ValuAnalysis

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ValuInsight – The Expected Return Formula, and How to Deal with Growth

- **Financial experts sometimes refer to a "Growth Stock Problem".** This describes how the compounding effect of growth makes it hard to calculate a *finite* present value of stocks, unless growth… well, stops, or at least fades. For the same reason, growth stocks are suspected to be the most sensitive to a change in the discount rate: without a fade, (discounted) free cash flows grow far into the future, a "problem" when interest rates rise.
- **The *true* problem is that sustainable growth in FCF is the key driver of a stock's expected return.** Growth cannot simply be ignored or assumed to be, or go, to zero, unqualified. A simple "yield and growth" formula shows that for both to contribute equally to a 7% expected return, the multiple of earnings - with a 50% distribution - would need to average 14x, a rare and specific occurrence. In most other cases, growth represents more than half the expected return.
- **Earnings multiple and sustainable growth cannot be thought of independently.** It is the multiple (inversed as "yield") *and growth combined* that make-up the expected return of a stock. This individual assessment can be construed into a practical and robust stock selection process.
- ***Sustainable* growth is the result of an opposite pull.** Growth quickly compounds and needs a realistic fade to be brought back to a standstill. Conversely, the "Lindy effect" posits that some entities have a survival probability proportional to their age. In layman's terms, this is described as a competitive advantage. We believe that there is insight in assessing these opposite forces to ascertain a stock's likely sustainable growth.
- **Luckily, growth in FCF has three drivers only**: revenue growth, operating margin, and capital consumption. The interplay between these drivers is intricate, sometimes counter intuitive. We argue that their close examination brings insight into the competitive advantage of a firm and its compounding potential.
- **The multiple is usually a junior contributor to the expected return, but wields an immense power: the rating of the stock.** Changes are triggered by short-term, "behavioural" considerations: earnings delivery, quality of execution, or macroeconomic trends affecting the risk premium. They reflect, for a given level of growth, the immediate level of confidence, which can change abruptly and, sometimes, irrationally.

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The "Growth Problem" – A Theoretical Challenge

This section deals with the theoretical challenges posed by growth in financial models. This is a 300-year-old problem originally presented by Bernoulli, the famous Swiss mathematician, as the Petersburg Paradox. In short, reasonable people are never prepared to pay the right price for an infinite sum of expected gains. This theoretical debate is relevant to growth stocks valuation, as an MIT Professor of economics spotted in 1957. We review here how this applies to modern finance.

Rationalising the "growth-stock problem"

For zero or low growth companies, say up to 3%, there is, by definition, no "problem"; their value is equal to the discounted value of D ("dividend") by d, the discount rate. If you wanted to be slightly more sophisticated, you could call their growth "ε", a small number, and with ε < d, write that the value V of a zero or low growth business is:

$$V = \frac{D}{(d - \varepsilon)}$$

Since ε is negligible, the earnings multiple (assuming 100% distribution) is simply the inverse of d, and the expected return of this investment is almost equal to *d*. In other words, for a zero or low growth business, the investment decision is largely placed on the shoulders of the discount rate, and boils down to assessing the right level of the embedded risk premium.

Holcim, the world leader in cement and aggregates has a historical revenue growth of a bit more than 3%. At this level, growth is going to play a secondary role in the valuation of the stock. What matters is its economic rent (its return on capital) and its asset multiple, or, in accounting parlance, its Price-to-Book. At zero or negligible growth, there is an equivalence between the asset multiple (market value over capital employed) and the relative return (return on capital over discount rate) because, as we noted in the previous paragraph, the earnings multiple is the inverse of the discount rate, and the latter is the expected return of the stock:

$$\frac{Return}{d} = \frac{Value}{Capital}$$

$$\frac{1}{d} = \frac{Value}{Capital} * \frac{1}{Return} = \frac{Value}{Earnings} = \frac{P}{E} ratio$$

At a price of CHF45, Holcim's asset multiple is 0.95x, which implies that it does not cover its cost of capital (otherwise the multiple would be at least 1x). Since its normalised economic rent, or return on economic capital, is ca. 7%, this implies that the cost of capital is ca. 7.4%, a substantial 200 basis points above the market's current discount rate, in our estimation. Holcim's specific risk premium of ca. 200bp above the average

stock (essentially for its exposure to its CO2 emissions, we suspect), is (*almost*) all investors need to assess to take a decision on this stock.

