions supersede and the measurement is no longer dependable for the future.**”

New conditions: Government actions

- The chief reason for that, incidentally, was because the government's commitment to prevent large-scale depressions has changed the climate of corporate earnings from what it was prior to the Employment Act of 1946.
- "We think this new insurance against a very severe falling off in the earnings of corporations generally would justify a higher valuation of these earnings than in former years."
- *Sounds familiar?*

Graham's New Central Value estimate

- Add an arbitrary 50% to the old estimate
- That would mean a value of about 570 for the Dow.
- "As a matter of fact if one is sufficiently optimistic and adroit it is quite possible to develop a method of valuation which sounds plausible enough and would justify the present level of 750 for the Dow Jones Industrial Average," he said.



Juggling the numbers

- “There is a lot of juggling with figures that can be done now as always; but none of these methods in itself gives a dependable result.
- **“To a great extent the figures selected are determined by the general attitude of the person who is selecting them, and that general attitude is very often determined in turn by what the stock market has been doing. When the stock market is at 750 you take an optimistic attitude and use some favourable figures; but if it should have a severe decline most people would jump back to the older and more conservative valuation methods.”**

With the market having risen more than 200% in 15 years, what's to make of it?

- Graham presented three possibilities



Possibility 1:

The rise that has taken place since 1949 – from about 163 in the Dow Jones Average, to 750 at the present time – reflects a new and a marvellously improved character of common stocks, and therefore can be expected to continue more or less at the same rate in the future



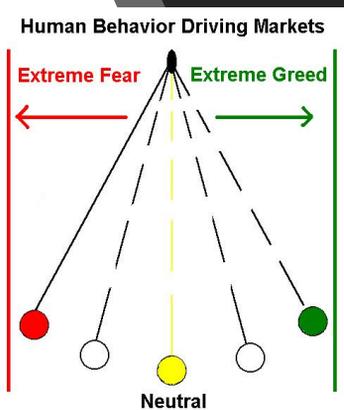
Possibility 2:

A good part of the rise was an adjustment from an undervalued level in 1949 to a proper level on some new basis of valuation. If that is so, a good part of the 1949-1963 rise could not be expected to be repeated from a level which is now a corrected one.

However, we could have a satisfactory advance on the average, say 4.5% per annum, from whatever level turns out to be about right for today. If 750 is about the right present level then the investor might possibly expect a more or less standard 4.5% advance from this level, year by year, subject to moderate downward fluctuations.



Possibility 3:



- The nature of the market has not changed from its earliest times, as shown in our records that go back at least to the South Sea Bubble in 1720, practically 300 years. It may well be that we shall still have the all-too-familiar **alternations of excessive optimism and excessive pessimism**.
- The most recent example of excessive pessimism is the very period which was a starting one for this market. During 1949-1950 the market had the lowest peacetime price/earnings ratio in its history. Stocks sold at only about 7 times their (10 year average) earnings, as compared with about 20 times at the present time.
- The implication here is that just as stocks were evidently undervalued at seven times their earnings **they might very well be overvalued at 20 times or at some higher multiple that will be established later in this market and will represent a level of excessive optimism**.

Graham's views

- The first possibility is really out of the question.
- It is not in the nature of economic reality to permit net gains at the shown rates from 1949 to 1963 – something like 14% per annum including the dividend returns – to continue indefinitely in the future.
- We just don't have a financial and economic system that can operate on that basis. If that were true nobody would have to work for a living. I remember very well the number of people in the late 1920s who got a corresponding view of the stock market, gave up their jobs and plunged into Wall Street to take advantage of its wonderful future.

Graham's views - 2

- The second possibility – which is that the market will advance pretty steadily from approximately the present level, but will not have the advantage of starting from a very low level – is admissible in theory.
- But the great problem is how can you determine the proper new basis for common-stock valuations and therefore how can you determine the more or less proper level for now?

Graham's views (3)

- **Third possibility is the most probable one**, though it is far from certain - that the stock market may have been overvalued in the last five years, just as it was undervalued fifteen years ago.
- Reason for the view that there will be wide fluctuations – of which we had a taste in 1962, in May particularly – is that I don't see any change in human nature, vis-à-vis the stock market, which is sufficient to establish more restraints in the public's behaviour than it showed over so many decades in the past. The actions of the public with respect to low-grade new issues during the 1960-1961 extravaganza in that field are an indication of its inherent lack of restraint.

Evidence that human nature remains the same, that we vacillate from extreme optimism to extreme pessimism

	Peak in 1959/60/61 (US\$)	Bottom in 1962 (US\$)	Change (%)
IBM	607	300	-51
GE	100	54	-46
Dow Chemical	101	40	-60
US Steel	109	38	-65

“Investors as well as speculators must be prepared in their thinking and in their policy for **wide price movements in either direction.**

They should not be taken in by soothing statements that a real investor doesn't have to worry about the fluctuations of the stock market.”

i.e. don't kid yourself that if you own a good company, you never ever have to sell!

