ValuAnalysis

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ValuInsight – From Multiple Compression to Margin Contraction

- **A new buzzword has emerged: *pivot*.** If a stock pickers' job is to find a needle in a haystack, Central Banks watchers seemingly have an even more desperately complicated job: to find a pivot in a press release. Whilst this article is also about a pivot, it is not about the *FED* pivot. It deals with a related tipping point in equity valuation.
- **This bear market started with a real rate-related multiple compression and will end with a *margin contraction*.** We think the former is on its way to being played out, but we are likely to… pivot to the latter. Our work on "normal" multiples suggests a range of 20x to 23x sustainable real earnings for non-financial stocks. This reflects a "normal" real yield and equity risk premium. "Cost of capital" businesses with a rent around 7% ought to trade in that range, and it looks like they do as a group.
- **Stocks with *better* than average economic characteristics are also entering this range**: Accenture, Booking, Sonova, possibly Visa. Multiple contraction is dragging down all valuations indiscriminately, including for the better economic moats, possibly a first sign of exaggeration.
- **Sadly, investors are under no obligation to price "the norm" in periods of stress.** Risk, growth, margins are still all going in the wrong direction. Whilst multiple contraction might be played out, ***margin contraction anxiety*** is about to replace it. We find plenty of evidence that investors are now starting to worry about lower than previously expected sustainable revenue growth for crucial industries such as online advertising, cloud computing or semiconductors. Unless execution is perfect, with revenue deceleration comes a lag in operating costs reduction, i.e., margin *de-leveraging*. If this lag gets to capital spending, Free Cash Flow is unavoidably affected. Any GDP+ grower can end up with flat FCF for 2021-2023. No FCF growth for two years, anyone?
- **We agree, this spells trouble, but margin contraction is comparatively better than multiple compression.** First, because it tends to be cyclical rather than structural, in a way that a backup in real yields from too low a base might not be. Second, it can be fought by the companies themselves. The recent announcements from PayPal, Disney, Intel or Meta speak for themselves in this regard. Many more will come.

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Methodology

This is an empirical study attempting to assess where we are in this market downturn. We first assess what a "normal" earnings multiple might be, applied to "normal" earnings. Using normalised earnings creates some circularity: share prices may come down because the discount rate is increasing, or because expected profitability is decreasing. And the latter almost certainly influences the former. Once we have assessed if the multiple looks adequate for "normal" profits, we evaluate if this norm is conclusively sustainable in the long-term, or how damaged profitability might be.

For once, we have simplified the valuation of equities extremely, as the ratio of a "flow" (F) over a discount rate adjusted for growth (d minus g). This is not how it works for individual companies in real life; this static "model" has impracticable constraints; for instance, "sustainable growth" has to be strictly smaller than d to make sense. But for this article's purpose, we will ignore all this.

Using P/L earnings as the flow, the adjusted discount rate "d minus g" is the earnings yield, and its inverse, the "multiple", is the PE ratio. We won't fuss about the flow either. Purists will define it – rightly – as a *dividend* flow, but for practical reasons (e.g., share buybacks), we use indiscriminately our own distributable Free Cash Flow, GAAP earnings or Shiller's Cyclically-adjusted earnings. All work.

Each of these three components, F, d and g, has some sort of historical mid-point, which we call "normal" or "sustainable", and each follows its own drivers, which we are proposing to analyse.

The "normal" earnings yield is the hardest to pin down, and the least quantifiable, because it is made of a "normal" real yield and a "normal" equity risk premium; both are inferable, but neither is directly observable.

The "normal" flow is largely dependent on the direction and the sustainability of the margin, preferably the cash flow margin. This is easier. We routinely value stocks on the basis of a normalised level of Free Cash Flow. This way, we are able to extract a bottom-up, stock-specific "normalised" multiple (or its inverse the earnings yield), which we can compare to the above.

The sustainable growth rate, finally is made of top line growth and leverage, two familiar and easily defined concepts.

Is multiple compression over?

Answering this question requires a sense of what a "normal" multiple is. Identifying and measuring its underlying drivers is difficult and fraught with some irreconcilable theories and easy-to-make mistakes. Starting with the confusion between real and nominal, a pervasive issue in any serious discussion about equity valuation and a hurdle that we need to clear first. We carry on with our best shot at what a "normal" multiple might be, and assess where some meaningful and representative companies stand against this benchmark.