Not so for a growing business. Writes Ben Graham himself: "It is important (...) to understand why this pleasantly simple method of valuing a common stock (...) had to be replaced by more complicated methods, especially in the growth-stock field. (...) When the expected growth rate is set progressively higher, the resultant valuation of dividends or earnings increases very rapidly (...) and a growth rate of 7 percent or more makes the issue worth infinity" (NB: B. Graham assumes a 7% discount rate).

Ben Graham is pointing out the limits of the equilibrium model, which can only work if g < d. "Equilibrium" means that growth has converged to GDP. This is not appropriate for a business exposed to growth *now*, either technically (if growth is above the discount rate, the denominator is negative) or philosophically, because this does not capture a potential Lindy effect. "Lindies", named after a theory that emerged in the 1960s, characterise companies able to increase their moat via above average growth, able to move and scale faster, able to finance their growth out of their own resources through a higher economic rent, etc. In modern speak, they "beat the fade". As the next section describes, the literature and the best minds of the past three centuries have struggled to offer alternatives to the equilibrium model.

A Nearly 300-year-old Paradox

In 1738, Daniel Bernoulli, the famous Swiss mathematician, presented a mathematical puzzle called the Petersburg Paradox. A player tosses a coin and receives from another player a doubling amount of money at each toss, until he lands "heads". Bernoulli asks what the player's entry fee should be. If one is allowed to play during an infinite amount of time, the mathematical expectation is infinite. This was the beginning of a much talked about "paradox".

The proof is easy enough. Say you receive $2 if you land "heads" in one toss, and, if you don't succeed at once, the amount that you receive for each toss doubles to 4, 8, 16 etc..., until you do. Since the probability of landing "tails" after one toss is 1/2, 1/4 after two, 1/8 after three etc..., if you keep on doing it, the sum of "amount x probability" is clearly an infinite sum of fractions equal to 1: (2*1/2) + (4*1/4) + (8*1/8) etc.

The paradox is that no one is willing to pay the right mathematical price for an infinite sum of expected gains, or indeed agrees on what an alternative price should be. This "paradox" has concerned literally anyone with an interest in probabilities and finance, from XVIIIth century French mathematicians (d'Alembert, Buffon etc...), to John Maynard Keynes or Paul Samuelson, among many others. All concluded (including Bernoulli himself) that the theoretical infinite price was not right, not "reasonable". But even if you reduce the game to a finite number of tosses, it seems that there is a large difference between the theoretical value, or expectation, and

what a reasonable person would expect to pay to enter the game. This difference has fuelled debates for centuries.

This ought to matter to investors because the Petersburg Paradox also interested an otherwise unknown MIT professor of economics, David Durand, who wrote *Growth Stocks and the Petersburg Paradox* in the Journal of Finance issue of September 1957. Professor Durand might not be remembered by many today but was influential enough to receive a footnote about his paper in chapter 39 of the 4th edition (1962) of Ben Graham's Security Analysis, *New Methods for Valuing Growth Stocks*. And indeed, associating the Petersburg Paradox and the value of growth stocks was inspirational: paying a growing amount of money that is scaled by ever decreasing probabilities is arithmetically equivalent to a discounted series of, say, growing dividends. The conclusion is also similar: do nothing to the model, and the value of these dividends, like in the Petersburg game, is infinite, which is clearly absurd and unacceptable. But there is no consensus on what to do to resolve this.

