Why do we do what we do?

PART 1 – VIA EQUITY RESEARCH TEAM

VIA AM

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Introduction

It can sound a bit steep for some people, but it must be made clear that accounting – while being important under fiscal, transparency or reporting dimensions – **has never been engineered to assist investors in selecting stocks.**

There is excessive flexibility of concepts and conventions globally, and this flexibility provides fertile ground for maneuvers, and some degree of manipulation.

Hence, what is it that can realistically deal with oversights, inconsistencies, and limitations in using accounting data?

The answer is a **proper process of normalization**, which requires a genuine bold attitude for constantly challenging traditional accounts and correcting inaccuracies, **eventually unearthing the economic truth, being good or bad**.

That said, this paper's beginnings are not about our view on accounting normalization, but **what the outside world thinks about it** instead. And by outside world, we mean two very powerful and complementary drivers in the historical development of financial markets: academic researchers and investment gurus.

In the first part of this double paper, we will come back on various recent papers emphasizing how the **unglamorous job of fundamental data mining has become a unique source of alpha generation**. Then, we will reflect on a few accounting comments within Warren Buffett's annual letter to shareholders. When relevant, we will add concrete real-life examples to some of those reflections, putting them into the context of what we do.

Ultimately, this will lay out some preliminary answers to the "why do we do what we do?" question – or why do we think normalizing companies account on a large scale **should be performed by anyone looking at valuing stocks** – before turning to the more quantitative side of the answer, in part 2 of this article.

I The accounting issue(s)

Access to public financial information has long been made available on servers as EDGAR, gathering Annual Reports (10-K), Quarterly Reports (10-Q), etc. of both US and non-US companies, all required to file and submit these documents abiding by the SEC regulations. As of November 2022, **the EDGAR database comprised more than 21 million filings online**. Given the quintessential 'public' nature of this information (and its accessibility by anybody in the world), **one would expect that using such filings should not be profitable** – else being equal.

Yet, various research papers have been written over the last decade not only to evaluate the empirical effect of exploiting these documents, but also to contrast the impact based on **what type of information is accessed, and how it is used by investors**.

Most accounting metrics are made readily available to investors by fundamental data providers that compute the metrics from companies' filings. Having said that, the nuance we would like to address is **the impact of using these 'undigested' figures (though coming from financial reports), versus opening these filings and start digging into the data…**

(i) Fundamental filings, a highly profitable piece of information to investors

In an attempt to answer the question "*Do Hedge Funds Profit from Public Information?*", Crane, Crotty and Umar (2018, **Ref-1**) considered a sample of about 600 hedge funds (alive and dead, based on the HFR database), their historical monthly returns, and main characteristics (AuM, process, fees, etc.). They filtered funds based on their strategy (excluding for instance macro hedge funds or fund-of-funds from the sample) and only used the ones publishing performance on the HFR database.

Each fund being associated with its own IP activity on the EDGAR server, they could track all existing records – that is, by company, type of download (10-K, 10-Q, etc.), time, frequency, etc. – hence build a large set of data points.

The results are as striking as they follow common sense: managers who download fundamental information (across filing types) outperform those non using it by up to 1.5% per year. **In other words, a manager doing his homework performs better**

than another who doesn't. Above-median users earn even higher subsequent abnormal returns.

This indicates how fundamental data, in their purest form (directly within companies' filings), seem to be one of the most profitable pieces of public information available to investors.

Investors who are not using companies' filings at all may use or create factors based on widely available accounting metrics (the famously known Return on Equity, Price/Book or Price/Earnings ratio to name a few) without challenging the data used to calculate them. **Or simply put, they stick to their blind faith in documents they don't open.**

When thinking about equity investing, a rigorous understanding of what flows into the factors is essential. Hence, the **equity analyst's work of grasping fundamental filings is a necessary first step to properly model and assess a given company's economics.**

The starting point of our normalization process is to understand and gather all fundamental data available of any company we are initiating coverage (using annual report data, quarterly releases, M&A pro-forma filings, etc.).

Experience and know-how are key: as just introduced, annual reports are not only pages containing tables of financial statements, but they also encompass more than hundreds of pages of complex notes or references, potentially holding crucial information.

In addition, our model is fed with forecast data (filtered consensus estimates), pricing data (stock prices, associates & minorities stock prices, etc.) and non-financial data (resources reserves, production, capacity installed, etc.).

This emphasis on 'big (fundamental) data' gives the analyst the required 'grist for the mill' to make all necessary adjustments and ultimately aim to move towards the economic truth of a company.

(ii) Not on a standalone basis, but within a systematic model

Coming back to Crane, Crotty and Umar's (2018 - **Ref-1**) paper, to better grasp the channel by which public information usage is profitable, they analyzed a sample of users that are ex-ante likely to have an information processing advantage.

Put differently, **they isolated funds systematically scraping the EDGAR database.** By scraping, they mean hedge funds using robotic means to acquire SEC filings. They classify a fund-month as robotic "*if the fund accessed more than 50 filings in a single day and the median time between downloads that day was less than 30 seconds*". If the fund has more than one robotic month, it is labelled as a Scraper.

And again, the outcome is straightforward: those scraper investors earn another 1.5% higher abnormal annualized returns than the non-scrapers. They conclude arguing **that "scraping" is related to the information processing edge mutual funds may have.**

This suggests that investors **are better off fetching fundamental data in a systematic way, rather than manually retrieving and processing filings.** The information processing dimension is indeed a core requirement to build & manage rigorously a large enough coverage for the purpose of a fund management.

Our database aggregates more than 3,000 live companies, from 48 different countries, with data ranging from 2006 to 2022, across all industries and accounting standards. All in all, every day, our models compile more than 1,000 points per stock, or more than 3,000,000 data points in total.

But while essential, adjustments factorization isn't an edge in itself. The core role of automation in our process is to allow analysts to focus on high added-value fundamental elements, for better stock selection.

Essentially, the multiple systematization processes our model contains are technological tools which have been tailored through decades of experience in fundamental research. The machine is here to serve the analyst and the investor, not the other way around. And when concluding on this second test, Crane, Crotty and Umar clearly underline this nuance: "*extreme information processing is not the channel explaining the full sample's usage-return relation*".

Indeed, for people who have already striven to fetch fundamental data straight from the source (systematically or not), most of them paradoxically surrender facing the complex aspects of 10-Ks, 20-Fs, 8-Ks, 10-Qs etc.

Yet again, if the devil is in the detail, we rather see this complexity as a barrier to entry offering a land of opportunities.