Graham's basic conclusion

Graham's assessment of the market in 1963 (1)

- The market was different at end 1963 compared to when it was at the same level at end 1961
- Back in 1961, there were frenzied demands for IPOs which had “passed all bounds in speculative excesses”. Graham expected a collapse in that area, and the frayed sentiment would spread to the broader market.
- Indeed, that's what happened. Within six months, the market collapsed by 23%

Graham's assessment of the market in 1963 (2)

- The high in 1963 was not accompanied by excesses
- It is the general view in Wall Street that such characteristic abuses must develop again before the stock market can have another collapse – or before a true bear market can begin
- These abuses would include large public participation by small people who don't know what they are doing, high borrowings on margin, the renewal of the new-issues spree, and so on.
- Now this contention sounds plausible enough based on experience, and **so one might guess that the market could well continue general upward for quite a while.**

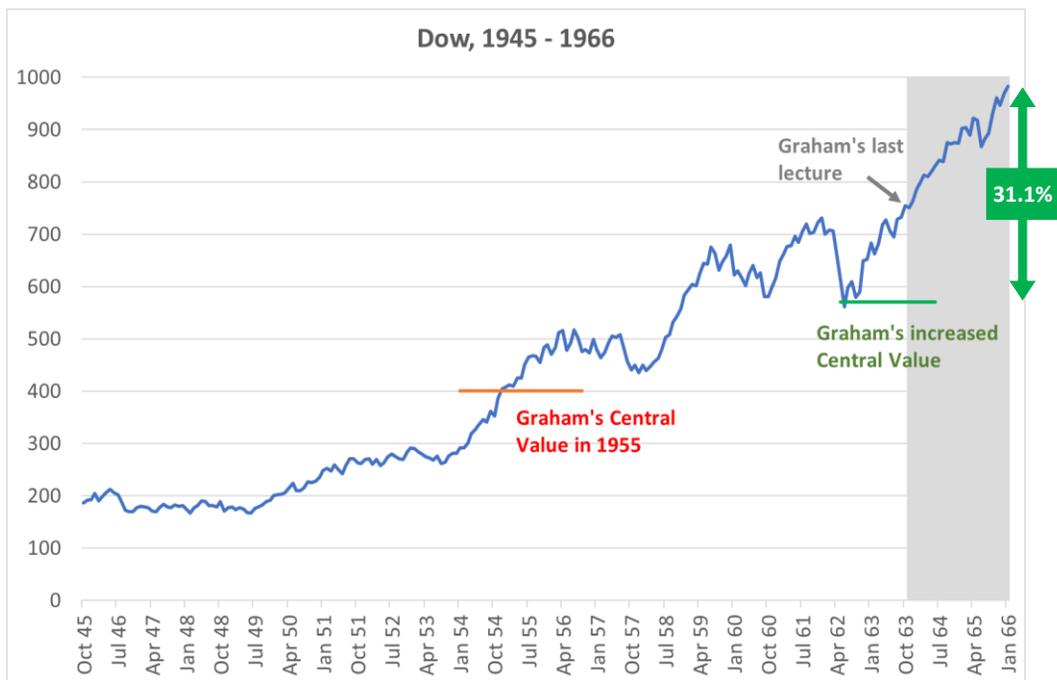
Graham's takeaway for his audience

"Investors cannot have a dependable view on the market's future action in the next year or so, but that a large and disturbing decline is likely to take place again sometime in the future, and that we should be prepared in thought and action for it, it is a necessary assumption for investors to make, and for sensible speculators too if there are any such."



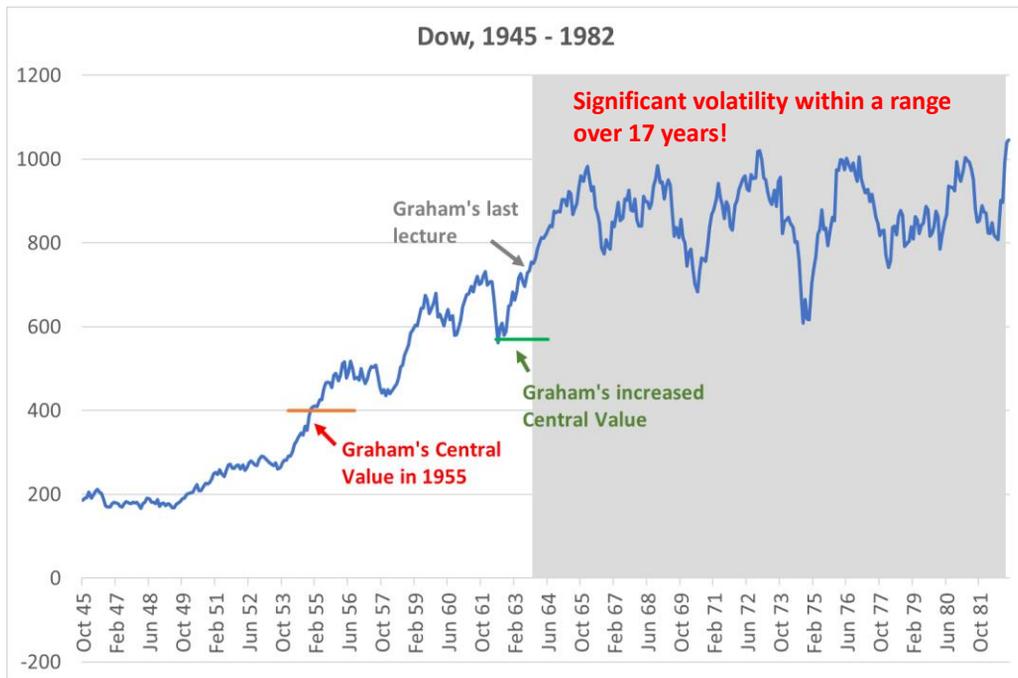
Indeed, two years after Graham's assessment that the market may be overvalued but could well continue general upward for quite a while

- The Dow went up by another 31% in the following two years to reach 1,000 points !!!!
- So the Dow established itself "at some higher multiple"



Guess what, following that two years of rise, the market finally reached “a level of excessive optimism”

- For the next 17 years, the Dow did not go significantly beyond 1,000 points. i.e. market didn't reach significant new highs in the next 17 years
- And there was **significant volatility** within that range
- In particular, from end of 1972 till Sept 1974 in that 21-month period, the market declined by 40%. After that, in the same length of time, market recovered all that was lost, or it was up 65% in 21 months!