The 1957 paper does mention a comprehensive list of possible technical solutions to bring the value of an infinite stream to a finite number. Including what we would today call "a fade", or the rate of attrition bringing down the rate of growth to a standstill. Back in 1938, J.B. Williams, in *Theory of Investment Value*, proposed a "logistic", a growth curve increasing exponentially for a time and then levelling off to an asymptote. Pr. Durand writes: "this device guarantees that the present value of any dividend stream will be finite, no matter how high the current, and temporary, rate of growth".

Yet the conclusion of his research paper is… well, inconclusive. "The very fact that the Petersburg Problem has not yielded a unique and generally acceptable solution to more than 200 years of attack by some of the world's great intellects suggests, indeed, that the growth-stock problem offers no great hope of a satisfactory solution".

The Lindy Effect

Pr. Durand's "growth-stock problem" is the result of an unpredictable, sometimes even unquantifiable, two way pull. On the one hand, assuming indefinite growth leads to an infinite dead end. On the other hand, ignoring it, or assuming that it somehow randomly disappears, suggests a lack of imagination and an unfamiliarity with the Lindy effect.

The "Lindy effect", named after a famous brasserie on Broadway, is a survival hypothesis based on conditional probabilities. Benoit Mandelbrot and Nassim Taleb have been some of the recent students of this hypothesis, which theorises that the life expectancy of a non-perishable object is proportional to its age. A company, which can be defined as a bundle of know-how, ideas and technology, has an unbounded and undefined end (remember, the market assumes "going concern" except in extreme cases) and is indeed "non-perishable".

Just like price formation, the Lindy effect is a probabilistic framework assessing the risk of hazard as a function of age. The math is dense but boils down to this: if you have survived for x years in a business whose participants have an average life

expectancy of y, your residual expected survival is considerably more than y minus x.

The theory emerged in a 1964 article but is deeply rooted in many familiar business concepts: 80/20 rule, "winner takes it all", moat and competitive advantage theory, resilience of the incumbent etc. Because it is repelling the natural proclivity towards zero growth imposed by logic, understanding the Lindy effect is of the utmost importance to assess *sustainable* growth.

Lindies and Turkeys

The card networks (Visa, Mastercard), Amazon, Alphabet, Accenture, Microsoft, Tesla, Zoetis, Procter & Gamble, ASML, Apple, L'Oréal are all "Lindies". With Tesla and Amazon making the list, we even have *disruptive* Lindies, those very special cases of companies with "escape velocity", the speed required to escape gravity. Let's say that the entire automotive industry is an eco-system with its own gravity. Tesla has managed to escape this gravitational pull by thinking about cars in an entirely different manner (not just changing the energy source, but also how the car is designed, built and sold), and then taking a material head start in battery technology, software management and autonomous driving. Amazon has played the same trick with cloud computing. Jeff Bezos has once observed that his company was given a seven-year head start to build AWS, before some serious competition emerged.

The Lindy effect reduces your risk of hazard, but we don't have a way to know for sure who is "Lindy", and who has enough escape velocity. Experience suggests that the safest assumption for most investments remains that there **won't** be enough torque to escape. Remember the early browsers, Mosaic, Netscape? The idea was Lindy, but there was not enough escape velocity from Microsoft's and Google's gravity. In the payment eco-system, the jury is still out for well-established new entrants (e.g., Adyen, or PayPal). In the collaboration video business, the battle between Zoom and Teams still appears uncertain. If you are a believer in the Lindy effect, you would back Microsoft against Zoom Inc., the gravitational pull of the former appearing quite formidable.

And finally, beware of Turkeys… Nassim Taleb, the author of *Fooled by Randomness* gives the example of a well fed and looked after turkey throughout the year, who thought life was great until December 24th… Luck and optical resilience can fool investors into believing in a purely fictitious Lindy effect: the memories of Nokia in 2000 remind us that the true Lindy in the handset business is Apple.

A New Paradox

Transforming an infinite value into a finite amount by fading the growth rate solves the Bernoulli paradox for valuation, but brings about another difficulty: immediate fading might not be appropriate for all companies. The Lindies will be disadvantaged, as their early fade rate is either slow, non-existent, or even negative for a period (i.e., their growth accelerates). On the other hand, the Turkeys will be flattered, in that they do not *fade* but *fail* abruptly. The real paradox today is that fades are absolutely necessary but only work for average companies. Time for some alternative empirical solutions.

