How would the similarities and differences between Ben Graham's time and today's investment environment affect his writings? And, what do you think Graham would change in a '*Security Analysis*' 2017 edition?

The core principles that Graham presented in *Security Analysis* remain central to the process of any fundamental value investor:

- view a stock as a share of an entire business
- try to determine that business' intrinsic value
- know that the price being offered by Mr Market may diverge from intrinsic value
- invest with a satisfactory margin of safety between price and value to accommodate for the fact that your calculation of intrinsic value is inherently imprecise

This sounds fairly easy when distilled to four bullet points. However one constant over the last 80 years is that the successful application of this process, of fundamental value analysis, requires patience, hard work and intellectual rigour. Graham describes it as "hard and systematic work".

In the first half of this essay we will discuss some of the key changes to financial markets since the 1934 publication of *Security Analysis* that might have impacted the efficacy of the style of fundamental investing Graham proposed. In the second half we will focus on three of the key lessons from *Security Analysis*, and discuss the extent to which these may need to be updated or amended in a 2017 edition of the book.

A brave new world

It's easy to skim through *Security Analysis* and see the many examples of stocks trading at below their working capital value, and think wistfully of a time when active equity investment must have been so straight forward. Graham stated in 1976 that it was already by that year much more challenging to isolate under-valued securities: "in light of the enormous amount of research now being carried on, I doubt whether in most cases such extensive efforts […] justify their costs".

The change to which Graham alludes is the increased efficiency of financial markets and their ability to correctly price assets. This potentially undermines the third bullet point in our list: the assumption that over the short and medium-term, there may be divergences between price and value.

Let's first consider the major changes since the 1934 publication of *Security Analysis* that account for Graham's statement on rising market efficiency.

Dissemination of information:

Access to information has evolved beyond recognition since 1934. In Graham's writings the key source of his information was company annual reports, probed in such detail by virtue of his diligence and intellectual curiosity. The modern investor has a plethora of company and industry data at his or her fingertips. The speed of dissemination, ease of access, and ability to use technology to rapidly analyse data has increased exponentially.

Increased trading volumes:

In the 1940's trading volumes on the NYSE were typically under one million shares per day. This has increased by a factor of 1000, with volumes currently fluctuating around one billion shares per day. The implication is that in more liquid markets, the wisdom of crowds will ensure that prices converge to intrinsic value faster. It is worth noting however that in 2007, average volumes on the NYSE were closer to two billion shares per day.

Participation of professional investors:

In 1934 retail investors by-far outnumbered professional investors, and naturally gravitated towards blue chip stocks. However this has changed dramatically. In 1951 the number of mutual funds in the US reached 100 for the first time; by 2015 there were over 9,200 mutual funds registered in the US. As professional investors account for a rising proportion of trading volumes, the level of scrutiny being applied to publically available information increases concordantly. Instances of mispricing are arguably much harder to find, for the simple reason that more people are looking for them as a full-time vocation.

However these changes should not be interpreted as the death knell of fundamental investing; markets can still display staggering inefficiencies that we shall demonstrate with two recent, but entirely distinct examples.

Firstly, in the Chinese stock market bubble of 2015, the Shanghai Composite increased by over 150% between June 2014 and June 2015; and subsequently fell by 45% by February 2016. Nobody would suggest that this price volatility reflected changes in the intrinsic values of the listed companies over the two year period. The cause of this bubble was an unprecedented number of retail investors opening brokerage accounts and buying shares with leverage. The severe upward momentum of this herd behaviour was followed by a resounding crash as margin calls kicked in. It was a clear validation that prices and intrinsic values still frequently diverge.
A second pertinent example to highlight is the shift in funds towards ETFs and Index trackers. ETF managers attracted $390bn of funds in 2016, and $191bn in January and February alone in 2017. This trend was summarised well by Seth Klarman: "the inherent irony of the efficient market theory is that the more people believe in it and correspondingly shun active management, the more inefficient the market is likely to become".
Although the cases of a China bubble and ETFs may seem quite distinct, they are both very recent examples that demonstrate the prevalence of herd behaviour, and the indiscriminate buying and selling of securities in modern financial markets. By this I mean that in both examples investors are, for the most part, buying and selling securities with no regard for the intrinsic value of the underlying businesses; a clear disregard for our second bullet point in Graham's process. This can only lead to mispricing – our third bullet point - and the opportunity for alpha generation for disciplined fundamental investors.

What I have tried to highlight here is that there is a very significant difference between markets becoming more efficient, and being entirely efficient. They are, as David Abrams put it, "inefficient enough". In markets that can quite evidently still be driven by psychological and behavioural factors, Graham's basic principles remain highly relevant.

Let's now focus on some of the specific lessons from *Security Analysis*, and the extent to which differences in the financial environment might necessitate changes in a 2017 edition.

The value of tangible assets
Balance sheet valuation was central to Graham's approach, since book value would be the first thing considered by an individual considering buying a private business, and the balance sheet offers fewer opportunities for distortion or misrepresentation in its preparation. Graham commonly applied his 'net-net' approach to give an indication of the margin of safety of an investment. For this, cash is taken at its full value and a haircut is applied to receivables and inventory. This provides a liquidation cash value for current assets, on the assumption that a company under stress and undergoing a fire sale would not receive the full market value of its debtors and inventory as recorded on the balance sheet. Total liabilities is then subtracted from this value of current assets. This net-net valuation represents the liquidation value of the company, and therefore acts a floor to the business' valuation as a going concern.