Given the volatile nature of the markets, what are Graham's advice

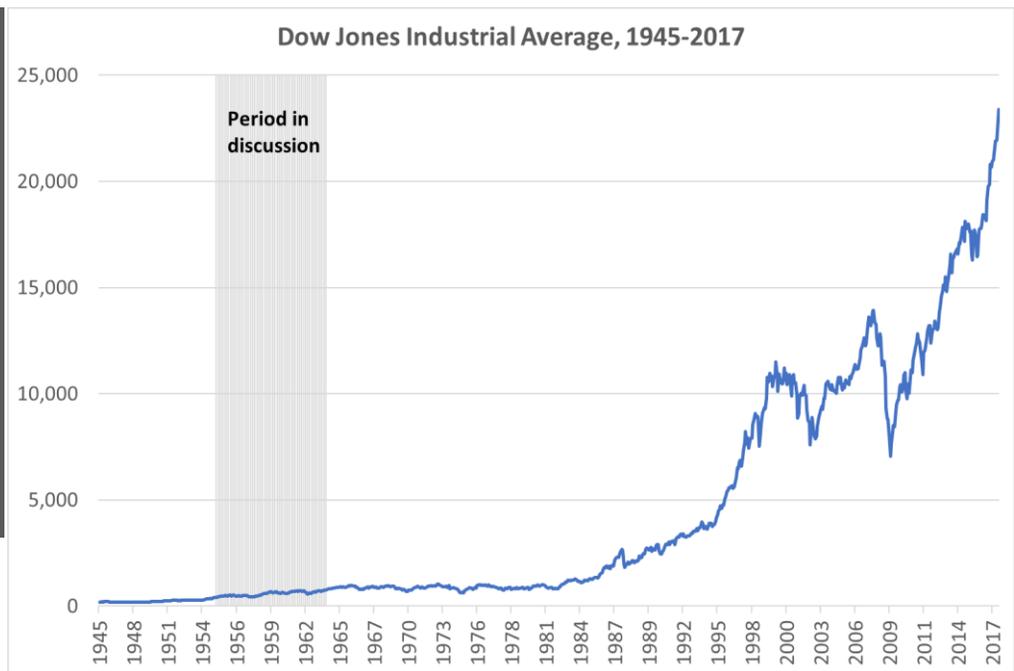
- The investor is required by the very insecurity ruling in the world of today to maintain at all times some division of his funds between bonds and stocks (cash and various types of interest-bearing deposits may be viewed as bond equivalents)
- His suggestion: Minimum stock position = 25%; and maximum = 75%
- Any variations made should be held within these 25% and 75% figures.
- **Any such variations should be clearly based on value considerations**, i.e. own more common stocks when the market seems low in relation to value and less common stocks when the market seems high in relation to value.

The main takeaway for me from Graham

- “The main need here is for the investor to select some rule which seems to be suitable for his (her) point of view, one which will keep them out of mischief, and one, I insist, which **will always maintain some interest in common stocks regardless of how high the market level goes.**
- “For if you had followed one of these older formulas which took you out of common stocks entirely at some level of the market, your disappointment would have been so great because of the ensuing advance as probably to ruin you from the standpoint of intelligent investing for the rest of your life.”

Stretch
the
time
horizon:

Graham
is right
again!



What
accounted
for the
Dow's
dramatic
climb in the
last four
decades?

Globalisation

Instead of just a market of 300 m, US companies now can sell to billions of consumers around the world

Advances in technology

Many US companies have entrenched themselves as world leaders in various fields which allows them to enjoy sustained growth and margins. Microsoft's net profit margin has remained fat over the last three decades. It averaged 26.5 per cent over the last 30 years. The latest net profit for FY2017 is 23.6 per cent.

Rise of neo-liberalism

Capital gaining power over labour

Low inflation

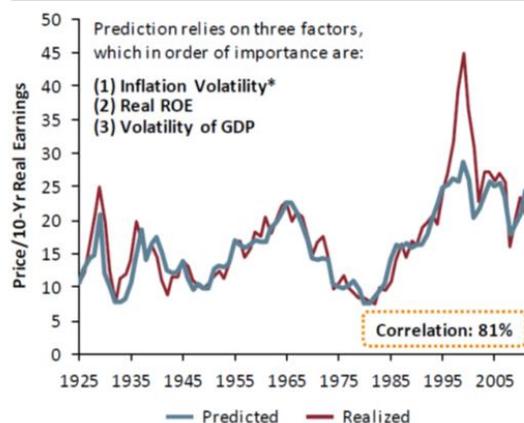
US has seen relatively benign inflation rate since mid-80s

Another guru Jeremy Grantham

- Investors, he said, like high profit margins, and stable and low inflation. They also like stable GDP growth. When these feel-good conditions are in place, valuations for stocks are high.
- He and his colleague came up with a model incorporating all these factors to explain the varying Price/Earnings (P/E) levels of S&P 500 since 1925. The ebb and flow of these variables explain previous market peaks and troughs to a very large extent. The correlation of their model with the actual movement of the S&P 500 Index is a high 81 per cent.
- Last year, they updated the model to add in two more factors. One is recession response – if there is a recession in the previous quarter, market P/E will be lower. The second factor is the US 10-year bond rate, where higher rates are negative. The new model has a 90 per cent correlation with the actual market movement!