Everything is real with equities

Companies own *real* assets. This reasonably clear and unchallengeable statement is nevertheless beset by counter-intuitive, confusing facts. For instance: it is because they grow everything *nominally* (i.e., including inflation) that equities are a *real* investment! In other words, throw any inflation rate at companies and they are assumed to be able to absorb it and deliver the same… well, *real* rent on invested capital (see table below).

The value of this invested capital ("the economic assets") is assessed at Replacement Value, which is usually much higher than the accounting book value, precisely because of inflation. The difference is the cost of replacing a 30-year-old asset in the books at today's price, and this difference accounts for inflation and productivity. It can be demonstrated that a large chunk of goodwill paid by companies (the difference between the market price and the book value) is in fact accounted for by the difference between Replacement Value and book value, rather than the hubris of the Board of the acquiring company.

It follows that economically, inflation is a wash both in the P/L and in the "economic" balance sheet, as schematised in the following table:

	Year 0	Year 1	Change	Assumptions
Costs	-80	-88	+10%	*Input costs are going up*
Revenues	100	110	+10%	*The company increases its prices*
Operating profits	20	22	+10%	*22 / 20, the difference equals inflation*
Operating margin	20%	20%	0	*Unchanged*
Economic Assets	150	165	+10%	*Assets "at replacement value" increase by inflation, too*
Rent	13.5%	13.5%	0	*The ratio of profits to replacement value is constant*

SOURCE: VALUANALYSIS

The table above broadly shows how it is supposed to work, on average and in the long run. But even though inflation is a long-term wash theoretically, it is likely that the equity risk premium will be affected, perhaps in a major way, as companies adapt to a new inflationary environment.

- The simplified example above purposely but incorrectly looks at P/L margin rather than *cash flow* margin, which includes such cash drains as the change in working capital, which is **not** immune to inflation.
- It also does not take into consideration the time lag between input cost increases and the pass-through to selling prices, let alone the resistance of customers to such price increases.
- The company could also take a strategic decision to "invest in" (accept) some margin contraction to sustain or expand revenue growth, perhaps to widen its moat or simply to retain its customer base, if its competitive advantage is not strong enough.

Despite being "real", equities are therefore not immune to inflation changes, let alone to a backup in real yield. Both likely compress the multiple. If we want to know if this multiple compression is over**,** (or: if the earnings yield is high enough), we need to identify some sort of "normal" level.

What does CAPM say?

We are not great fans of the CAPM framework, but it offers a simple calculation of what a "normal" multiple might be, with its formula equating the expected return to a risk-free rate plus a risk premium, adjusted for beta.

The "normal" real yield is not a subject matter brimming with certainty. No theoretical advance has been made since Knut Wicksell, an early XXth century economist who sees the real rate of interest equilibrating savings and investment around the "natural interest rate". Since then, interest rate determination has been taken up by empirical studies, whose resulting econometric predictions are unconvincing. The Federal Reserve Bank of Cleveland keeps a useful long-term series of 10-year real interest rates going back to 1982, whose average is 2.46%, and latest reading (October 2022) is 1.80%.

The equity risk premium benefits from the definitive paper from Arnott and Bernstein *What risk premium is "normal",* in 2002 Financial Analysts Journal. This is an extremely detailed and thoughtful paper which concludes that:

The historical average equity risk premium, measured relative to 10-year government bonds, (...) is about 2.4%, half of what most investors believe. The "normal" risk premium might well be a notch lower.

It is tempting to put these two figures together ("normal" real rates and ERP) in the simplified CAPM formula. Assuming a beta of 1, this gives a "normal" real expected return of 5%, or a multiple of 20x.

Real Return = Earnings Yield

The interchangeability between an observed market multiple (or its inverse, the earnings yield), and the expected real return on equities has long been established in the literature. The observed earnings yield is only a proxy, but a good enough one that works for the long term and for the market as a whole.

Unquestionably, the best set of aggregated data for earnings yield is the Shiller PE ratio, or CAPE, designed and maintained by the eponymous Yale Professor. Using a normalised and inflation-adjusted multiple improves the correlation to future 15-year return markedly, from 52% to 65% (in: Portfolio Construction Forum, 2018).