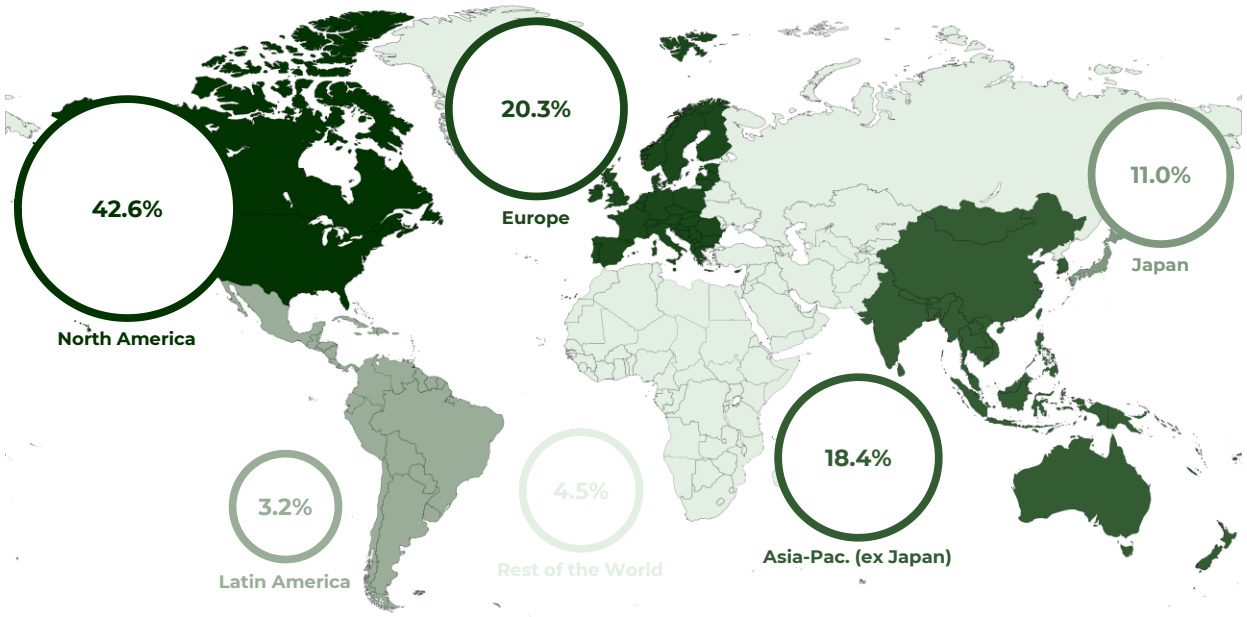


FIG 1: REGION'S COVERAGE BREAKDOWN (as of November 2022)

(iii) Complexity as an opportunity

Loughran and McDonald ("*Measuring Readability in Financial Disclosures*", 2014 - **Ref-3**) extensively analyzed implications of the textual uncertainty and complexity 10-Ks/10-Qs may contain. As they qualify it, "*textual uncertainty may arise when company management is unsure of the implications of the financial results or when there exists uncertainty concerning future cash flows of the firm*".

They used a large sample of US 10-K filings from 1994 to 2011. In their regression, they observed post-filing return-related metrics. To evaluate readability, they used the Annual Report's size as a proxy, which is relevant at least for its simplicity and transparency.

They show that **larger 10-K files have significantly higher post-filing date volatility, and higher standardized unexpected earnings.** That lead them to conclude as follows: "*the less material investors and analysts must digest to get valuation information from company managers, the better they are at predicting subsequent value relevant events*".

Following this analysis, Crane, Crotty & Umar (2018 – **Ref-1**) used another proxy for complexity, the "*Fog Index*". This metric was developed by Gunning (1952 – **Ref-2**) and calculated from both the average number of words and the percentage of complex words in SEC documents.

They found out that **viewing filings with relatively more uncertain language (i.e., high fog index) results in higher performance.** And the magnitude is quite large: a one-standard deviation difference in textual uncertainty is associated with subsequent performance improvements of about 1% per year.

Let's leave academics for a second and see a practical example. When normalizing the accounts of giant US utility services company Exelon Corp., we came across something called 'Nuclear Decommissioning Trust Funds', $13bn in long-term assets on 31/12/2017. The definition on page 206 of 2017 10-K is the following: *"Exelon, Generation and CENG maintain trust funds, as required by the NRC, to fund certain costs of decommissioning nuclear plants. The mix of securities in the trust funds is designed to provide returns to be used to fund decommissioning and to offset inflationary increases in decommissioning costs"*.

Exelon.

Country: United States

Sector: Utility

Market Cap.: $41 B

It's therefore possible to confirm that the whole of the $13bn is long-term investments (they are 100% financial assets), put aside by the company to cope with future cash outflows to decommission nuclear plants.

As this case shows again, large-scale accounting normalization requires the double expertise of a financial and a big data analyst (and being able to smoothly switch from one hat to the other).

In various situations, our analysts are indeed facing very 'foggy' areas, for which the non-glamorous job of digging into the statements must be done and understood extensively. This is precisely where the human value-added part lies, and for which a robust and homogeneous analyst assessment is the only one desirable.

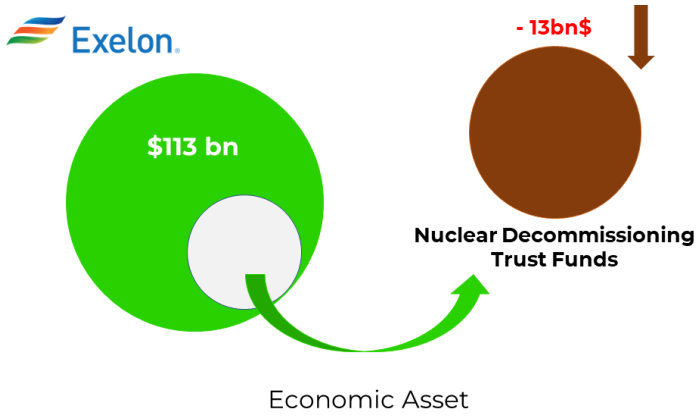


FIG 2: NUCLEAR DECOMM. IN ECONOMIC ASSETS RETREATMENT - Sources: VIA AM, Bloomberg

Why does it matter? Because long-term financial investments must reduce the Economic Enterprise Value. If they are kept in Other Long-Term Assets, the Economic Assets is over-stated by $13 bn., making the whole economic profitability and valuation flawed. In this case, we are talking about an amount that corresponds to 36% of the current market cap.

Ultimately, **outsmarting complexity in corporate filings is key**, but it is not a one-time exercise. Indeed, normalization requires a continuous and timely routine.

(iv) Through a continuous and timely approach

A study conducted by Chen, Cohen, Gurun, Lou, and Malloy ("*IQ from IP: Simplifying Search in Portfolio Choice*", 2017 – **Ref-4**), gathered SEC's EDGAR data from 2003 to 2016 and linked the monitoring behavior of hedge fund managers (mostly through filings downloads) to specific events on stocks they hold. They introduced the concept of 'tracking', as the repeated filings download pattern for a given subset of companies by mutual funds.

Based on this idea, Crane, Crotty & Umar (2018 – **Ref-1**) showed evidence that trades initiated by investors related to 'tracked' firms (in this case, stocks for which 10-K/10-Q information has been consulted for several fiscal periods in a row) **are more informative than other trades for future stock return**. They show that a one-standard deviation increase in the median tracking status of viewed filings corresponds to 55 basis points difference (annualized) in fund performance.

Overall, the usage intensity/consistency is positively related to future performance. Which leads to a second non-rocket science conclusion: **a manager who does his homework on a regular basis performs better than a manager who does it once.**

Instead of and better than 'tracking', one must put in place a robust, **standardized, and consistent framework**. This is another major prerequisite to accurately compare companies with each other, no matter the sector, the country, the accounting standard, and so on.

This normalization process, if it is to be properly done, must be achieved throughout a complete and detailed set of adjustments. Once carefully done, it has an impact on stock selection, and hence potentially on performance *(but let's not spoil you on the second part of this paper too early)*.

When initiating the coverage of any new company in our database, the inputs from analysts are supported by a mature decision tree, based on more than two decades of analyst questioning and fundamental research. Within this framework, each company has its own 'tailor-made' adjustments, for the remainder of its lifetime. Ultimately, this homogenization allows us to compare apples with apples – or say, for instance, treat a Swedish truck maker and a Japanese video game developer on the same foot.

As a result, a key aspect of our normalization process resides in updating/ controlling the flow we impose to each company we follow.