Exhibit 2: Inker-Grantham Behavioral Model to Explain P/E

The Original Inker-Grantham P/E Model: S&P 500 P/E 10



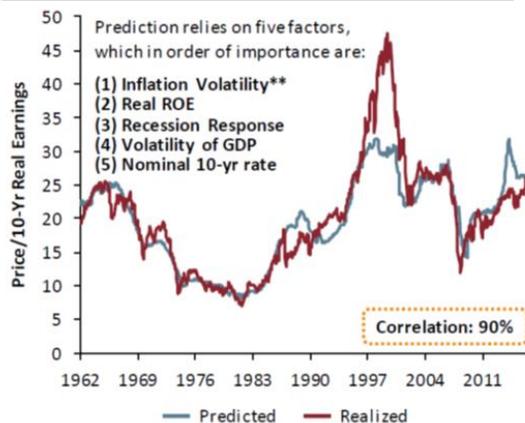
As of 12/31/10

Source: GMO

*Inflation's squared deviation from 2.5%.

Note: Log P/E 10 is regressed on the three factors listed above to come up with predicted log P/E 10. Its exponent is the "total regression" dashed line.

A Revamped Behavioral Model: S&P 500 P/E 10



As of 3/31/17

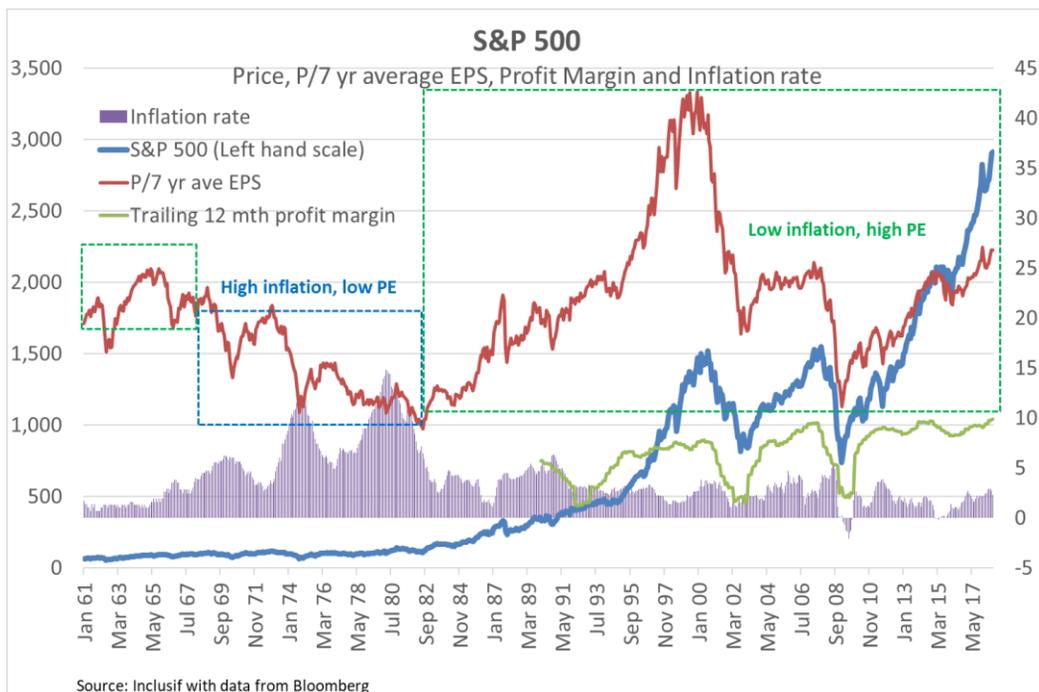
Source: GMO

**Inflation's squared deviation from 2.0%.

Note: Normalized Earnings Yield is regressed on the five factors listed above to come up with predicted earnings yield. Its reciprocal is the predicted P/E 10.

Grantham's observations

- Whether sensibly or not, investors **love high margins** and **like stable growth** even if it's modest, and **hate inflation**, said Mr Grantham. They felt this way from 1925 to 1997 and they felt exactly the same way in our new era of 1997 to 2017. So, behaviourally it is absolutely not a new era.
- The peaks of 1929 and 1965 delivered favourable margins and inflation inputs but for a very short while in both cases.
- In contrast, the period of 1997 to 2017 has delivered to investors their preferred conditions almost the entire time, with only two very quick time-outs for market breaks.