The "Growth Problem" – An Empirical Solution

Ben Graham's 1962 equilibrium model posits that if the required rate of return is 7% and the dividend is growing at 4%, then the dividend yield will settle at 3%. This is the powerful basis of an expected return model, which can easily be rearranged and modernised.

The Yield + Growth Expected Return Model

Let's start by expressing everything in terms of net normalised distributable free cash flow (from here on "FCF"), for the following reasons:

- A Free Cash Flow approach will incorporate share buy backs, which are sometimes larger than dividend payments
- A non-GAAP item, FCF is nevertheless a much-scrutinised financial measure, monitored by financial analysts and detailed by many companies alike
- FCF is easier to assess with respect to its sustainable growth, on which more later

FCF definitions are like snowflakes; there are plenty but no two are identical. For this exercise, we would suggest that FCF is taken:

- After financial costs ("levered")
- After stock-based compensation costs
- After normalisation for the cycle and extraordinary, non-operating cash payments
- After a notional "non distributable" reserve, as companies rarely use all of their FCF to the sole benefit of shareholders

Note that if this is done precisely, the residual value should be close to a normalised dividend payment plus share buy backs.

A Yield + Growth formula can then be used to calculate an individual expected return. The Yield + Growth formula is a simple rearrangement of the original Graham formula, which does not start from the required return but obtains a specific expected return for a stock, at an observed price. We measure the yield based on the multiple of FCF, defined above, taking the market value for granted and as a putative entry point. Adding "growth" to it gives the expected return from this entry point.

Sustainable Growth and FCF

If we take any distribution of any P/E definition at any period in any market, the dispersion around the mean is going to be significant. This means that growth is not taken uniformly "at equilibrium", roughly GDP+, in the price formation process. If it were, it would be a constant for all stocks, and all stocks would be approximately on the same PE ratio. Invoking a different risk premium or business cycle per stock is not enough to create

such a dispersion. **The distribution of multiples replicates the distribution of growth profiles, which we think is priced by the market as the *sustainable* level for each company.**

We define it as the growth rate that the company can sustain over a cycle for the longest possible time without fading materially, without going outside of its core business, or without changing its capital intensity. "Tuck-in" acquisitions allowed. It is the specific equilibrium point between the pull of the fade and the push of the Lindy effect. And this definition requires a special analytical effort because in a Yield + Growth formula, "growth" will almost always be the most significant item.

Assuming that the FCF multiple averages around 25 times since 2000, the 4% apparent yield (1/25) is going to be reduced to perhaps a 2.5% "distributable" yield, after financial charges and transfer to non-distributable reserves. If the long-term expected return of equity markets is 6 to 7%, growth represents the bulk of it, in this case 3.5% to 4.5%, more than half the total return.

Sustainable growth and economic life of the underlying assets are linked. Short asset lives, like in the film or the video game industries, will tend to make investors assume a lower sustainable growth rate, because reinvesting often into a new product carries a specific risk of fade. Conversely, entrenched positions of world leaders will push out the point of fade. Analytically, we tend to assess sustainable growth on a 5-to-10-year view if possible. Despite a great deal of empirical reliance, this assessment is crucial for the expected return of a stock.

The Three Drivers of FCF

Over the years, we have encountered a fair amount of confusion about growth, starting with "growth of what?" Assets? Revenues? Profits? Real? Nominal? The merit of the Yield + Growth formula is that it simplifies this issue, too. To be consistent with the original formulae, this can only be growth of dividend, or, in our framework, "distributable normalised net" FCF. We mentioned earlier that one of the reasons to prefer FCF to dividend was the (relative) ease to assess the former's growth rate. Table 1 illustrates this point by showing a simplified cash flow statement from revenues to Free Cash Flow.