We have 3 levels of monitoring: daily, monthly, and annual.

- Every day, each company is automatically refreshed with the latest fundamental/pricing/estimates data available – as a mean of being both up-to-date and controlling the data received.
- Monthly, we track every single newly announced corporate action (M&As, Spin-offs, Splits, etc.) that may require adjustments ahead of a company's annual report yet to be released.
- Finally, every year, each company's 10-K acts as a 'pit-stop' for the analyst, who may decide to make new adjustments, or to update old ones, depending on the new nature of the filing.

II Reflecting on Warren Buffett's letters to shareholders

Warren Buffett usually says he loves to curl up with companies' annual reports. In Mary Buffett and David Clark' book "*Warren Buffett and the Interpretation of Financial Statements: The Search for the Company with a Durable Competitive Advantage*" (**Ref-7)**, Buffett says an investor gets smarter by reading "*500 pages like this every day. That's how knowledge builds up, like compound interest*".

In his Berkshire letters, he rightfully criticizes accounting problems and limitations, corroborating the view that **poor investment decisions may arise when using raw accounting data not designed for stock-pickers**.

In fact, he also makes very clear that mastering accounting is a pre-condition to invest: "*accounting is the language of business and it's an imperfect language, but unless you are willing to put in the effort to learn accounting – how to read and interpret financial statements – you really shouldn't select stocks yourself.*"

As an example, in his 2017 letter to shareholders (**Ref-5**), Buffett swiftly turns to accounting: "*The new rule says that the net change in unrealized investment gains and losses in stocks we hold must be included in all net income figures we report to you. That requirement will produce some truly wild and capricious swings in our GAAP bottom-line. Berkshire owns $170 billion of marketable stocks (not including our shares of Kraft Heinz), and the value of these holdings can easily swing by $10 billion or more within a quarterly reporting period. Including gyrations of that magnitude in reported net income will swamp the truly important numbers that describe our operating performance. For analytical purposes,* ***Berkshire's 'bottom-line' will be useless****. We will attempt to alleviate this problem…Nevertheless,* ***I expect considerable confusion among shareholders for whom accounting is a foreign language.***"

Indeed, new or reformed accounting norms are not meant to make life easier or clearer to investors. They tend **to add extra layers of complexity or 'pollution' over time**, making trickier the attempt of finding the truly important numbers for measuring the operating performance, even for experts.

With that in mind, we will focus on two important themes discussed in the 2017 Berkshire letter: the big issue with the 'Bottom Line' (or Net Income) analysis and the issue of undistributed earnings of investees.

(i) "Bottom Line" analysis: a recipe for obliviousness

Unfortunately, the drawbacks in analysing 'bottom-line' results are not limited to distortions caused by unrealized investment gains and losses in stocks. Let's see it with 3 concrete examples.

a) The Carrefour Case

The first suitable illustration of a P/L polluted by a material non-operating item can be witnessed in the case of Carrefour. In its 2017 10-K, the company declared that "*based on the impairment tests carried out in 2017, the Group recognized a 700-million-euro impairment loss against goodwill allocated to its Italian operations*".

Carrefour

Country: France

Sector: Food Retail & Distrib.

Market Cap.: $12.7 bn

But wait, what is goodwill? Goodwill represents the difference between the price paid for the acquisition of a given company and its book value. If an impairment of goodwill is recognized at a later stage, it means that goodwill has been overstated, which will lead to a loss in the P/L.

Carrefour's Net Income was negative in 2017 mainly due to this goodwill impairment - which **is rather related to an accounting standard than to the company's operational activities.**

A major implication can be drawn from this case: as this element tainted the Bottom Line, it must be computed again and differently, and the key is to go a bit further up in the P/L...

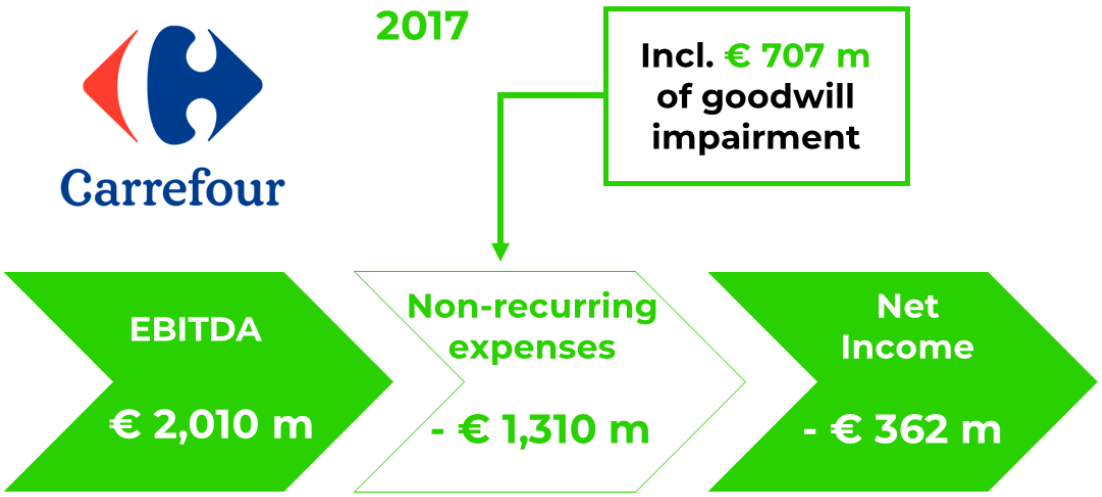


FIG 3: CARREFOUR'S GOODWILL IMPAIREMENT ADJ. IN 2017 - Sources: VIA AM, Bloomberg

Besides, a drawback in using accounting elements without any adjustment is the distortion created by mixing cash and non-cash elements in the P/L, and here, Nokia is a great example.

b) The Nokia Case

In its 2017 10-K, the company reported a €579 million expense in the P/L for "*restructuring and associated charges*" as well as €536 million for "*product portfolio strategy costs*". Both items negatively impacted the operating profit in a total of €1.1 billion.

NOKIA

Country: Finland

Sector: Telecom. Services

Market Cap.: $26 bn

Meanwhile, in its Cash Flow statement, Nokia declared a €522 million non-cash restructuring charge, in a rather inconspicuous footnote: "*adjustments represent the non-cash portion of the restructuring charges recognized in the consolidated income statement*".

However, economically speaking, only cash restructuring costs (related to dismissals for instance) must be included in the construction of cash returns, or the Economic Profitability.

Indeed, the non-cash part (€522m out of €1.1bn) relates to asset impairments and should therefore be treated post-EBITDA – only keeping the €593m cash element. And

unfortunately, this is something that would not be challenged using the Net Income in the P/L analysis.