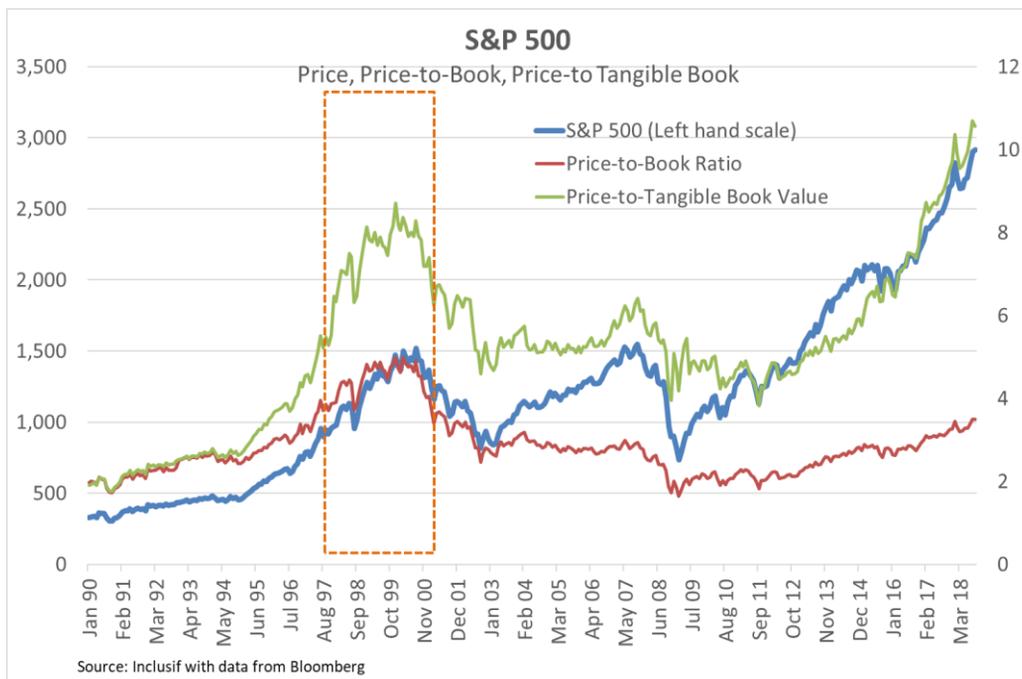


Points to note from the chart

1. Despite the S&P 500 having gone into uncharted territories, the P/7-year average EPS is today significantly below the peak registered during the last dot-com bubble in 2000. This means companies have been generating higher earnings to justify the higher stock prices.
2. As noted by Jeremy Grantham, inflation rate is negatively correlated with P/E. Periods of high inflation corresponded with periods of lower market P/Es (1966-1982). Conversely, when inflation was low, market P/E was high (1961-1965, 1983 till now).
3. Inflation rate has been pretty low in the last 20 years. This explained the more elevated market P/E.
4. Market P/E plunged when profit margin crashed – post dot-com bubble, and post Great Financial Crisis.

Grantham's market assessment at end 2017

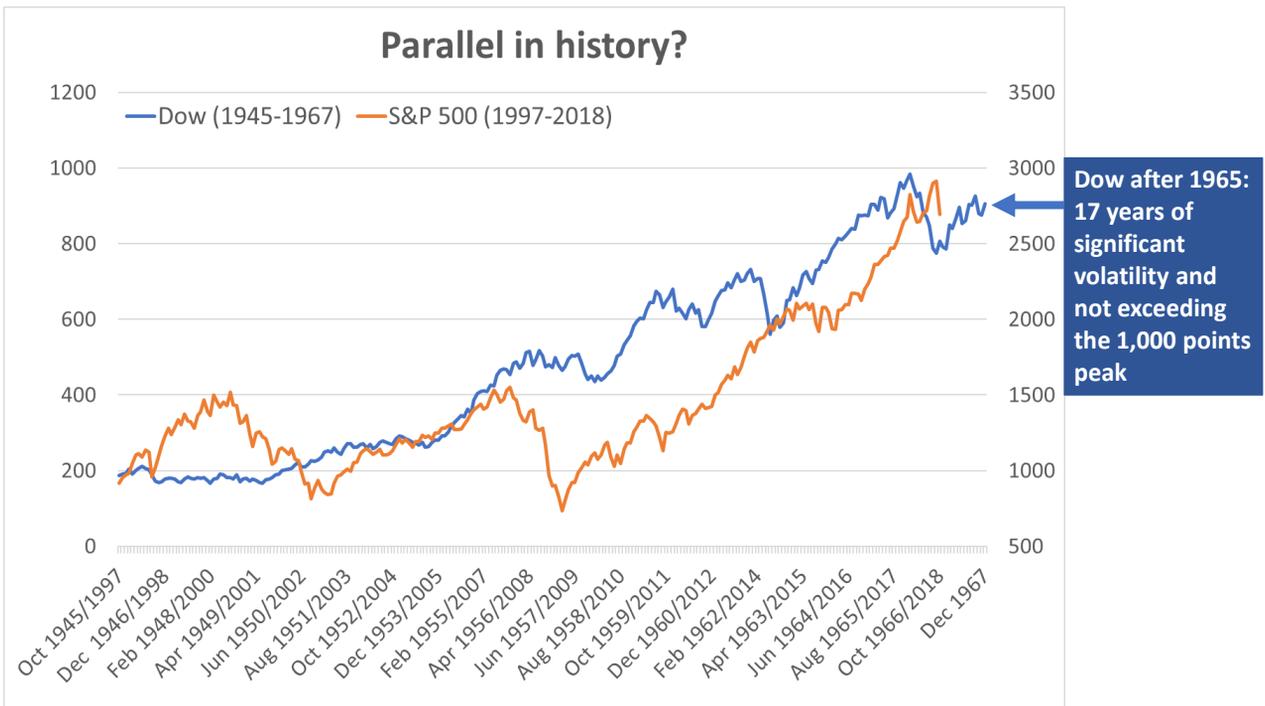
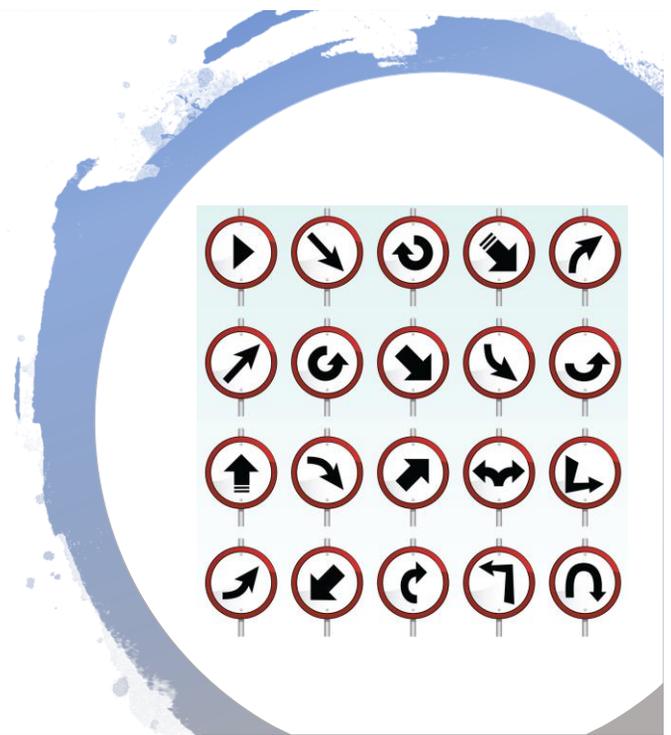
- Based on this finding, we might reasonably conclude that **any large and more or less permanent decline in the market** (i.e., to a new, lower trend, much more like the 1945 to 1995 period than today) **would require an equally large deterioration in profit margins or increase in inflation or some combination. Without either, any large market decline would be very unusual historically and likely, Mr Grantham believes, to be temporary.**
- His personal opinion for 2017 is that margins will remain favourable, and inflation not so. But, even if these guesses prove to be correct, this mixed signal does not suggest a major decline or perhaps any decline.
- The model, said Mr Grantham, is apparently a reflection of human nature. Of all factors influencing the market, human nature, as economically inefficient and unsophisticated it may be, seems the least likely to change.