Table 1: Simplified Cash Flow Statement

From Revenues to Free Cash Flow		Growth Drivers
Revenues	100	Assume an organic and sustainable growth rate – example +7%
Operating Costs	(70)	Margin Leverage - margin expansion or contraction – example +30bp
Cash Flow from Operating Activities	30	
Capital Consumption	(18)	Capital leverage - margin expansion or contraction – example +10bp
Free Cash Flow	12	Sustainable growth is revenue growth + margin and capital leverage

SOURCE: VALUANALYSIS

FCF is affected by three drivers only. First, organic growth in revenues. Note that the (dreaded) real or nominal issue has disappeared; it is clearly nominal growth, made of volume and pricing combined. This organic sustainable growth rate is best approximated with the support of the 3-, sometimes 5-year plan that companies often disclose during their Capital Market Days, adjusted for a critical analysis and the level of confidence that one might have in such disclosures.

Over and above this top line advance come two levers: margin and capital, which, combined, represent the net operating leverage. If the company is able to let its costs grow less quickly than its top line, its operating margin will improve. Lower down the Cash Flow statement, if the capital intensity of the business diminishes, capital consumption will decrease proportionally and the FCF margin (on revenue) will increase beyond what the margin leverage can produce.

Margin and Capital levers go in the opposite directions but are additive; in the Table 1 example, the overall FCF margin improves by 40bp per annum. Had the company been capital inefficient to the tune of 15bp per annum, the overall net leverage would have been 15bp only. The FCF growth rate is computed in this way:

$$FCF\ Grw = Rev.Grw + \frac{(Net\ Lev.* (1 + Rev.Grw)}{FCF\ margin}$$

The leverage impact is dependent on the level of FCF margin in a counter-intuitive way: the lower the margin, the more impact. In the Table 1 example, a 7% revenue growth becomes a ca. 10.5% FCF growth because the FCF margin is relatively low (12%). Had the FCF margin been 32%, FCF growth would have been lifted by 130 basis points only, from 7% (revenue growth) to 8.3% (levered FCF growth)[1]. A number of valuable points follow from this observation.

The significance of normalised cash-flow from operations (CFO). Setting the right watermark for sustainable CFO margin is very important, as it will in part determine the impact of leverage, and therefore the sustainable growth rate of FCF.

The loopback effect of the growth type on the multiple. Yield (or its inverse, the multiple) and growth are not independent variables. By construction, there is evidently a relationship between the level of growth and the multiple (the higher the former, the higher the latter). But the relationship is more intricate, and there is some likely interference between the growth *type* and the multiple. This may be the most significant point in this paper, and there is no better illustration than Amazon.

Amazon, not surprisingly given the dominance of its retail business, has a low FCF margin. We calculate that its normalised CFO margin is 21% and its normalised FCF margin is less than 5%. Remember that we include R&D and advertising costs in capital consumption. Amazon's CAPEX is ca. $50bn but its capital consumption is ca. $100bn, according to us. Assuming that Amazon's sustainable growth in revenue is ca. 17%, as per the

[1] 7% + (0.4* (1.07))/12% = 10.5%, but 7% + (0.4* (1.07))/32% = 8.3%

first driver of FCF growth. With a 10bp net de-leverage, which is consistent with history, the (sustainable) FCF growth ends up at ca. 14.5%.

On the multiple front, the 2022 FCF median consensus estimate is $43bn. Call it $40bn to weed out any margin expansion baked in these forecasts. This results in a multiple of ca. 44x. Once adjusted for the distributable part, the yield is ca. 1%. Combined with growth of ca. 14.5%, this amounts to an expected return of 15.5%. This example illustrates several important points.

The multiple is a poor indicator of value. If we accept that stock selection should be based on expected return, the Amazon example shows clearly that growth dominates the formula. As we detailed earlier, even a lower growth outlook would still dominate the expected return calculation. There are many respectable reasons why investors might not consider Amazon an interesting investment, but "it's on a multiple of 44" is certainly not one of them. Which does not mean that the multiple does not carry information.