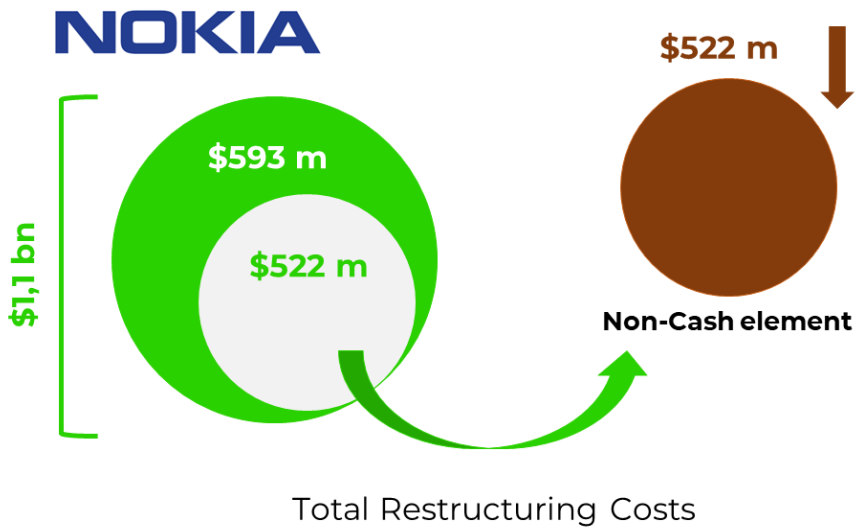


FIG 4: NOKIA RESTRUCTURING COSTS TREATMENT - Sources: VIA AM, Bloomberg

Moving on, another example of a potential source of P/L distortion is the way tax may be computed in companies' filings.

c) The Molson-Coors Case

Molson Coors is one of the world's largest beverage companies, whose core business is brewing – this is at least what is expected to drive its cash generation.

MOLSON COORS

Country: United States

Sector: Beverages

Market Cap.: $11 bn

Yet, in its 2017 10-K, the company reported a significant gain with a "*net deferred tax benefit*" of $434 million. This item *(very far from being related to brewing)* was estimated following the 2017 US Tax Act, which reduced firms' income tax expense – and even led, in Molson's case, to a $54 million negative tax paid.

While abiding to new accounting rules, this item has nothing to do with Molson's core operations and must be removed to better reflect the firm's economic reality.

Buffett clearly expressed his concerns on the matter in his letter: "*a large portion of our gain did not come from anything we accomplished at Berkshire. [...] Only $36 billion came from Berkshire's operations. The remaining $29 billion was delivered to us in December when Congress rewrote the U.S. Tax Code.*"

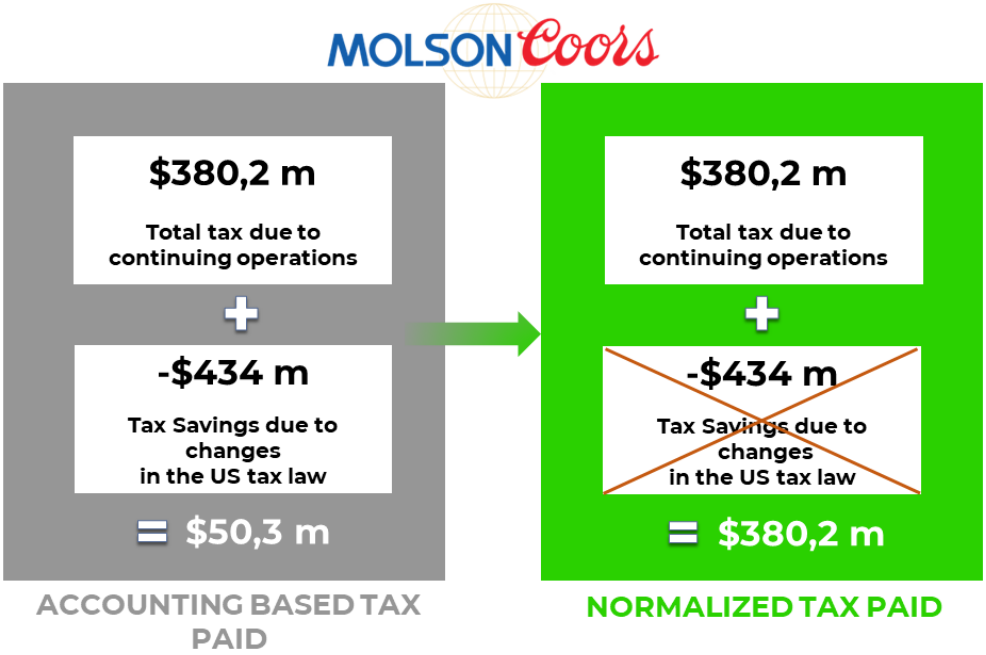


FIG 5: MOLSON COORS TAX TREATMENT - Sources: VIA AM, Bloomberg

Buffett is certainly right about the confusion that 'bottom line' analyses will bring. In fact, 'bottom line' has always been improper for analytical purposes, the three basic cases above show just that. There are many other cases, with different levels of complexity, leading to the same conclusion.

More on the bottom line: in his 2015 letter to shareholders (**Ref-6**), Buffett brings up the topic of intangibles: "*Serious investors should understand the disparate nature of intangible assets. Some truly deplete in value over time, while others in no way lose value*". **But what about "invisible" intangible assets?**

d) The Adobe Case

Adobe

Country: United States

Sector: Software

Market Cap.: $154 bn

Let's take the example of Adobe. The US company operates as a worldwide diversified software provider with activities in three main segments: Digital Media, Digital Experience and Publishing & Advertising.

In the 2021 fiscal year, Adobe spent 16% of its revenue in R&D, for $2.5 billion. In traditional accounting, all costs incurred are expensed, and are not capitalized in whatsoever on the balance sheet (as, for instance, regular capex would).

That said, **we consider this expenditure as an investment and capitalize a stream of R&D historical spending flows**, as being crucial for keeping the business relevant and thrive in the digital media landscape.

A useful life is associated to this invisible asset, after which this annual expense is deprecated. It then evolves over the years with new expenditures growing its value and depreciated assets reducing it. It is then included in the company's Economic Assets, as illustrated in Figure 6.

Besides, this expense is also considered when computing the Economic Cashflow. As it has been deducted from the revenue to get the EBITDA, it must be added back to get a real value creation metric.

Other companies heavily invest in marketing campaigns to create stronger brand names and to build a greater customer recognition - ultimately trying to increase their top-line and operational margin capacity.

In the traditional accounting world, this is also treated as pure expense. Here again, in the eyes of a chief executive, there is no distinction between constructing a new factory, building a software and launching a new global marketing campaign. **Each of these has a replacement value**, which is the upfront cost of the investment, and may participate in generating future operational cashflows.

Here, the challenge is to identify and quantify what really corresponds to advertising/marketing expenses and understand **what should not be capitalized** (distribution expenses, promotions, etc.). The impact on both Adobe's Economic Cashflow and Economic Assets is indeed quite substantial. In 2021, this total 'invisible' capital invested amounted to $3,080 m for a total Economic Cash Flow of $8,774 m. At this time,

Economic Assets were valued at $9,407 m with $4,321 m coming from the 'invisible' capital invested, up 21% from the previous year.

And **this gets even stronger when looking at external growth**, where, among other issues, past spending in R&D and advertising must be addressed.

FIG 6: ADOBE INVISIBLE CAPITAL INVESTED CALCULAITON IN 2021

e) Bristol-Myers Squibb's acquisition of Celgene

Biopharmaceutical firms are R&D-intensive businesses operating in a very competitive environment where Merger & Acquisitions operations are frequent.

When a deal occurs, the acquiring company "inherits" all the past R&D invisible asset created by the acquired one.

Hence, **capitalizing such asset in the new entity is a must when valuing its Economic Cashflow and Assets**. This is what we observed in 2019 when Bristol-Myers Squibb, a large US biopharmaceutical company, acquired Celgene, a smaller biotech firm for $88 bn.

Bristol Myers Squibb

Country: United States

Sector: Pharmaceuticals

Market Cap.: $168 bn

Celgene

Country: United States

Sector: Biotechnology

Market Cap.: $77 B (before acq.)