The mean Shiller PE since 1881 is 17x. Whilst we see the merit of looking at very long-term data series, it is worth mentioning that this represents the bottom of a putative range, as the trend in the Shiller PE is undeniably up. The table below shows various averages of the Shiller PE ratio:

Period	Average Shiller PE	Real expected return
Average since 1881	17.3x	5.8%
Average past 100 years	18.3x	5.5%
CAPM yield + ERP	*20.0x*	*5.0%*
Average past 50 years	21.3x	4.7%
Average since 2007	26.1x	3.8%

Source : R. Shiller, Yale University, ValuAnalysis

2007 is the birth of the smartphone, and we think that this is a significant date which might correspond to a new economic paradigm (sustainability unknown). We see various explanations for such a break in multiple. The most brutal would be a flood of liquidity unwarrantedly buoying the value of assets, and bound to mean-revert under the new policy of central banks, a hypothesis we are loath to rule out totally.

There is a more benign explanation, albeit slightly technical. In the Gordon formula, it is assumed that the dividend growth component **is a function of retained earnings**, since earnings are either distributed or retained. The model assumes that reinvestment of retained earnings is done at constant ROE. If the marginal return on investment increases, perhaps because of a massive technological shift (innovation), perhaps because asset lives are getting shorter due to a higher intangible content, perhaps because technological moats are larger, then the multiple will increase, too. It is a plausible explanation for what has happened with the digitalisation of the economy over the past two decades, and it is not clear that this is about to stop, even though we wholeheartedly support the idea that it will, eventually. This, we believe, is a major point of contention around what the "normal" multiple might be.

What we assume and what we observe

It is probably prudent to assume a normal multiple range within a restricted historical range. We propose to call it 17x to 21x normal profitability, *at a normal market growth rate*. This is an important qualification because only the real yield component applies to all stocks (many studies observe that real yields converge globally in any case). The risk premium is clearly different at least from sector to sector (regulated or not, cyclical or not, long or short asset lives etc…). And the sustainable growth rate is the most differentiating factor among companies.

Sustainable growth is not here the *in fine* growth rate, which has to converge to GDP to make the financial models work, but carries no investable information. In our view, equities are priced off a long-term sustainable growth rate which we estimate to be over a 10-year horizon, or alternatively over a couple of investment cycles (asset lives x 2). Thus, we think that Microsoft

can outgrow global GDP in the coming decade in a way that, say, Verizon cannot. At constant risk premium and real yield, their "normal" multiples cannot be identical.

Furthermore, the full market includes high risk premium companies that use leverage, especially banks and other leveraged businesses. We estimate that about 15% of the market might trade on such an inflated risk premium, which translates into a 50% PE discount to a large stable company. For instance, the long-term historical average PE ratio of JP Morgan is 15.6x, whilst that of Johnson & Johnson is 29.7x. This very rough math points to a 7.5% (0.5x0.15) adjustment to the range, or 19.5x to 22.7x. False precision excluded, **we estimate that the "normal" multiple range for non-financial stocks is 20 to 23 times "normal" earnings**, defined as inflation-adjusted 10-year average historical earnings by the CAPE formula.

Moving back to our framework, we identify ca. 600 large caps trading as a group on a CAPE of ca. 21x (our calculation), **with an average rent below 7%**. This is not really surprising. Companies with a rent at or below 7% are "cost of capital" businesses which cannot sustainably outgrow GDP, since they do not generate any excess return to fund it. And indeed their 5-year average revenue growth rate[1] is 4.25%. They have no reason to be excessively priced and have only been marginally derated this year.

What we are looking for is anecdotal evidence that significant non-financial companies with overall **superior economic characteristics** might be getting near or within this range, too. This would be an indication that multiple compression might have run its course. "Superior economic characteristics" include some straightforward patterns such as **above average growth** and **above average rent** (the latter is a pre-condition of the former). **Operational leverage** is harder to come by but is precious, too. **Above average resilience** reduces the risk premium, which is why defensive stocks (e.g., Procter and Gamble) tend to trade at a premium. The following paragraphs identify companies that all enjoy at least one such characteristic, yet trade on the multiple of an ordinary company.

