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BTN Thursday Thoughts

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More on Physical Retail Space and Penalizing Investment in the Future While Rewarding Mistakes

While on spring break last week, a couple of retail items crossed my path. The first was starting in Tucson, we found ourselves about to meet up with people with a young daughter having a birthday. So, my girlfriend wanted to find a Toys R Us and get a gift. I commented that if we can find one, we better call to make sure it is still there. We found one and both concluded it was a dump as we pulled up. She asked, "What can this ever be again?" I looked at a giant warehouse box in the middle of town with its own parking lot and noted – this is a new e-commerce distribution center. Upon returning the next week, Amazon announced it was buying what is left of Toys R Us so my forecast, while true, had the same value as handicapping the first race dead-on and arriving at the track in time to bet on the second race. But, on the surface this made much more sense to me than paying a fortune for Whole Foods and trying to add Amazon distribution and cross-selling, in a fraction of the square footage. Perhaps, some of the beat up REITs that own strip-malls or properties that represent closed grocery stores or Gander Mountains may have some hidden value. We will do some more work on this and report.

Wal-Mart (WMT) is already doing this changeover with some of its Sam's Club stores. Macy's (M) is remaking stores to add more fulfillment operations/same day pick-up options as well as non-retail to the mix. Essentially, Macy's wants to remake several large stores that may be 9 stories tall into 1-2 stories of retail and the rest into mixed use of other

commercial, entertainment, and residential concepts. This further gelled a bit reading this article in *Forbes* on the plane talking about the potential of Nordstrom going private. The article has a great quote of the week that meshes with what we've heard from Starwood Property Trust (STWD) and Brookfield Infrastructure (BIP), ***"physical retail is not dead, boring retail is."*** We're not keen on the idea of adding considerable debt to any retailer, but the author makes another good point. Perhaps, getting a good company and management team out of the rat-race insisted upon by Wall Street that a retailer MUST always open more stores and scrimp on capital investment to maintain ROI is a good thing. Maybe an established company is better off not expanding and investing more heavily in the existing operation. Ensure the employees are the most knowledgeable, focus on both online and in-store sales, and make service key. This is what Best Buy did in recent years and found people do like to be educated about a purchase before making it. The same could be said for the Apple Stores.

That led us to another possible focus in finding retail investments – look for those that can preserve or grow margins even if it requires some upfront investing. Two thoughts come to mind here. The first is basic finance – retailing is a business with huge sales and low margins as opposed to say a software company with modest sales and huge margins. The goal of the low margin business is to raise margins even a little bit. Conceding some revenue to make this happen is not necessarily bad. The high margin business wants market share and will concede some margin to take more revenues:

Company A – Revenue $10b, margin 3.0% = Income of $300mm
    Goal – Revenue $9.5b, margin 3.5% = Income of $332.5mm

Company B – Revenue $1b, margin 65% = income of $650mm
    Goal – Revenue $1.5b, margin 55% = income of $825mm

A great read is a book called *"It's Earnings That Count"* by Hewitt Heiserman. It makes some good common-sense points about the shortfalls of GAAP reporting in financial statements. The author highlights points such as GAAP treats equity as free capital and earnings should be adjusted in some situations to subtract a cost of capital from earnings just like interest. GAAP earnings also don't track if a company is investing in the basic business with additional working capital or capital spending that exceeds depreciation. The Heiserman point we will discuss here is GAAP expenses R&D and Advertising immediately in the current year. However, they should have value longer than that. We would also argue that additional staff training, using more full-time employees vs. part-time employees, bonuses to retain experienced staff, store remodeling efforts, and even losing some sales from a poorly performing infant-wear area to install a coffee bar (just as a random example) are other areas that have the same impact. What Mr. Heiserman would suggest is to add back these costs to operating income each year and then determine a period to amortize

each one and subtract that from operating income. Just looking at advertising and arguing it adds value for 3-years, a company that spent $150, $150, $300 in advertising over the last 3 years, would add back the current year's $300 to operating income and subtract 33% of advertising from each of the last three periods ($50 + $50 + $100 = $200). Thus, adjusted operating earnings would rise from this exercise.