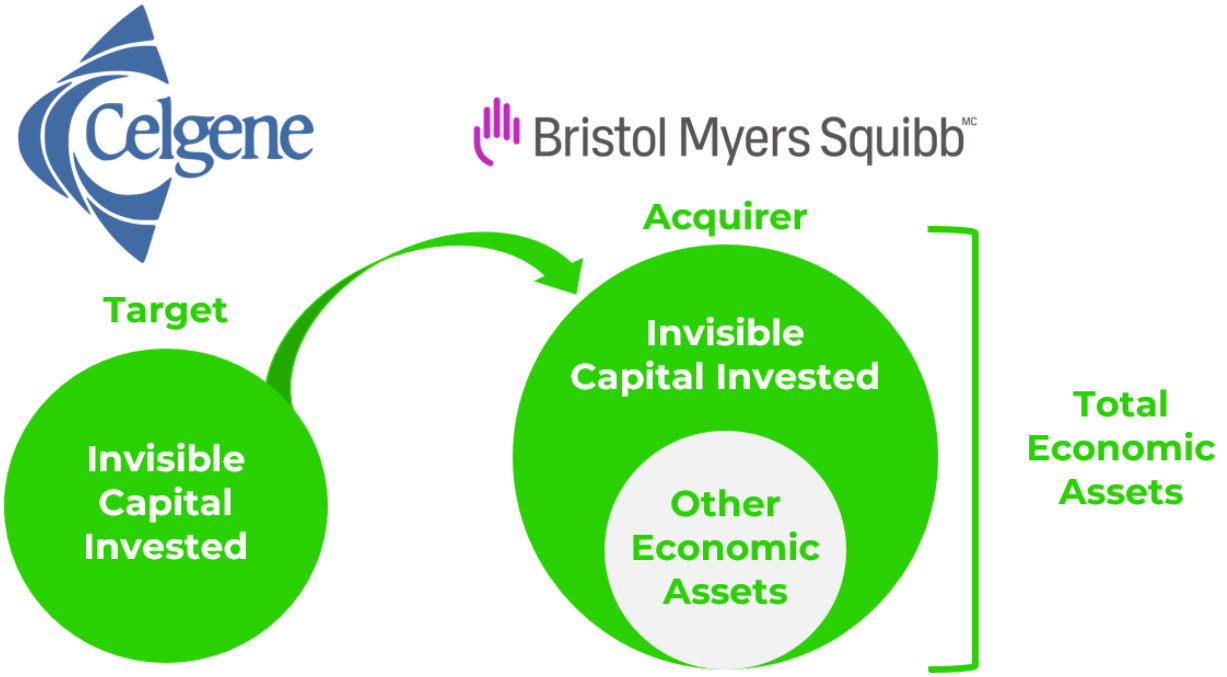


FIG 7: INVISIBLE CAPITAL INVESTED IN BRISTOL MYERS'S ACQUISITION OF CELGENE

As illustrated in Figure 7, Celgene's 'invisible' capital invested, mostly composed of R&D related assets, is merged into Bristol Myers Squibb's Economic Assets.
Celgene's capitalized R&D assets were valued at $15 bn pre-merger in 2018. Post-merger, this asset has been integrated into Bristol Myers Squibb's – representing 17% of the new company's total Economic Assets. A similar observation can be done on the new entity's Economic Cash Flow with a 15% increase of the metric after the acquisition of Celgene.

But that's not it when it comes to M&A operations: **they can also provide misleading information on profitability because of underestimated cash flows of the merged entity.**

As seen in Figure 8 (along with what happens on the invisible asset side), we estimate the economic profitability of a company as the internal rate of return of the operational cash generated by the economic assets over the remaining life of depreciable assets. Consequently, the accounting version of Return-on-Equity and Price-to-Earnings are materially distorted if the post-merger EBITDA is underestimated. It must be adjusted to get the real economic profitability of the company.

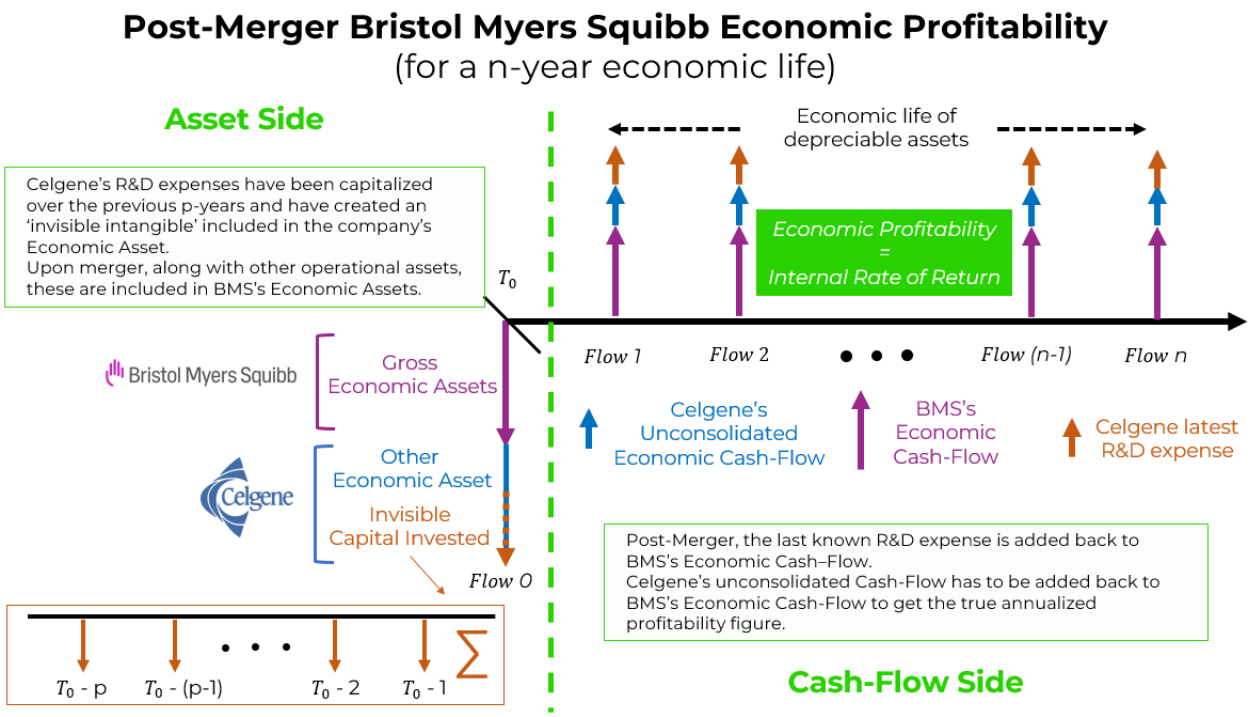


FIG 8: POST-MERGER ADJUSTMENTS FOR ECONOMIC PROFITABILITY

(ii) It's not only about dividends: are there capital gains on the horizon?

Going slightly lower in the P&L, Buffett dedicates a section on the issue related to undistributed earnings of investees and expectations on capital gains. Here, reflecting on this, we will first highlight the significance he confers to what he calls "*minority interests*", and his view on the subject. Then, we will discuss similar and other difficulties holders or selectors of "minority interests" face from an accounting perspective.

a) Buffett, minorities, and associates

In his 2017 letter to shareholders (**Ref-5**), Buffett tells us more about his vision on the ownership of interests in businesses: "*Charlie and I view the marketable common stocks that Berkshire **owns as interests in businesses**, not as ticker symbols to be bought or sold based on their 'chart' patterns, the 'target' prices of analysts or the opinions of media pundits. Instead, we simply believe that if the businesses of the investees are successful (as we believe most will be) our investments will be successful as well... Our recognition of capital gains (and losses) will be lumpy, particularly as we conform with the new GAAP rule requiring us to constantly record unrealized gains or losses in our earnings. I feel*

confident, however, that the earnings retained by our investees will over time, and with our investees viewed as a group, translate into commensurate capital gains for Berkshire."