High rent and Consolidator: Accenture

Accenture is at the core of the digitalisation of the economy and works with the entire spectrum of businesses available. We view this company as a pertinent sounding board, representative of a GDP+ business able to grow its revenue base sustainably, say in the coming decade, at 6%+ on average. Sustainable growth is inherently linked to the level of the rent, statistically as well as logically. Accenture employs very little capital and its rent is very high as a result (ca. 45%), ensuring that growth is funded and allowing the company to be an avid consolidator.

Based on the above, we estimate that Accenture's sustainable FCF in the coming two to three years is around $8bn per year. This is a "GAAP-like" definition of FCF, including, for instance, Stock-Based Compensation as a cost, or amortisation of intangibles as an operating charge. In other words, a fairly conservative definition of FCF. On that basis, the stock trades on about 20x normalised, or sustainable, FCF.

[1] Note that all revenue growth rates that we quote are of course nominal..

In early January 2022, at the peak of its valuation, the stock was trading on 32x FCF. The same level of FCF, or exactly $8bn. In rent terms, the normalised rent was 45% then, 45% now. In other words, the fall in the share price from above $400 to ca. $285 is purely due to a change in the multiple.

Long-term runway and control of the cash flow margin: Sonova

Sonova is another 6%+ revenue grower with superior economic characteristics. This market leader in hearing aids benefits from clear long-term visibility, based on an ageing population and new habits (mobile phones, earpieces etc...) putting strain on human hearing. We estimate that the company can accrue revenues at this 6% clip for the coming decade.

Sonova has been able to control its cash flow margin remarkably well, avoiding so far a working capital cash drain that so many have not been able to avoid. Its rent (flow on economic assets) on the other hand is under some light pressure, as the company is increasing its capital investments. We estimate that its sustainable rent will be close to 30%, versus 31% currently. Both levels are synonymous with substantial excess return. And, contrary to many other businesses, a gap has not opened between current and normalised rent. This not only suggests that the company does not need to go out of its way to achieve "normal" profitability, it also underpins the confidence in this normal level of profitability.

As a result, we estimate today that Sonova's FCF can average CHF 700m in the next two years, a 3.7% increase on our March 2022 figure of CHF 675m. The stock was trading then on 34x this FCF. A 38% fall in its share price puts the stock on a normalised FCF multiple of 21x, well within our "normal" CAPE range. Like for Accenture, the fall in the share price is mostly due to multiple contraction.

Above Average Resilience: Booking Holdings

The company is currently executing a trade-off between new growth areas (flights, payments), some market share gains (taking advantage of some of its competitors' weakness post pandemic), and lower margins. It has already warned the market that it will not be able to recover its pre-pandemic margin level. We estimate and normalise its cash flow margin 400bp below the pre 2019 average as a result. In our speak, this means that the company has limited margin leverage on its revenue growth. But top line is on par with previous examples: we estimate its sustainable revenue growth to be 6 to 7%.

In December 2019, we calculated a normalised rent of 20.3%, corresponding to a normalised FCF of $4.2bn; the stock was trading on 20.5x this level. As of November 2022, we calculate a rent of 21%, corresponding to a normalised FCF of $4bn; the stock is trading on a multiple of 20x. This does not look like much; many companies are well above their 2019 levels. The stock trades on exactly the same multiple as three years ago, an earnings yield of 5%. This is conveniently almost exactly the normal real yield (2.5%) and the normal risk premium, as per the CAPM paragraph of page 4.

We are suggesting that the stock may not belong to the "normal" range for two reasons. First, the company has not damaged its sustainable growth rate during the pandemic. Second, it has

been able to recover 100% of its previous earnings power, despite a more than halving of its revenue base during 2020 (from $15bn to $6.8bn), cosmetically avoiding making losses in profits and cash during that year.

These two reasons have in fact the same root: above average resilience. The picture is possibly blurred currently by the severe cyclical swing that has just occurred, but resilience is a key economic characteristic which, we believe, is rewarded in the long-run by investors in the form of lower-than-average risk premium.

Deep Moat and Leverage: Visa

Visa hardly needs an introduction. Like Booking, the pandemic has taken its toll on the company, but nowhere near as severely; travel revenues were compensated in part by online purchases.

The company's rent is stratospheric, in the 70s%. Its revenue growth is equally impressive, in double digit territory; we normalise a sustainable level at 8.5%, even though the company is adamant that current trends in the market, and in particular the emergence of "new" digital payment methods, will increase its trend growth.