We would not blindly add back all types of restructuring – layoffs and writing down inventory are examples of actions that are designed to cut costs and eliminate mistakes, not necessarily invest in the future. Solid evidence that a company is investing in improvement would be penalizing GAAP earnings as these higher investments are expensed quickly and weaker GAAP earnings normally turns off investors. However, these investments should be shoring up future sales and boosting future margins making a stronger retailer. Moreover, as this higher level of investment abates a little (training ends and coffee bars are built), the higher margins could materialize under GAAP earnings. Thus, this could be a path to finding some future gems.

Why Financial Analysis Involves Art as Well as Numbers

Thinking of retailers penalizing current earnings to create future value showed me another example on spring break. After Tucson, we were in San Francisco and Sonoma for a couple days. One spot, I had never visited was the Walt Disney Museum in the Presidio. I highly recommend this, but I'm not sure kids would enjoy it as much. Yes, there are some areas with cartoons playing. However, this is much more reading about history and photographs that are very interesting – just remembering being 5-6 years old and getting a bait and switch (having expectations for Disneyland only to arrive and end up reading about Disney's life instead.)

Two things become abundantly clear in seeing the history of Walt Disney. First, when he had problems gaining traction was when he tried to break into areas with 40 existing players. Thus, he continually looked for ways to make his product very new. Examples of this are scoring music on his cartoons, drawing in color even though TV sets were still overwhelmingly black & white, creating the first full movie-length cartoon feature. Second, he was often broke or nearly broke because his way of doing things cost more. There was an early bankruptcy and Bank of America could likely have owned the studio outright when Snow White's cost was rising beyond what anyone expected from a "first of its kind" venture.

In the end, having a better product that cost more in the early years resulted in above-average profits. It also gave the work longevity so that something like *Snow White* not only won an Oscar in TWO years and the company could release it repeatedly to a new group of kids with essentially no incremental costs with solid success for decades. This made me

think of the situation where GAAP earnings expensing R&D and advertising immediately penalizes current earnings, but creates the basis for higher profits in the future.

What is fun to experience in the museum is seeing how innovation battles the budget between Walt and his brother Roy throughout time. There are times when Roy wins, like making *Dumbo* cheaper and it thus was more profitable than *Pinocchio*. And my favorite quote as Walt wins, they are designing Walt Disney World in Florida and they have the land already. But, another opportunity comes up to buy 12,000 more acres adjacent to the Disney ground. Roy isn't sure they can comfortably cover that purchase and isn't sure they need the extra land. This is about 10-years after Disneyland in Anaheim, CA was opened. Walt responded, "Wouldn't you like to have an extra 12,000 acres next to Disneyland now?" Given that Michael Eisner was born 41 years after Walt Disney and earned hundreds of millions of dollars monetizing some of these assets, I hope he is a hefty donor to the museum.

Earnings Quality Reviews

Tiffany & Co. (TIF)

To see how the market reacts to a company that wants to invest more in existing operations, Tiffany & Co. (TIF) provided a great example last week. The company reported 4% sales growth, it gained 30bp in gross margin, and operating margin was up only 10bp because SG&A rose faster than sales. EPS adjusted for the tax law changes in 2017 and some minor impairments in 2016 rose to $4.13 vs. $3.75 – up 10%. That beat forecasts, yet the stock promptly sold-off from $102.71 to $97.51 and has remained lower at $97.04 yesterday.

Why did this happen? The company is investing more in the future of the business. SG&A rose faster than sales in 2017, "as a result of higher labor and incentive compensation costs, higher store occupancy and depreciation expenses and increased marketing spending."

The outlook for 2018 calls for sales to basically repeat 2017 – comp store sales up low-single-digit, total sales up with that and 2% more square footage, slightly higher gross margin, and SG&A that will rise faster than sales resulting in EPS of $4.25-$4.45 or 3%-8% EPS growth. The reason for faster SG&A growth is "higher investment spending in technology, marketing communications, visual merchandising, digital and store presentations." The company is also impacting rent and depreciation by remodeling/relocating stores. Last year,

it opened 9 and closed 7 and relocated 7 stores. In 2018, it expects to open 9, close 2 and relocate at least 15.