Indeed, Buffett rightfully criticizes the side-effects of the (at the time) new GAAP rule. What is new is his assertion on the importance of future effective capital gains, which are expected to cover substantial undistributed earnings, as he repeatedly explains:

"*Berkshire received $3.7 billion of dividends in 2017... That dividend figure, however, far understates the "true" earnings emanating from our stock holdings. For decades, we have stated in Principle 6 of our 'Owner-Related Business Principles' that we expect undistributed earnings of our investees to deliver us at least equivalent earnings by way of subsequent capital gains*".

From an accounting perspective, what Buffett calls minority interests are what we call investment in affiliates, or associates, whose accounts are not consolidated: "*From our stock portfolio – call our holdings 'minority interests' in a diversified group of publicly-owned businesses*".

We highly emphasize the importance of correctly valuing investment in associates and minorities, in listed and non-listed companies alike. That is based on their market value, and not treated as 'quick holdings', or even ignored, especially in the construction of the Economic Enterprise Value.

However, this is far easier said than done. First, annual reports do not always provide analysts with full disclosure of holdings, and they may not be even usable when differentiating associates from minorities. Hence, the use of technology is essential to working out accurately all of them, through a cross-dimensional analysis from different sources.

As the accounts of associates are not consolidated in those of the parent company, they do not have an impact on the latter's operating profitability. However, if the profitability and prospects of associates improve, that naturally tends to make their valuation richer, paving the way for potential effective capital gains from a holder perspective. The reverse is also true.

By simply tracking the associates' valuation, it's possible to have an idea of future effective capital gains – just like a stockholder who knows the price he or she paid for the stock and the current stock price. This simplistic mechanism is sound in theory but in practice accounting implications are mixed and controlling the market value of multiple holdings in a timely manner can be challenging.

b) Minorities & Associates 2.0: The Hon Hai Precision Industry case

We can use Taiwan's Hon Hai Precision Industry as an example. Hon Hai offers electronic manufacturing services for computers, communications, and consumer electronic products. The group has non-controlling interests or minorities, which are basically the portion of the equity of all the subsidiaries they do not own. **It is therefore the slice of the pie that is not owned by Hon Hai shareholders.**

FOXCONN 鴻海科技集團

Country: Taiwan

Sector: Technology

Market Cap.: $46 bn

That concerns the ownership, as of November 2022, of FIH Mobile (64%), Shunsin Technology (59%) and Circutech (51%). As a result, the market value of the part Hon Hai does not own, or 36% in FIH, 42% in Shunsin and 49% in Circutech must be added to the Economic Enterprise Value, or about $0.4 bn. That's regarding valuation, but how about profitability? We estimate that more than 3% of Hon Hai's current EBITDA comes from those subsidiaries, they are consolidated by the company and respective operating results captured in the Economic Profitability accordingly.

Hon Hai has no shortage of investment in associates, whose market value is around $5.5 bn, reducing the Economic Enterprise Value to $43 bn. Stakes such as 34.1% in Sharp, 32.3% in Zhen Ding, 29.0% in Asia Pacific Telecom and others **must frequently reflect their market value for the accurate (and up to date) Economic Enterprise Value** – ultimately for looking at better valuation multiples. Once again, the use of technology is critical for achieving this goal.

Another reason for frequently computing a precise market value of investment in associates is to use it **as a proxy for potential future capital gains or losses.**

For example, if Hon Hai ever decides to sell its 34.1% stake in Sharp, what would be transformed into cash is its market value ($1.6 bn today), of which a capital gain or loss is determined.

Finally, holdings can be broken down between minorities & associates, and they are very different, as explained above. They both have a potential impact on valuation, so once again the use of technology to detect and value all of them is key.

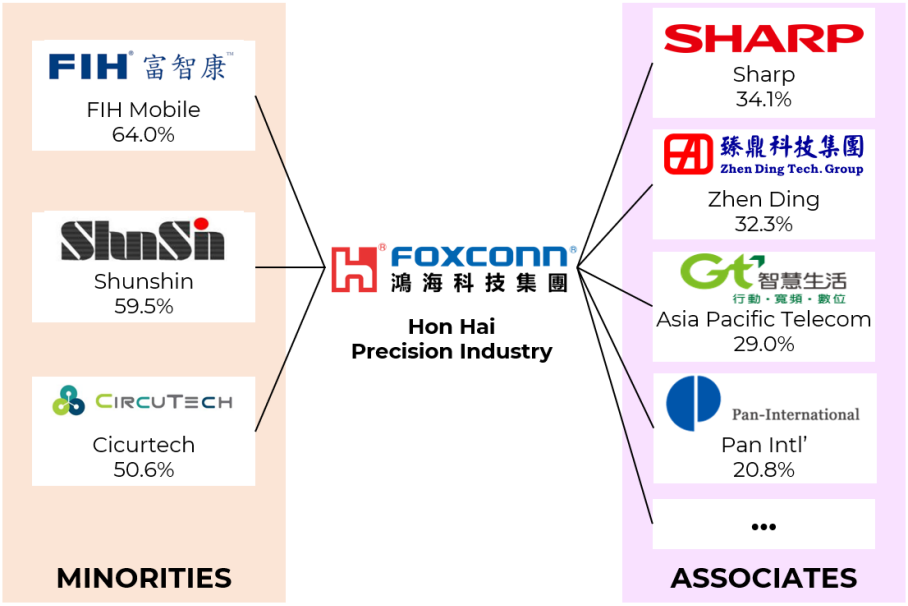


FIG 9: HON HAI'S MINORITIES & ASSOCIATES STRUCTURE - Sources: VIA AM, Bloomberg

Ultimately, the two themes discussed by Buffett show that **accounting normalization is not an innovative subject.** In fact, accounting critique have been a recurring and important topic in the Berkshire letters to shareholders. This critique is certainly turned into action way before the time comes to selecting stocks – **that is, precisely, what we are looking for.**

III Concrete examples of what we do

(i) The normalization "twist": Exxon Mobil v. Gilead Sciences

Normalizing accounting data allows investors to read the economic value of companies and is a great tool for comparing value creation in different businesses, from different sectors, countries, or accounting norms, at any point in time.

And that being said, the process is **far from being cosmetic or only conceptual: it may completely change the picture we are looking at.**

To illustrate our point, we pick two rather different US companies: Exxon Mobil and Gilead Sciences.

Exxon Mobil Corporation explores and produces crude oil & natural gas in the United States and internationally. The company is also involved in the manufacture, trade, transport, and sale of crude oil, natural gas, petroleum products, petrochemicals, and other specialty products.

ExxonMobil

Country: United States

Sector: Oil & Gas

Market Cap.: $408 bn

Gilead Sciences is a biopharmaceutical company. The company discovers, develops, and commercializes medicines in the area of unmet medical need in the United States, Europe, and internationally.

GILEAD

Country: United States

Sector: Biotechnology

Market Cap.: $79 bn

As of June 2022, we summarize below both companies' overall accounting figures. While Gilead's Return on Equity comes out higher than Exxon's (26.1% v. 17.5%), it also comes at a more expensive Price-to-Book, ending up with a slightly higher accounting Price/Earnings ratio (13.5x v. 11.8x).