The multiple is a good indicator of confidence. We need to go back to the importance of the FCF margin on leverage to illustrate this. Remember that we assumed a net -10bp leverage for Amazon. If we break down net leverage into margin and capital, we can see that Amazon is able to expand its operating margin over time, but the benefit is engulfed into a massive capital consumption which makes the company more and more capital intensive and reduces FCF growth relative to top line growth. In figures, +17% top line growth becomes +14.5% FCF growth. Now imagine that we had reasons to believe that this capital binge might decelerate, and that the company might be able to reduce its capital consumption whilst collecting its 17% growth on the top line. Let's say that net leverage could be +30bp, a reasonable net leverage for a well-managed and growing company. Due to the low FCF margin, this leverage propels FCF growth to 24%, ca. 10 percentage point higher than previously (same calculation as in footnote on page 8).

It would be foolish to assume that the market does not know this. It most likely does, which means that the multiple of Amazon, or of any company with above average growth potential and a low FCF margin, will be sticky on the downside and might always appear "expensive". As if there were some sort of option value embedded in the valuation when the market has enough confidence that the company can leverage its operating cost or its capital base in the future, and punch above its weight in terms of FCF growth.

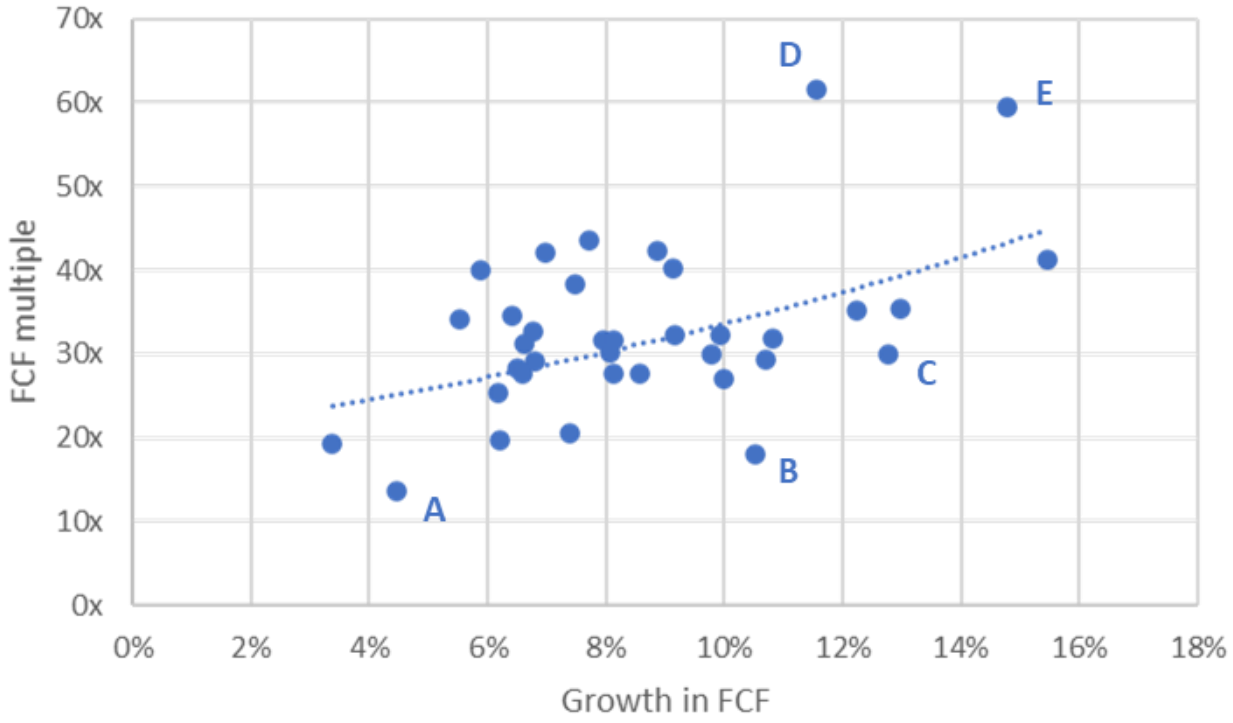
The multiple can re-rate without damaging much the expected return of the stock. Recall Amazon's multiple of 44x FCF, and its expected return of 15.5%. Imagine now that the shares go up, for any reason at all, to a multiple of 50x (all else equal). What has changed? Nothing much. The market capitalisation has increased by 6 times FCF, or $240bn, but the expected return has moved down by 15 basis points only. **In other words, the expected return should be the prime fundamental selection criterion, and the level of confidence (in growth and in this expected return) drives the share price in the short-term.**