Pulling up any of the commentaries following results shows sentiment essentially saying, “All this new spending on technology and remodels will be a drag on earnings.” On the conference call, management noted that it wants to create a feeling of “newness” to the shopping experience with new product lines, refreshed stores, greater marketing awareness, and ways to communicate with customers more easily with technology. The annual reports for Tiffany say repeatedly that it wants to maintain the high quality and value of its brand and use that to create sales as well. From the financial statements, it is very possible to see that Tiffany seldom scrimps in this area, so it’s not too surprising that it wants to invest more in 2018:

$ in mm	2017	2016	2015	2014	2013
Sales	$4,170	$4,002	$4,105	$4,250	$4,031
Advertising	$315	$299	$302	$284	$253
Cap Exp.	$239	$223	$253	$247	$221
Deprec.	$207	$209	$203	$194	$181
Store Rent	$232	$217	$207	$197	$182
Net Income *	$516	$470	$494	$545	$190
Free Cash Flow *	$693	$483	$564	$429	$227

We adjusted Net Income to reflect the tax law changes in 2017, some minor impairments in 2016 and 2015, a $94 million charge to refinance debt in 2014 and a one-time $480 million settlement with Swatch in 2013. Cash flow was adjusted for a $15 and $120 million voluntary contribution to the pension in 2017 and 2016, along with the net of tax payment for Swatch in 2013.

What we see is a company that routinely reinvests in the business – with advertising about 7% of sales, capital spending exceeding depreciation, and higher rents reflecting some new/larger/pricier locations. The result has been that sales have been basically flat, earnings are penalized by the higher depreciation and rent – but are generally flat, and cash flow has been rising. Moreover, cash flow routinely exceeds net income even after higher capital spending.

There are many retailers that would love to be throwing off that much cash, still having stores people plan travel around visiting, holding steady to modestly rising, and rising cash flow. The bigger issue in our opinion, is why does TIF ever have a growth multiple with a

P/E above 20? Currently, with the stock at $97, the stock is 22-23x forward EPS. There is $1.3 billion in cash that equals the ST borrowing, LT debt, and pension obligations. Debt is not an issue here and leaving out the LT debt and pensions, there is over $9 per share in cash and that would make the effective stock price $88 and the P/E about 20-21 vs. single digit growth.

Two things seem likely to happen, while TIF will always reinvest in the business – the level of investment for a large percentage of stores being relocated and remodeled in a given year may slow a bit and allow earnings to rise via flatter deprecation and cash flow to rise via lower capital spending. If the heavier investment generates some margin gain or incremental sales, income and cash flow should also rise. We also think investors should start clamoring for a larger dividend and less share repurchases. Why buy back expensive stock?

TIF has already ramped up the dividend nicely in recent years and it's still not consuming even half of free cash flow:

	2017	2016	2015	2014	2013
Dividend Growth	11%	13%	5%	12%	6%
Dividends % FCF	35%	45%	36%	45%	75%

The stock yields 2% currently and growing nicely. The company could still boost the dividend 50%-100% and sustain its heavy investment in the business. Perhaps, a faster growth rate in the dividend or special dividends is in the future. The company is carrying essentially no debt now with $1.3 billion in cash and $1.3 billion in total debt. EBITDA is $1 billion, it would not be tough to make a case to borrow another $1 billion or 1x EBITDA and pay a special dividend of $8 on top of the regular $2. Essentially, we think investors should be focusing on TIF as a cash flow story much more than earnings. Recent and future plans seem to be driving that story forward.

From an accounting standpoint, we don't see many problems here:

1. Rent is rising faster than sales and is a headwind on margins for a few basis points. Also, while rent is rising, the rents contingent on sales are essentially flat, indicating that sales growth is running behind what landlords anticipated.
2. There are routine impairments for slow moving inventory – about $25 million per year against $2.2 billion in inventories so that does not concern us.
3. Tiffany works to ensure access to inventory of high quality and took some minor write-downs in 2015 and 2016 in this area for loans made to distribution sources.