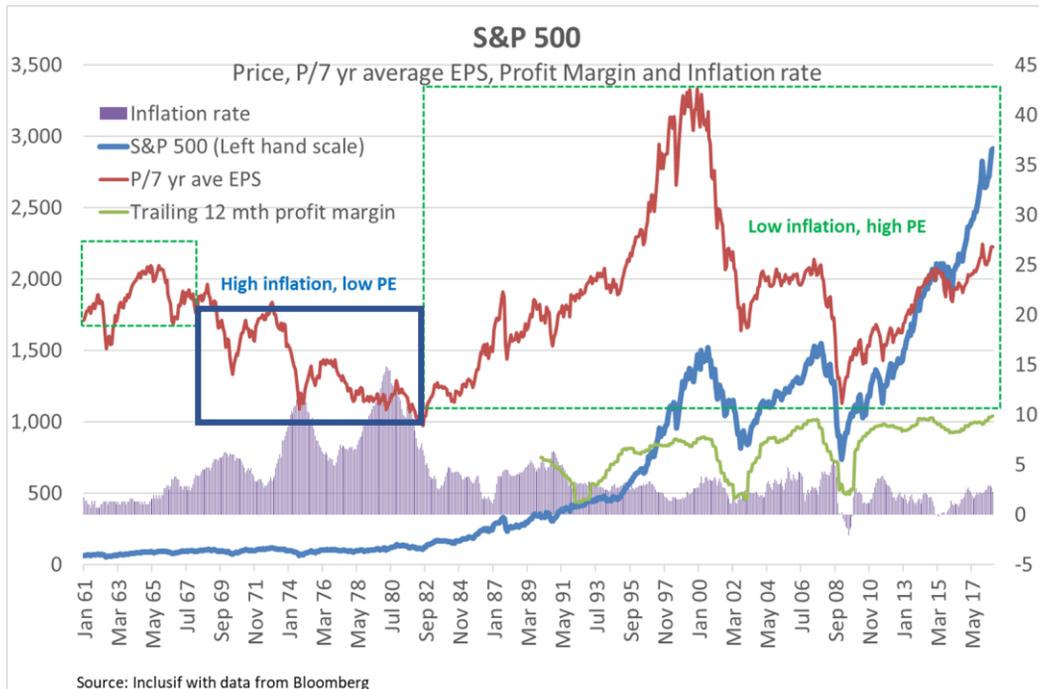


P/B and P/NTA charts

- In terms of P/B, we are still some distance away from the dot-com peak.
- In terms of P/NTA however, we are currently in uncharted territories.
- The widening gap between P/NTA and P/B shows that more of the assets owned by US companies today are intellectual properties, not the tangible sorts. Selling an extra ad in cyberspace, selling an extra licence for a software do not incur a lot of extra costs. That's perhaps one reason why profit margin has been climbing.

So, where to from here for the Dow?





Assessment

- The 17 years of the Dow not going anywhere after it hit a peak in 1965 coincided with a period of high inflation in the US. That caused market PE or market valuation to be compressed, despite continuing growth in earnings
- Jeremy Grantham: “Any large and more or less permanent decline in the market (i.e., to a new, lower trend, much more like the 1945 to 1995 period than today) would require an equally **large deterioration in profit margins** or **increase in inflation** or **some combination**. Without either, any large market decline would be very unusual historically and likely to be temporary.”
- So without large deterioration in profit margins or significant increase in inflation, current valuations can't be said to be excessive

Revisit what accounted for the Dow's dramatic climb in the last four decades?

Globalisation

Instead of just a market of 300 m, US companies now can sell to billions of consumers around the world

Advances in technology

Many US companies have entrenched themselves as world leaders in various fields which allows them to enjoy sustained growth and margins. Microsoft's net profit margin has remained fat over the last three decades. It averaged 26.5 per cent over the last 30 years. The latest net profit for FY2017 is 23.6 per cent.