Compounding vs. Rating. A Typology

The "Yield and Growth" expected return formula identifies two levers of performance: the multiple (the inverse of the yield) which measures the rating, and the sustainable growth rate, which measures the compounding. The following chart regresses FCF growth to the multiple for a sample of stocks.

As theory suggests and practice confirms, there is a broad positive correlation between the two variables. A classic analysis of these market lines assumes mean-reversion, and outliers are identified as undervalued (A,B,C), or overvalued (D,E). Our typology offers a more (better?) analytical alternative.

Chart 1 – FCF multiple and FCF growth



SOURCE: VALUANALYSIS RESEARCH

Outlier A is Holcim. The world largest producer of cement is a slow grower, which is how it appears on the horizontal axis of the chart. But its multiple is also at a substantial discount to the "market line", which represents the average points where growth and multiple meet. What puts the multiple *under* this market line is likely connected to Holcim's CO2 emissions and an expectation of increased costs of carbon emissions. Investors in aggregate have a low confidence in the status quo, which increases the risk premium and compresses the multiple.

Outlier B is Qorvo. Qorvo is a small semiconductor manufacturer specialised in radio frequency chips, the kind that populates, among other things, smartphones. It is a higher grower than Holcim, but suffers a similar multiple compression relative to its sustainable growth rate. The reason here is the competitive position of the company and its relatively small size. Qorvo depends on a small number of very large smartphone manufacturers (among which Apple) and competes with equally large, and more diversified, chip manufacturers, among which Broadcom or Qualcomm. Various rumours of vertical integration from some phone manufacturers, complemented by the suspicion of market share losses to its bigger competitors, have increased the risk premium significantly, and compressed the multiple.

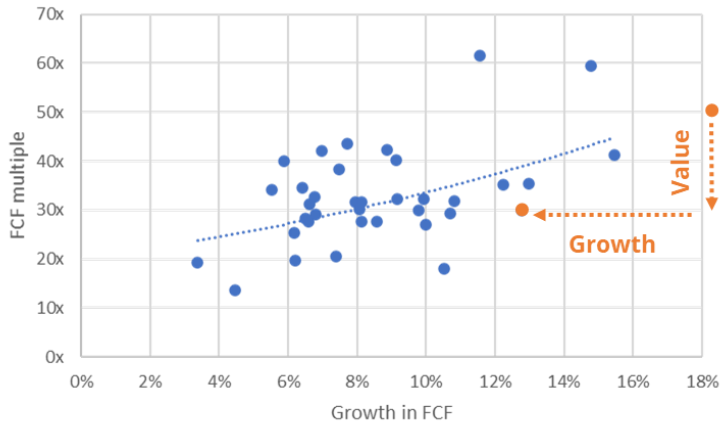
These two examples above illustrate a compression of the multiple triggered by an increase in the level of the risk premium, itself signalling a lower level of confidence in the sustainability of the growth rate. Even though the share price can drop significantly during this process, the expected return may not change much, since only the yield (the inverse of the multiple) is affected, which is usually a smaller contributor to the expected return. The next example is something else altogether; it illustrates a change in the sustainable growth rate *and* an increase in the risk premium.

Outlier C is PayPal. This combination of a change in both "yield" and "growth" in the expected return formula is more complex and more brutal; PayPal's share price has fallen by 40% since the beginning of 2022. With hindsight, events unfolded in three stages.