Over two years, this was about $50 million, and we are not going to make a big issue of that, as there is almost nothing left there to write-down.

4. The amortization rate for capitalized software may be a bit too long at 3-8 years. TIF took a write-down in this area in 2016. If it was done over 3-5 years, it may boost amortization expense enough to cost TIF about 4-cents.
5. TIF even boosted its bad debt reserves last year from 5% of receivables to 7%.

The operating model adds more potential risks in our view:

1. Over 55% of sales are foreign which can put TIF sales and growth at risk of FX losses.
2. Diamonds are very profitable and help margins more than other products. Products with diamonds dropped last year from 59% of sales the prior two years to 57% in 2017. That bears watching, as it could become a margin headwind. It played a role in dropping average prices per unit last year.
3. Inventories can bring some wild results when commodity prices are rising or falling in rapid movement. Inventory is a $2.2 billion asset here vs. all other non-cash assets of $1.9 billion. Inventory also only turns about 0.7x per year. 100-250bp margin changes are not unheard at Tiffany based largely on rising or falling raw material prices. That's basically 26-64 cents of EPS in any given year.
4.

   The good thing about TIF's slow turning inventory is there are many clues before this hits. First, raw materials inventory starts to grow much faster than sales and finished goods inventory when this pressure begins. TIF is sort of like a gas station when oil prices start to increase. People always wonder why if the station bought its current gas at say $1 per gallon, why does the station immediately boost the price to $1.25? The answer is they need the cash from current sales to pay for the next shipment of gas that is now arrive at the station at the higher price. So TIF does the same thing, as raw materials start to rise rapidly on in inventories – the company raises prices, even though they are still working off cheaper finished goods. So gross margin pops with price hikes taken ahead of the cost pressure hitting the income statement.

   We currently do not see this building as a significant problem right now. Raw materials inventory only grew at 2% in 2017 versus 5% for finished goods and sales growth of 4%. In fact, diamond prices are falling.

   The last time this was a significant issue was in 2010 and 2011. Gross margins rose 250bp off the lows of 2009 and about 200bp from the normal levels based on price increases according to the discussion of earnings. So, they took the price hikes early

on to preserve cash flow, but the big bubble of high cost inventory didn't wreck margins until more than a year later.

	2010	2011	2013
Raw material Inv Growth	19%	47%	1%
Finished goods Inv Growth	9%	16%	13%
Sales Growth	14%	18%	4%
Gross Margin change	+260bp	-10bp	-200bp

Merck (MRK)

A review of Merck's (MRK) 2017 10-K turned up several items of concern:

- MRK reports an adjusted non-GAAP earnings figure which adds back one-time items. However, investors cannot afford to totally ignore items such as the huge IPR&D write-offs, payments to establish deals to develop new drugs, and material restructuring charges that occur every year.

- Accruals for customer discounts declined during 2017 even as actual payments exceeded provisions by $171 million. In addition, the company actually wrote $221 million of the accruals back into profits during the period. Those two amounts come to over $0.11 per share in earnings.

- Depreciation expense declined by almost 10% in 2017 despite an increase in gross property, plant and equipment (PPE). If depreciation had remained constant as a percent of PPE, it would have taken about $0.07 per share off of EPS for the year.

The Trip from GAAP to Non-GAAP

MRK has incurred many unusual expenses and charges over the years related to issues including restructuring charges, in-process research and development (IPR&D) write-offs, and the establishment of collaborative agreements. While the company does not break out most of these items in its income statements, it highlights them in its discussion of results

and, like many companies, includes a reconciliation from reported GAAP profits to its adjusted non-GAAP figures used by most analysts to value the company and assess the company's "real" growth.