Starting from that accounting reality, let's now try to understand what happens when switching to a more economic one.

Gilead has achieved external growth by acquiring new businesses. Its accounting Book Value includes more than $8 billion in goodwill (i.e., a cumulated acquisition spread) **which is non-operational by nature**.

Staying on the asset side, the capitalization of invisible assets, such as research & development and advertising, has equivalently a major impact on Gilead's economic

profitability. Both elements increase the Economic Assets of the company (as well as its Economic Cash-Flow, as seen earlier).

	GILEAD	ExxonMobil
Price *(MEUR)* ➢ *Capitalisation*	75 900	385 363
Assets ➢ *Book Value*	21 505	187 186
Profitability ➢ **Acc. ROE**	26.1%	17.5%
Valuation ➢ **Acc. PE**	**13.5x**	**11.8x**

FIG 10: GILEAD AND EXXON MOBIL ACCOUNTING FIGURES – Sources: VIA AM, Bloomberg

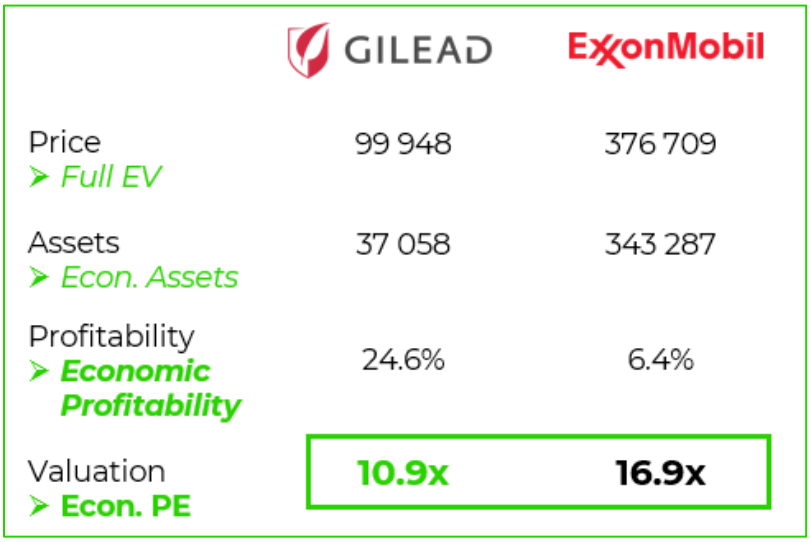
Considering inflation is also important and impactful to value the Economic Assets of Exxon Mobil. Indeed, in the accounting world, assets are reported at their historical costs on the balance sheet. To get their real economic value as of today (or their 'replacement value'), **they must be adjusted for inflation (or how much they would be worth today)**. This is particularly key for companies with long asset lives such as Exxon Mobil.

Talking about lives, to carefully compare companies with very different asset breakdown and length of use (and that's particularly the case here), **we rebuild their Economic Life**, which is then used to calculate their profitability (as an Internal Rate of Return, rather than a ratio which assumes an infinite life).

On the liability side, Exxon Mobil gradually provisions for its environmental obligations. Considering these adjustments, along with a consistent set of other treatments, we come up with the economic figures below. Upon normalization, Exxon Mobil's Economic Assets **almost doubled from the accounting Book Value with nearly identical figures between the Economic Enterprise Value and the Market Capitalization of the company**. It results to a 50% discount on its Economic Assets Multiple. The impact on its profitability metric is also significant, with a 6.4% Economic

Profitability vs. a 17.5% Accounting RoE – which makes also more sense for a 1.1x Economic Asset Multiple company.

Gilead's Economic Assets almost doubled as well with a more limited increase in its Economic Enterprise Value, thus reducing its Asset Multiple to 2.7x for the Economic version. We end up having a lower Economic P/E at 10.9x, a 20% decrease from the 13.5x accounting P/E.



	GILEAD	ExxonMobil
Price ➢ *Full EV*	99 948	376 709
Assets ➢ *Econ. Assets*	37 058	343 287
Profitability ➢ ***Economic Profitability***	24.6%	6.4%
Valuation ➢ **Econ. PE**	**10.9x**	**16.9x**

FIG 11: GILEAD AND EXXON MOBIL ECONOMIC FIGURES- Sources: VIA AM, Bloomberg

At the end of the day, as this example illustrates, **our process may completely twist the image you are looking at when using accounting data**, hence affecting stock picking (and performance, but again, that is for Part II).

(ii) The normalization lag: CVS Health

Coming back to academics for a second, Lourghan & McDonald concluded in their paper (2014 – **Ref-3**) that more-difficult-to-process filings **require longer time for the market to process** – and logically **create information asymmetry more skilled investors may benefit from**: "*sophisticated fund managers may have an advantage at processing longer filings and earn greater returns than less skilled funds*".

Hereby, they also suggest these more complex filings may take more time to be processed by the market, hence explaining potential short-term performance lags or misrepresentation of a company's profile.

In their book "*The End of Accounting and the Path Forward for Investors and Managers*" (**Ref-8**), Baruch Lev and Feng Gu show, among a lot of other insightful points, that being able to predict earnings provided a positive abnormal return over the 25 years period before 2013.

They also demonstrate that, during the same period, being able to predict "*companies' cash flows would have yielded an 8 percent higher return annually than predicting earnings*". This observation seemed counter-intuitive at first as "*predicting cash flows is more straightforward and considerably less time-consuming than predicting earning, because you don't have to forecast the numerous non-cash items (accruals) that affect earnings*".

Naturally they wonder how the accounting rules, which are supposed to provide a clear and precise information, can mislead investors compared to the 'primitive' concept of cash flows – particularly insisting on intangible assets (which overall weight in companies' overall assets have grown exponentially in the past three decades): ***"every aspect of the financial report is adversely affected by this dated, industrial-age treatment of intangible capital".***

That being said, **our job is not about trying to predict** (earnings, or any other metric), that's far too complex, and has proved rather inaccurate in the past 30 years, see "*Forecasting earnings and returns: A review of recent advancements*" by J. Green (2022 – **Ref-9**). It is about **unearthing the economic truth through a sometimes complicated (and not necessarily complex) path.**

And as Lourghan & McDonald's paper (2014 – **Ref-3**) underlined it, that mismatch between accounting and economic value can't be seen as a short-term arbitrage or a

guaranteed immediate performance: **that complexity generally materializes through a marked-to-market lag.**

This is what we will illustrate with the example of CVS Health, the US retailer of health care products and services, at the beginning of 2019. The high-level summary of accounting and economic figures is gathered in Figure 12, below (in green the economic metrics, in grey, the accounting ones).