- **Inflated Expectations**. During its Capital Market Day of early 2021, the company indicated the prospects of a high double-digit growth in revenues to 2025. At the time of writing, i.e., more than 12 months later, the consensus of analysts is *still* expecting an average revenue growth of more than 18% (Source: S&P Capital IQ), which is now largely deemed over ambitious.
- **Doubts about sustainability.** Various corporate events, including a rumoured attempt to take over a social network, casted doubts about the sustainability of hoped-for organic growth; the multiple started to compress as investors in aggregate did not put a high probability on achieving the original goal.
- **Admission and change of strategy.** Eventually, the company communicated a change in corporate strategy and admitted to being somewhat "carried away", whilst reiterating its hope to achieve its earlier growth prediction. Too late; investors have now crystalised serious doubts about the sustainable growth rate of the company.

On the next chart, which replicates the chart shown on page 10 with the five outliers, we show how PayPal moved, as its expected sustainable growth rate got reduced and its multiple shrank.

Chart 2: PayPal with 18%+ and 12%+ growth in FCF



SOURCE: VALUANALYSIS LIMITED

The 12%+ sustainable growth featured in the shares' current position is our best guess of what the company might be able to generate sustainably (the company has a higher number). Note that the shares trade at a *discount* to this figure (they are still an outlier at this growth rate), suggesting that the market is still applying a low probability to this growth rate, and wants tangible confirmation.

These various examples show the interplay between rating and compounding. They also show the difference between rating sustainable growth with a lower probability (Holcim, Qorvo) and rating a *change* in sustainable growth, which is far more damaging to the share price. At some point, these outliers will find their footing and the "right" multiple will be found. But with a different sustainable growth rate, ranging hypothetically from 1 to 3 from Holcim to PayPal, their ability to compound is very different, and they will not converge to the same multiple. Once the "right" multiple is achieved, Holcim would increase its value by 3-4% per annum to keep the same multiple, and PayPal three times more.

At the other end of the spectrum, high confidence outliers D and E are NVIDIA and Amazon. NVIDIA is another good illustration of the interplay between yield and growth in the formula. Taken at face value, the stock's expected return is in mid-teens, thanks to its immense top line growth potential. But it is hard not to conclude from the chart that the level of enthusiasm for the stock is at least commensurate with the talent of its founder and Chief Executive... Should investors have any temporary doubts about the runway, a de-rating of the multiple would be on the cards. Note that this is not *just* about growth; it could be about leverage, about the competitive position or short-term earnings disappointment.

Amazon's position above the line suggests a relatively high market level of confidence. In this case, we would ascribe it to its very substantial leverage potential, as we explained earlier. Recall how its FCF growth could be below its revenue growth, or substantially above, on relatively innocuous changes in operational leverage assumptions.

The ebb and flow of the risk premium will therefore dictate re or de-rating. Three sub-components are able to shift the multiple:

- The market risk premium, which changes the multiple for macro-economic reasons
- The company-specific risk premium, for instance with respect to its exposure to ESG factors
- The confidence level in corporate execution

The stocks exposed to a rerating can be attractive opportunities. For instance, if the excess penalty risk applied to Holcim were to halve from 200bp to 100bp, its asset multiple would move from 0.95x to 1.1x, a +23% impact on the equity value.

If a good (high) yield can signal an attractive opportunity, it cannot necessarily identify a "great investment", unless there is also some compounding potential: **for us, a "great investment" is necessarily a compounder**. And to compound, you need growth, preferably with leverage. The analytical power of the Yield + Growth expected return formula is the clarity with which these drivers are identified.

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	"Buy", "Hold" and "Sell" recommendations		Investment services provided to these issuers in previous 12 months	
Recommendation	**Number**	**% of total**	**Number**	**% of total**
Buy	0	0%	0	0
Hold	0	0%	0	0
Sell	0	0%	0	0

The above table covers the period 28th March 2021 to 27th March 2022. This disclosure is reviewed and updated on a quarterly basis. Last updated 11th February 2021.

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ValuAnalysis

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