The pharmaceutical industry, by nature, is going to have good and bad things happen "in lumps." Millions will be invested in developing drugs that will simply not pan out. These disappointments are part of the game, and when they happen, the company has to write off the investment and move on in the search for the next successful compound. Likewise, many projects start out with large, one-time investments that will not begin to generate cash for years, but assuming they are successful, will benefit the company for many years after that. We will keep this in mind as we review the below table showing MRK's GAAP to non-GAAP reconciliation for the last five years:

	12/31/2017	12/31/2016	12/31/2015	12/31/2014	12/31/2013
GAAP Income Before Taxes	$6,521	$4,659	$5,401	$17,283	$5,545
Acquisition and Divestiture-Related Costs	$3,760	$7,312	$5,398	$5,946	$5,549
Restructuring Charges	$927	$1,069	$1,110	$1,978	$2,401
Charge Related to AstraZeneca Collaboration	$2,350				
Charge for *Keytruda* Litigation		$625			
Venezuela FX Devaluation			$876		
Vioxx Shareholders Class Action			$680		
Gain on Sales of Migraine Programs			-$250		
Gain on Divestiture of Ophthalmic Products			-$147	-$480	
Gain on divestiture of Merck Consumer Care				-$11,209	
Gain on AZN Options				-$741	
Loss on Extinguishment of Debt				$628	
Additional Health Care Reform Fee				$193	
Other	-$16	-$67	-$34	-$9	-$13
Non-GAAP Income Before Taxes	$13,542	$13,598	$13,034	$13,589	$13,482

It is interesting that the company's regular earnings have been in a fairly tight range of 35-45% of adjusted earnings for the last five years. We agree that many of these items, such as gains on sales of programs and the Venezuela devaluation should weigh less in determining what ongoing earnings really are. However, we believe investors go wrong by completely ignoring all the charges listed above. In fact, the company even states in its 10-K in relation to these amounts:

> "The excluded items (which should not be considered non-recurring) consist of acquisition and divestiture-related costs, restructuring costs and certain other items.

> These excluded items are significant components in understanding and assessing financial performance."

We will examine a few of these items more closely below.

Acquisition and divestiture-related costs

These charges include both amortization of acquired intangibles as well as IPR&D impairments. A rough breakdown is shown below for the last three years. Note that this is not an exhaustive list of all items, thus the amounts below do not exactly add to the acquisition and divestiture-related amount in the table above.

	12/31/2017	12/31/2016	12/31/2015
Amortization Expense	$3,200	$3,800	$4,800
IPR&D Impairments	$513	$3,600	$63

First off, while it is common practice among companies today, we strongly disagree with completely ignoring acquisition-related amortization expense when valuing a company. The intangible asset was created when the company spent shareholders' equity to invest in the purchase of a company or the rights of a drug. The amortization expense is the offsetting cost associated with that investment and should be acknowledged in some form when calculating profits and returns.

Likewise, the IPR&D impairment charges represent instances where such investments didn't go as planned. For example, of the $3.6 billion in write-offs in 2016, $2.9 billion was related to clinical development work done on uprifosbuvir, a compound intended for the treatment of hepatitis C. According to the 10-K, MRK determined in 2016 that due to changes to the product profile and new expectations regarding ultimate pricing that the actual worth of the asset was $240 million, not the $3.2 billion that was previously on the books. In 2017, the company decided to abandon the compound altogether and wrote the remaining balance off as well. This is included in the $513 million amount shown in 2017 above, which was also added back to non-GAAP earnings. Keep in mind that uprifosbuvir was obtained in the company's 2014 $3.9 billion acquisition of Idenix. Less than three years later, most of the shareholders' capital spent on that investment is now gone.

As we noted above, we understand that taking risks and dry holes are all part of the pharmaceutical game. However, given that it is, why should investors ignore the cost of

these write-offs when arriving at a figure for sustainable earnings? These dry holes are not free. The company had to pay cash or dilute shareholders and now they are generating negative returns.