Rise of neo-liberalism

Capital gaining power over labour

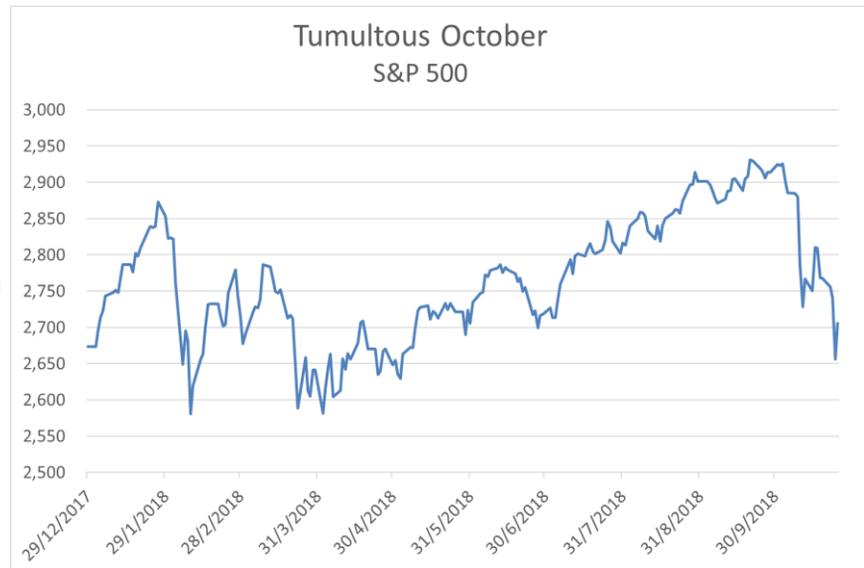
Low inflation

US has seen relatively benign inflation rate since mid-80s



If there is a reversal in globalisation and neo-liberalism, profit margins will be reduced, and hence market PE will be compressed. This means that the favourable conditions for high valuations are no longer there. In other words, markets may be overvalued now.

What's the
markets
telling us?



Graham's three possibilities:

1. The climb of the past 20 years is a reflection of a new and a marvellously improved character of common stocks and so can be expected to continue **[Moot – now that markets are in correction]**
2. The rise was from an undervalued position. We are at fair value and markets can be expected to grow in tandem with earnings and GDP growth **[Possible – the volatility is to find its fair value, which may turn out to be at the current levels]**
3. Markets are overvalued now, and so will see significant volatility until a fair value has been established **[Possible – especially if there is a retreat from free trade]**

Using Graham's New Central Value Formula

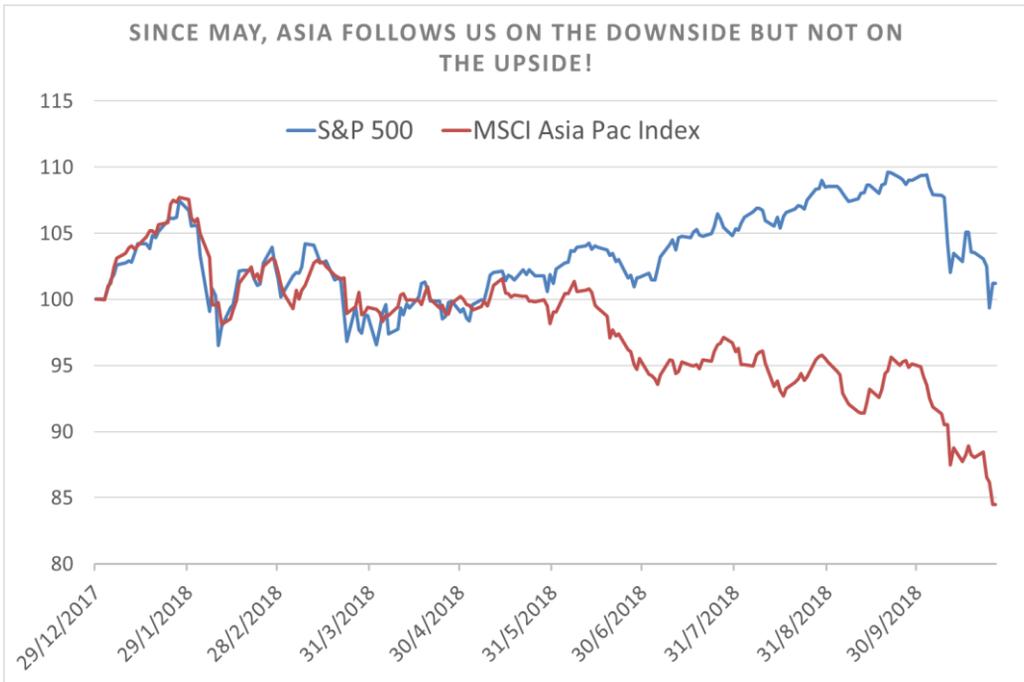
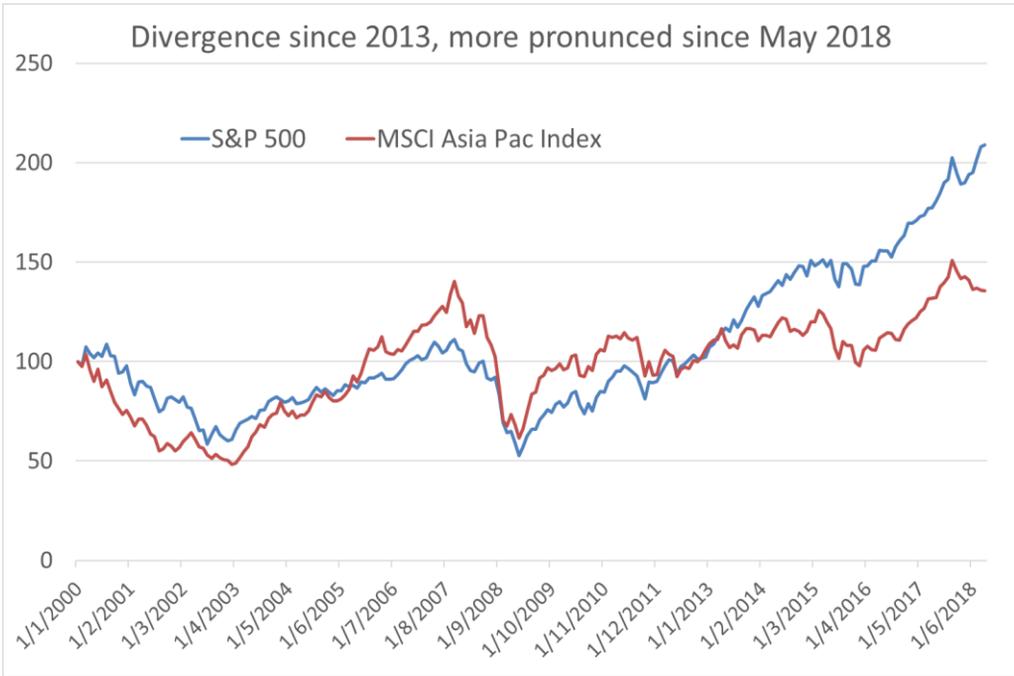
- S&P 500's 7-year average earnings per share as at Sept 2018 : 108.84
- 10-year US government bonds : 3.07%
- Central Value for S&P 500 = $108.84 / (2 \times 3.07\%) \times 1.5 = \underline{\underline{2,658.89}}$ points
- S&P 500 closed at **2,658.69** on 26 Sept, 2018!!!!