CVS Health

Country: United States

Sector: Health Care Retail

Market Cap.: $134 bn

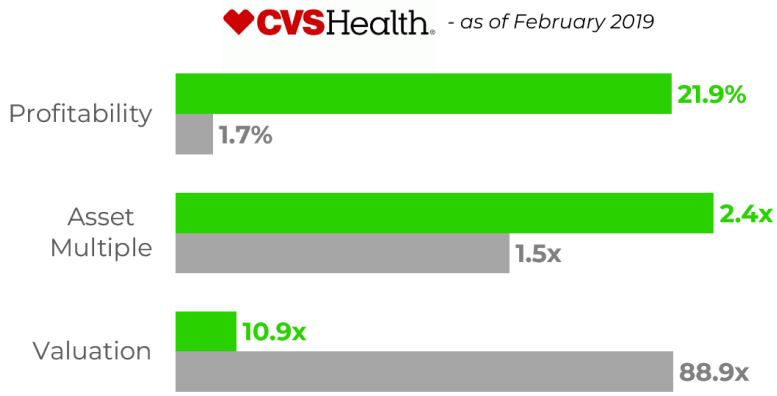


FIG 12: ACCOUNTING v. ECONOMIC SITUATION OF CVS IN FEB. 2019- Sources: VIA AM, Bloomberg

Together with the Q4 2018 earnings, a disappointing 8% downward revision to the 2019 guidance on Earnings per Share (EPS) was released on February 20th 2019 *(always hardly predicable by analyst, as companies' CFOs usually drive the cat and mouse game, not the other way around).*

That upsetting guidance, coming in at a time when accounting metrics were rather unglamorous (very high multiple/very low profitability) made the share plunge 20% in less than three weeks. When looking at its main fundamental metrics, CVS's accounting RoE came out at 1.65% with a P/E of almost 89x. On the Economic side, the stock still appeared far more appealing: profitability was higher, reaching 21.9% with a valuation naturally lower at 10.9x.

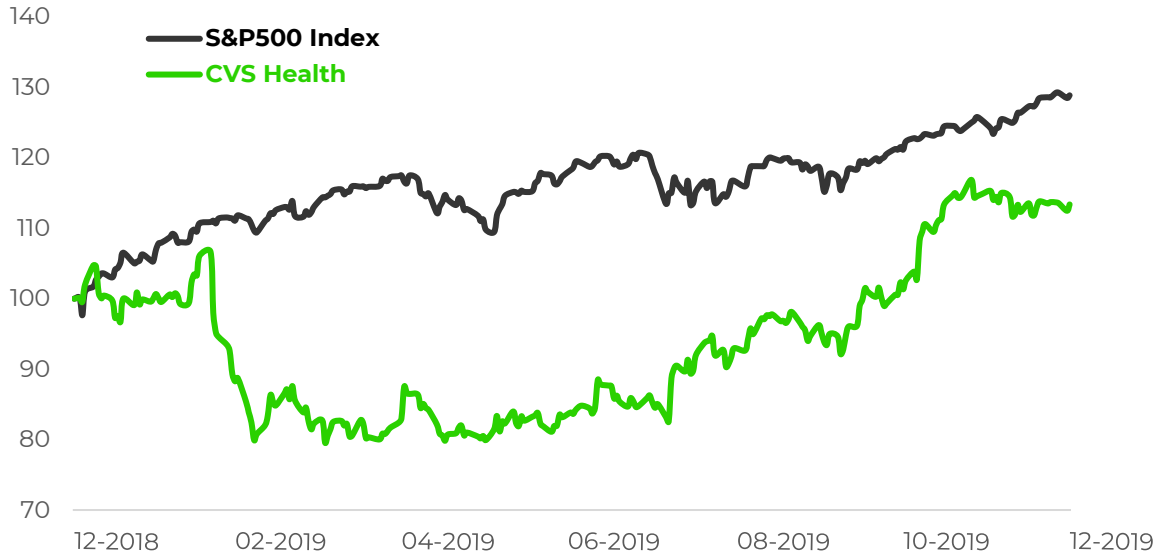


FIG 13: CVS HEALTH AND S&P500 PRICE EVOLUTION IN 2019- Sources: Bloomberg

A few months later, at the end of the year, the share price started to rally, going back towards its start-of-the-year level, and it finished 2019 with a positive performance. Investors repriced the potential of CVS Health's profitability/valuation in the second semester of 2019.

That said, we wouldn't have predicted any kind of come back, or given recommendation of timing at the bottom or before the release of Q4 report. **More realistically, it could have helped analysts & investors navigating the overall episode with cleaner, more robust, and more economic data when it comes to judging the operational risk & opportunities of the company.**

Conclusion

It's important re-emphasizing that **we are not creating something new or revolutionary**: accounting normalization is common practice of the world's most successful investors and its strengths have been highlighted by recent academic papers.

What is innovative is the maximization of the use of technology to support us in doing it on an **industrial scale without compromising the quality of the output, quite the opposite** (as we will see in part 2). Again, technology is **used to serve the analyst, not the other way around.** In the end, we want to be less exposed to accounting missteps.

We can see it as a 'Base rate versus Case rate' configuration: outside absolute certainty (there is often a big gap when moving from theory to practice) we believe that companies displaying better fundamentals will ultimately outperform and that accounting normalization act as the best possible lens cleaning in that matter.

We have no illusion on the fact that there is neither guarantee nor precise timing for the realization of expected outperformance, in fact, recent literature has shown that this tedious work may display a lag.

Hence the need to dig to the lowest possible level of details, which is an invaluable extra mile we have control over, **no matter what un-controlling external circumstances may be.**

In part 2, we will endorse the analyst/investor's costume, to study the impact of a structured normalized process on a large universe, both in terms of data stability, relevance, selection, but also and ultimately… in terms of alpha generation.

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I) Jeremiah Green, 2022, Forecasting earnings and returns: A review of recent advancements **– Ref-9**

Glossary

Associates	Market value of investment in affiliated companies.
Deferred Revenues	Deferred revenue, or unearned revenue, refers to advance payments for products or services that are to be delivered in the future. The recipient of such prepayment records unearned revenue as a liability on a balance sheet.
Economic Asset Multiple	Economic Assets / Economic Enterprise Value.
Economic Assets	Economic replacement value of a company's inflation-adjusted operational assets, including off-balance sheet elements and invisible CAPEX. It can be considered as the Economic equivalent of the Accounting Assets' Book Value.
Economic Cash-Flow	Computed post-tax operational cash-flow, working out noise stemming from exceptional & non-cash elements, dealing with tax fallacies, and accounting for invisible capital invested (R&D, advertising, human capital).
Economic Enterprise Value	True financial leverage, gathering all (on and off) balance-sheet items. It can be considered as the Economic equivalent of the Accounting Enterprise Value.
Economic Profitability	Real cash profitability on the Economic Assets deployed, calculated as an internal rate of return of inflation-adjusted capital invested and Economic Cash-Flow over the average economic life of depreciable assets.
Economic Revenue	Operational revenue generated by the company.
Financial Provisions	Funds set aside to pay for anticipated future losses.
Income Tax Expense	Amount of expense recognized in an accounting period for the government tax related to its taxable profit.
Income Tax Shield	Reduction in income taxes that results from taking an allowable deduction from taxable income.
Invisible Capital Invested Net	Economically capitalized intangible assets such as investments in advertising, R&D and operational leases.

Leasing	Operating Lease assets are off-balance sheet in standard accounts, at least until IFRS 16. As they are part of a company's operating assets, they must be considered economically, including the economic debt associated.
Leasing Capitalized	Leasing amounts recorded on the balance sheet.
Minorities	Market value of non-controlling interests.
Net Debt	Short Debt amount + Long term amount - Cash & Equivalents.
Net Intangible Assets	Not physical in nature such as software.
Net Tangible Assets	physical assets or property owned by a company such as equipment.
Net Working Capital	Difference between current assets and current liabilities.
Other Long-Term Assets	Means the value of non-cash assets of the Business not due within one year (example: equity investments, goodwill, trademarks...).
Pension Obligations	Obligations related to pension plans for employees.
Relative Cash Return	Corresponds to the ratio of the Economic Profitability / Cost of Capital. It is expressed as a multiple.
Valuation	[(Economic Enterprise Value / Economic Assets) / Economic Profitability].

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