In early 2022, we estimated the rent to be in the high 60s%, with a normalised FCF slightly above $14bn. As of November, we estimate that the FY 2022 rent was in the 70s%, and we normalise it at 74%, with a corresponding normalised FCF of $16.5bn, up 18% from a year before. On that basis, the stock trades on 25x, vs. 33x at the beginning of the year. This is not quite within the "normal range" of 21 to 23x, but neither is this a "normal company"! Besides, we are normalising FCF quite conservatively, with a near-term revenue growth of 7.5% p.a., below potential. Growing revenues at potential, or 8.5%, would add a billion to FCF and reduce the multiple by a full point. Further, on consensus GAAP earnings, the stock would trade on ca. 21x, which made us say on the front page that Visa was *possibly* within the 21 to 23 range already.

In any case, we don't think that it is necessary to "game" the figures; even within two multiple points of the range, we feel that multiple compression is well up with events. Note that everything is not perfect in the world of Visa. There are frequent reminders that regulatory authorities, as well as large clients such as Amazon, feel uncomfortable with the Visa/MasterCard duopoly. The risk premium should probably be assessed above the market average as a result. But this is more than compensated by the company's seemingly well defended moat, as well as its tangible platform effect.

From Multiple Compression to Margin Contraction

The fact that we are able to identify large companies with superior economic characteristics trading within the range of average ones is signalling that **the grinding effect of higher real yields and risk premium, i.e., "multiple compression", is well advanced.** Perhaps the extravagant reaction of the market to the October CPI number will retrospectively mark the end of this phase. But this cannot be said without qualification. There is still a pool of equally large and important companies trading one floor up, in the 25 to 30x bracket. These companies tend to be exceptional, with either a far superior grip on their markets, or a far superior sustainable growth, or both. This select list includes such names as Microsoft, LVMH, L'Oréal or Thermo Fisher. It is

unclear to us how these companies' share price will continue to fare in this bear market; investors have resisted de-rating them to the same extent for reasons that are hard to rationalise, sometimes, except perhaps for their exceptional resilience, like the US waste management companies which are also part of this cohort.

For that reason, we cannot exclude entirely that some residual de-rating continues in the market, especially if the real yield goes beyond our putative 2.5% "normal" level. But the driver of the bear market should progressively move away from multiple compression and focus on the other shoe to drop: margin contraction. Focusing on normalised earnings (FCF) to measure objectively the former is useful but artificial. In reality, share prices fall for a multitude of reasons beyond the rise in the discount rate. In the next section, we analyse why and how.

Margin Contraction Anxiety – How Damaged is Profitability?

Investors will not stop at "normalised" or "sustainable" earnings, and will inevitably move on to the question of permanent damage to either growth or profitability. Structurally, they will doubt the long-term sustainability of many subcomponents of the FCF creation. Cyclically, if the spot profitability is too far away from the assumed normalised level - however reasonably estimated the latter has been - investors will tend to increase the risk premium. Gradually, the main driver of this bear market will move from multiple compression to "margin contraction anxiety", shorthand for a general questioning of sustainable profitability. In fact, it has already begun.

The Three Drivers of FCF

At this point in the bear market, we think that investors will be more inclined to question a firm's ability to retain old growth patterns than care about real interest rates. Those firms who cannot withstand this scrutiny, and disappoint, will see their share prices crushed.

FCF formation is simple to assess as it rests on a handful of drivers only: **revenue**, **margin**, and **capital spending**. Or, dynamically, revenue growth, margin expansion and capital intensity. Schematically, revenues are captured by expensing operating costs, booked in the P/L. The more the top line grows without dragging along operating costs, the better: the operating margin expands. This however is the most basic level of understanding of a business model. Revenues are also captured by employing capital, "fixed" (fixed assets) and "floating" (mostly working capital). Each year, operating profits are called to make an important contribution to both the fixed and floating parts of invested capital. The contribution is not recorded in the P/L, making this part of the accounts only moderately useful.

Any business model can therefore be analysed schematically as a stream of FCF whose growth rate in revenues is leveraged by operating costs and capital spending. At its most virtuous, this mechanism becomes a **platform model**, able to grow revenues disproportionately to operating costs and capital spending, maximising FCF growth. At its least virtuous, this becomes a **deleveraging model**, where more needs to be spent in capital and operating costs relative to the growth in revenues that the business can capture, resulting in a suboptimal FCF growth. Needless to say, these two versions will not attract the same multiple, even though both can grow earnings.