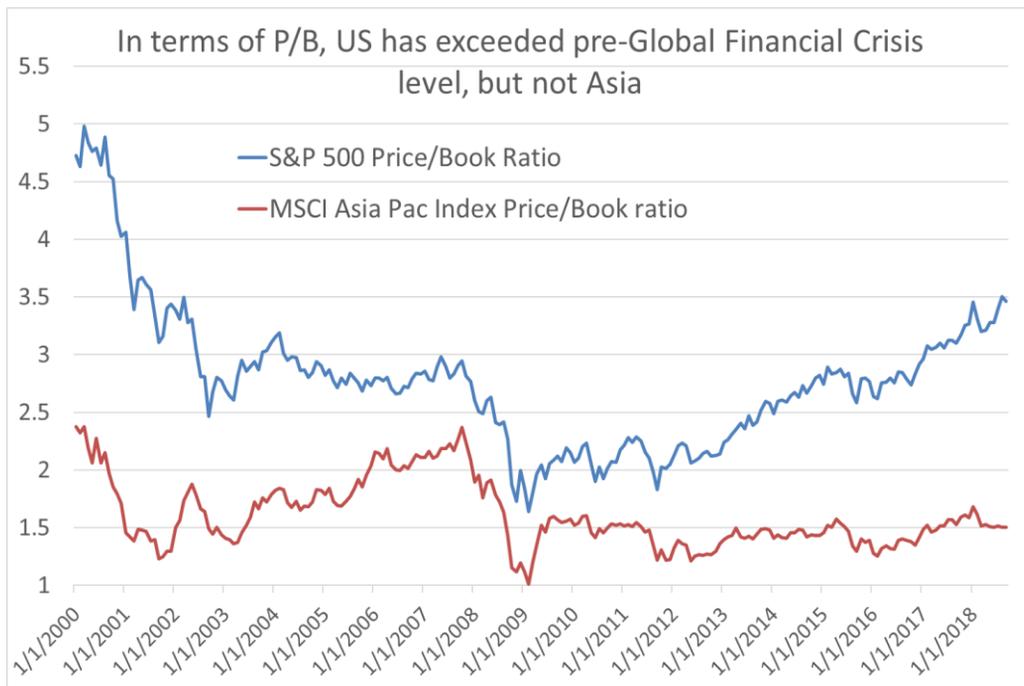
- If we used the yield for high grade corporate bonds, which is at 3.88%
- Then the Central Value for S&P 500 = $108.84 / (2 \times 3.88\%) \times 1.5 = 2,103$
- That's 20% below current level

Why so much emphasis on the US markets?

- Whether we like it or not, Asian markets take their cue from the US markets
- Wherever the US markets go, we follow
- But since May, Asian markets have been following the US markets down but not up!







Things to think about

- The US has been the prime beneficiary of the IT and social media revolution, especially in the last decade. A retreat from a free trade world would hurt the giant US companies, which constitute larger weights in the indices, more
- With increased rivalry between the US and China, are we headed towards a bifurcated world – where one part will serve the West and the other, China and allied countries?
- What implications will that have in terms of creating industry leaders and the supply chain?
- A de-globalised world means stock markets will be less correlated?
- My view: Markets are now seriously entertaining thoughts of escalating rivalry between China and the US, as such are adjusting their expectations of earnings and valuation based on various scenarios. But capitalist principles will still remain, and at some point, investors will realise that Asian economies will chug along and Asian assets are still worth something – with or without the US as the ultimate buyer!



Thank you!