However the relevance of liquidation values in such a broad-based manner has diminished since the 1930's. As the frequent company examples in *Security Analysis* show, the US stock market was then heavily weighted towards asset-heavy industries such as railroads, manufacturing, mining and utilities. The 2017 US economy, and consequently the stock market, is far more service-oriented, with technology allowing companies to be more nimble and asset light. Furthermore, liquidation value was a relevant marker when, in the aftermath of the Great Depression, the economy was under severe distress. In 1933, a year prior to the publication of *Security Analysis*, unemployment in the US peaked at 25%, and during 1932 over 40% of the companies listed on the NYSE had traded at below net current assets.

A net-net valuation method is still highly relevant for certain business models which may be asset heavy; or in industries under-going cyclical downturns where current earnings are depressed but the company retains valuable assets. In these instances a focus on tangible assets provides an effective measure of your margin of safety. However, a 2017 edition of *Security Analysis* should also acknowledge that for many companies this approach is not appropriate. In many instances intangible assets and off-balance sheet

assets (brands, customer relationships etc.) are an increasingly important component of intrinsic value as well.

Incorporating qualitative factors
In isolating value, Graham leans heavily on the balance sheet and the company's earnings track record, and assigns comparatively little weight to earnings forecasts and qualitative factors. For Graham, since these factors cannot be accurately measured and quantified, there is greater margin for error in assigning a value to them, and they therefore drift into the practise of speculation, rather than investment. On earnings forecasts, he highlight that a "future trend is only an assumption", which makes the process "psychological and quite arbitrary". He quite definitively states that an earnings-forecast "is never thoroughly reliable and frequently turns out to be quite clueless". The frequency and scale of changes to the market's consensus forecasts shows his wisdom in this regard.

However I feel that over the past 80 years, many businesses have clearly demonstrated that certain qualitative factors, which are inherently difficult to quantify, have resulted in the consistent outperformance of those companies over long-term horizons. These qualitative factors were most clearly laid out in *Foundations of Corporate Success* by British economist John Kay; and I believe are deserving of a chapter in a 2017 edition of *Security Analysis*. Kay groups these corporate moats under four headings:

- Brands and reputation
- Architecture – a company's network of contracts, with customers, suppliers and employees
- Innovation
- Strategic Assets – such as intellectual property, first mover advantages and natural monopolies

These qualitative factors are decisive competitive advantages, allowing companies to sustainably outperform their peers, compound returns and generate value over long periods of time. Graham gives this argument a brief nod, acknowledging that "earnings based on these intangibles may be even less vulnerable to competition than those [assets] which require only a cash investment in productive facilities".

The distinction being made here is between buying a cheap business, as was strongly advocated by Graham, and buying a good value business. Cheap businesses were referred to by Warren Buffet as cigar butts: "a cigar butt found on the street that has only one puff left in it may not offer much of a smoke, but the 'bargain purchase' will make that puff all profit". However an investment in a good value business recognises that certain defensible qualitative characteristics allow a company to consistently improve upon its market position over long periods of time, diluting the importance of initial price multiples or balance sheet values. As concluded by Buffet: "time is the friend of the wonderful business, the enemy of the mediocre". I feel that there is room for both philosophies in the toolkit of a fundamental value investor.

The continued importance of shareholder engagement
"It is a notorious fact, however, that the typical American stockholder is the most docile and apathetic animal in captivity."

Graham's chapter on shareholder engagement is a call to arms, equally relevant in 2017. It reminds us that shareholders, as owners of the business, have a responsibility to engage with management and hold them to account. It is the owners, and not the management, who have put capital at risk in the business. It is therefore the owners who have first entitlement to any benefits associated with the business' success, in the same way that they will suffer the capital loss resulting from the business' failure. Management decision making does not always reflect this fact. While "it is nearly always true that the management is in the best position to judge which policies are most expedient […] it does not follow that it will always either recognise or adopt the course most beneficial to the shareholder".

An example of this conflict of interest is on dividend policy, where management may choose to retain more capital within the business, and not return it to shareholders. If this is to expand the business, and consequently the management's status, without regard for whether it is an effective and appropriate use

of shareholder capital, it should be contested as being disadvantageous to minority shareholders. A more high profile issue is the suitability of salaries, bonuses and stock options awarded to senior management. The annual realized remuneration of CEOs of the top 300 US firms was 303 times that of the annual employee salary in 2014, having been 20 times in 1965.

Whether you are a retail investor, or a professional investor with a fiduciary responsibility for the capital of your clients, shareholder engagement is as important today as in 1934.

The enduring relevance of a professional approach

When I first read *Security Analysis* I was simply staggered by the breadth of wisdom it contained. Given the changes in financial markets over the last eight decades, largely as a result of technology, it is easy to assume that a 1934 textbook on investment principles would be archaic and outmoded. Such an assumption could not be more wrong. The overriding message of the book is of valuing a business – and therefore a stock - rationally based on definitive factors, while minimising assumptions. As financial analysts it is easy to fall into the trap of failing to acknowledge the uncertainty of our assumptions, often exacerbated by the precision implied by an Excel spreadsheet. Graham's methods epitomise professional investing based on a scientific approach; not on crystal ball-gazing or speculation. As financial markets become noisier, with no shortage of market commentators offering an opinion on which way prices will move next Wednesday, it is important for all of us in 2017 to remind ourselves of the many timeless lessons of *Security Analysis*.

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