In an upturn, leverage comes naturally even to the least attractive business models. In a downturn, the reverse applies, and even companies executing well may struggle, too. In the previous section, we took Accenture as the example of a company able to maintain its rent and to stabilise its FCF. As we pointed out, the resulting FCF amount is around $8bn, for 2021, 2022 and 2023. Bond investors delight in 0% growth, but equity investors need real growth, and they might not be getting any for two years in a row, in this case. This shows that the complex interactions between revenues, operating costs and capital

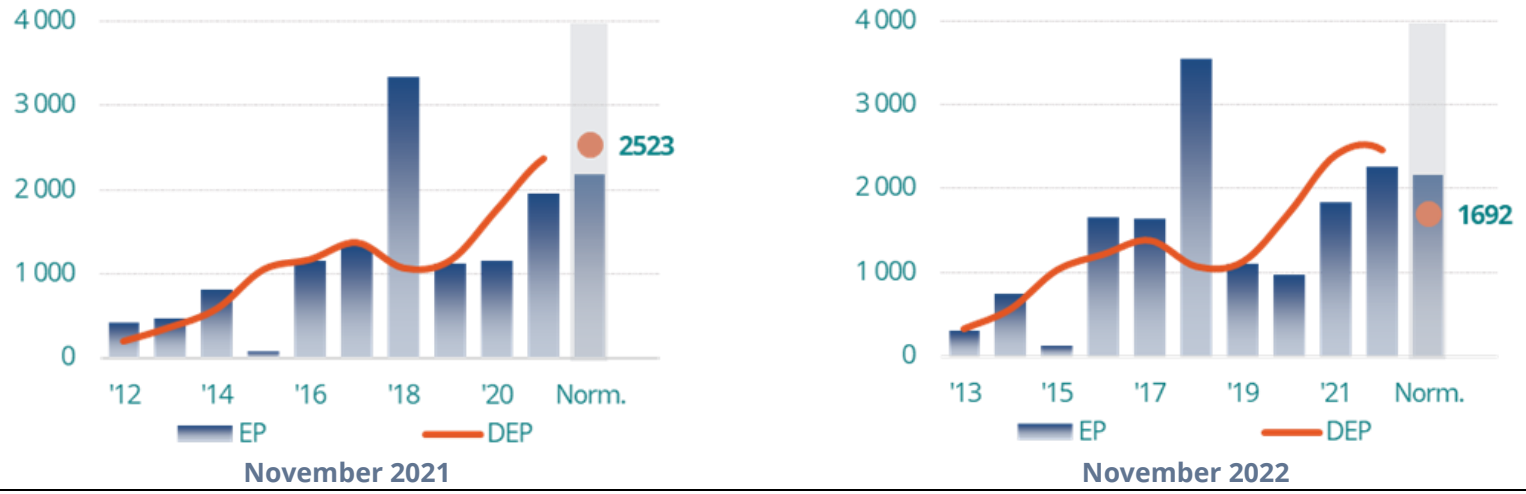
spending, even for resilient companies, might result in low or no growth in FCF during this slowdown. We call this the "margin contraction anxiety" and there are many signs that this is about to become the dominant issue going forward.

Anecdotal Evidence of "margin contraction anxiety"

Anxiety of long-term sustainable growth - NXP

Sustainable revenue and its associated growth are the head drivers of FCF formation. We think that in a number of cases, a low 20s normalised FCF multiple has more to do with a disbelief in previously accepted growth numbers than with a rise in the discount rate. NXP is a good example of this. Historically, this semiconductor specialist has been able to grow its top line at slightly more than 5% p.a. The company announced a new medium-term target (2021-2024) In November 2021 to grow revenues between 8 and 12% p.a. We measured NXP shortly after this announcement; the stock was trading on 30x normalised FCF, with a rent of 16.6% and a normalised FCF of $2.2bn. One year later (November 2022), the normalised FCF is still $2.2bn and the rent is at a similar level, but the multiple is now 21.3x normalised FCF. During this time, the company's execution has been near perfect, with cash flow margins remaining unchanged almost to the digit, no leakage from Float Capital and a well-controlled Fixed Capital spending. Yet, compare these two charts, plotting economic profits (blue bars) and discounted economic profits (orange line) in November 2021 and 2022:

NXP : Economic Profits (EP) and Discounted Economic Profits (DEP)



SOURCE : VALUANALYSIS LIMITED

The benefit of using this EVA© metric, usually not part of our standard toolkit, is that Economic Profit is calculated *after* a notional capital charge, i.e., *takes into account the cost of capital changes*. Between 2021 and 2022, we model a 75bp increase in real yield, and both the economic profit and its discounted version (EP level discounted by the share price) are therefore presented here after this impact. Everything else being equal, the discounted level of EP should have followed the modest decline in normalised EP, which can hardly be seen on the chart[2]. Yet it moves from $2.5bn, at a premium to the normalised level of EP, to $1.7bn, a deep discount. These calculations do not aim at the same precision as nuclear physics; it is possible that some real yield increase, or, more likely, some increase in the risk premium, have crept into this change anyway. By not as much as to create a 33% fall in the discounted value. In fact, the most likely source of this de-rating is a **revision of the sustainable growth rate.**

Because NXP has executed so well, investors cannot be suspicious of deleveraging, with operating costs and capital spending getting out of hand relative to revenues. If anything, investors should believe the contrary. Thus, investors must be questioning the ability of the company to deliver its promise on its very ambitious revenue growth of 8 to 12%. It is unlikely that a credible 8 to 12% grower would trade at such a low multiple; we think that a believable double digit revenue growth would be today associated with a high 20s multiple, if not higher.

Leverage – The Stealth Destroyer of FCF growth

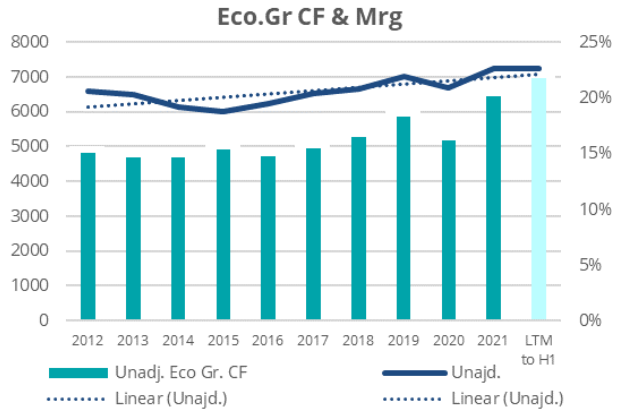
Leverage is a stealth provider of margin contraction anxiety in terms of capital requirements. The cash demands on the revenue line need increased scrutiny at times of a slowdown. P/L margins capture operating costs, but not capital spending. If analysts are not careful, the signals quickly become misleading.

Schneider, a world leader in energy management, is a key player in the transition towards electrification. Its sustainable top line growth is 5%+, with the prospect of a step up, complemented by some leverage to produce a sustainable FCF growth of perhaps 7%, in line with its historical dividend growth per share. Its stock trades on 22.5x normalised FCF. Its normalised rent is in the high teens (17-18%), but we calculate its LTM (Last Twelve Months) rent to be 8%.

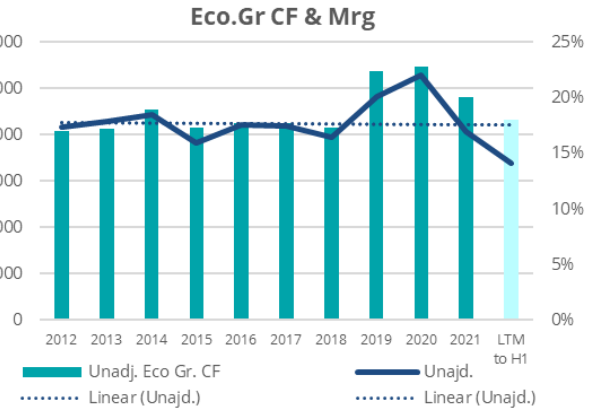
On the next page, we present two versions of Schneider's gross cash flow margin, The version on the left is the Earnings Before Depreciation and Interest, some sort of taxed EBITDA, a P/L measure. The one on the right is based on Cash flow from Operations (CFO). As Alfred Rappaport famously said: "Cash is a fact, profit is an opinion". And, in this case, the wrong opinion.

[2] Economic Profit is a very volatile and sensitive residual value; the eagle eyes will have noticed that historical calculation is different for some years as a result. What matters is the grey area, the normalised level of EP and its discounted value.

Schneider – P/L vs. cash flow margin



Gross Cash Flow defined with EBDI



Gross Cash Flow defined with CFO

SOURCE : VALUANALYSIS LIMITED

The collapse in the LTM rent did not come from revenues, which reached an all-time high at the latest interim stage. Like many companies, Schneider has been caught by supply chain issues and had to finance a massive increase in receivables and inventories, mostly. LTM figures are notoriously volatile, as they are the addition of four un-audited quarters. Indeed, the company has reiterated its EUR 3bn FCF target for 2022, suggesting that there will be a catchup for the balance of the year. It remains that there is now an uncertainty about the speed at which the current 8% rent will revert to its "normal" 17-18% level. This uncertainty, which comes from (capital) de-leveraging is unquestionably affecting the risk premium, even for a stock as resilient as Schneider.

Capital Spending – The Undisguised Destroyer of FCF

Lower down the Cash Flow Statement, capital spending represents the last cash claim before Free Cash Flow. Not everyone can do it, as only the rich can spend, but the temptation to be profligate with cash from operations is universal. The current largest offenders are the Technology companies, ranging from Amazon (massive surge in logistics capacity and data centres) to Texas Instruments, who is increasing capacity and is allocating $3.5bn in CAPEX per year between 2022 and 2025, from an average of ca. $730m between 2015 and 2020, a cool fivefold increase.

Increasing the asset base is not an infringement to good capital allocation, if it supports a larger revenue base, preferably growing at a faster clip than before. This is Texas Instruments

project. But if a company is allocating more capital and more operating costs at a time when revenue growth is decelerating, **the deleveraging will be brutal.** If the company enjoys high growth and trades on a high multiple as a result, **the damage might be irrecoverable**. We have no better example than Meta in this respect.

On our definition, we estimate that normalised FCF, including stock-based compensation costs, has gone from $21bn in November 2021 to ca. $8bn in November 2022, a 62% fall in 12 months, whilst the Enterprise Value has gone from ca. $900bn to $285bn, a corresponding 68% fall. Sometimes things are easy: market value does follow FCF. Free Cash Flow is a residual; relative to the size of any company, it is usually a small number. Here, the shortfall is "only" $13bn. We estimate the breakdown as: $7bn from additional CAPEX, $3bn from revenue shortfall and $3bn from cash flow margin contraction. But $13bn on a multiple of 47x is indeed $615bn, or how much Meta's value has been lost in this. Contrary to a cyclical business whose management will anticipate lean times and will tend to reduce capital spending, Mr. Zuckerberg has wagered the company's profitability for his vision. The market has been unforgiving so far.

Towards 2023

Our best guess is that 2023 will be the year of margin contraction, just like 2022 has been the year of multiple compression. The second shoe is yet to drop, and it is anybody's guess how the cumulative effects of the Ukraine war, higher energy prices and inflation, higher interest rates, supply chain issues, commercial tensions between the US and China, the vagaries of European policies, to name but a few, will play on asset valuation. "Not so well" does not sound like a far-fetched answer.

But the worst is never certain. Margin contraction, in our view, is more benign than multiple compression. One is endogenous, the other is not. Companies spend their lives managing costs and allocating capital, or at least they ought to. Shareholders are vigilant, and are ready to voice their concerns when margins are not protected. When we started to write this article, the only example of decisive action on costs that we could quote was PayPal. In the space of a few days, Intel, Lyft, Disney, Meta, Snap, have all announced substantial restructuring programmes, mostly focused on operating costs, with Amazon rumoured to mull over its loss-making pet projects. It is likely that many other such announcements will follow. Microsoft, Google among others have hinted during earnings calls that they will consider reducing the pace of their spending (operating costs and capital spending), which will reduce deleveraging, assuming that top line growth decelerates. If it does not decelerate, or not much, 2023 will surprise on the upside, as a reduction of cash claims will boost leverage and profitability. This cannot be totally excluded either.

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Recommendation	**Number**	**% of total**	**Number**	**% of total**
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Hold	1	11	0	0
Sell	0	0%	0	0

The above table covers the period 15th November 2021 to 15th November 2022. Last updated 15th November 2022.

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