Charges related to AstraZeneca collaborative agreement

Part of the non-GAAP adjustment for 2017 is the addback of $2.35 billion in charges for the establishment of a collaborative agreement with AstraZeneca (AZN) to develop and commercialize AZN's *Lynparza* for the treatment of ovarian and breast cancer and selumetinib for the treatment of thyroid cancer. Under the agreement, the two companies will both work to commercialize the two drugs both alone and in combination with two of their own drugs (*Keytruda* for MRK and *Imfinzi* for AZN.) MRK will fund all development for combination therapy with its *Keytruda* and AZN will fund all development work related to combination therapy with *Imfinzi.* Gross profits from either monotherapies or combination therapies will be shared by both companies. The $2.35 billion charge shown above relates to the $1.6 billion cash payment made to AZN in 2017 plus another $750 million for future license payments to be made to AZN to license its two drugs. In addition, MRK could have to pay up to an additional $6 billion in milestone payments contingent on meeting sales targets.

As with investments in IPR&D, investors cannot simply ignore these amounts paid to develop these future therapies. However, adjusting them out of non-GAAP earnings entirely is inviting them to do exactly that. A more appropriate treatment would be to amortize them over the time period that the collaboration project is expected to provide an economic benefit to the company. We believe five years is a reasonable time frame to use given the uncertain nature of pharmaceutical development and future payments likely to be incurred. This would amount to an additional $500 million in expense in 2017 that should be viewed as operational.

Restructuring charges

MRK also incurs regular restructuring charges related to ongoing cost reduction programs. According to the company, these costs include:

> …"employee separation costs and accelerated depreciation associated with facilities to be closed or divested. Accelerated depreciation costs represent the difference between the depreciation expense to be recognized over the revised

useful life of the asset, based upon the anticipated date the site will be closed or divested or the equipment disposed of, and depreciation expense as determined utilizing the useful life prior to the restructuring actions. Restructuring costs also include asset abandonment, shut-down and other related costs, as well as employee-related costs such as curtailment, settlement and termination charges associated with pension and other postretirement benefit plans and share-based compensation costs."

Just eyeballing these costs over the last five years does not give the impression that these costs are one-time in nature. They are also far from immaterial, accounting for almost 15% of pretax earnings in 2017. The company anticipates that restructuring costs will be $500 million in 2018, which represents a considerable reduction from 2017. It will be interesting to see if that comes in on target, as well as if a new program is announced for future years.

Putting it in perspective

If we adjust non-GAAP profits by taking out the full amount of the amortization of acquired intangibles, all the restructuring charges, and the $500 million in proposed amortization of the AZN payments, they would fall to approximately $8.6 billion, or roughly 60% of their present amount. We recognize that there could be considerable debate over all of the estimates required to arrive at a more exact estimate of what true ongoing earnings are, but this exercise should serve to illustrate that the company's non-GAAP earnings of $13.5 million are unrealistically optimistic.

Customer Discount Accruals Declining as the Company Reversed Previous Accruals

MRK offers discounts to its customers through both rebates and chargebacks. Rebates are refunded to contacted customers such as insurance companies and Medicare/Medicaid after the products are sold to participants on these providers' networks. MRK also sells directly to customers such as drug wholesalers. Chargebacks occur when contracted customers buy drugs through wholesalers at the rate they have contracted with MRK, then the wholesaler essentially charges MRK for contracted customers' discounted amount. Both forms of discounts require the company to estimate participation rates by each customer type to arrive at a best guess of how much of current period sales will have to be paid back as a discount. Recognized revenue in a given period is reduced by these amounts.

The following table shows activity in the accruals for customer discounts for the last four years:

	12/31/2017	12/31/2016	12/31/2015	12/31/2014
Beginning Customer Discount Accrual	$2,945	$2,798	$2,154	$1,688
Current provisions	$10,938	$9,831	$8,068	$6,560
Adjustments	-$223	-$169	-$77	-$18
Payments	-$11,109	-$9,515	-$7,347	-$6,076
Ending Customer Discount Accrual	$2,551	$2,945	$2,798	$2,154
Sales	$40,122	$39,807	$39,498	$42,237
Accruals as % of Sales	6.4%	7.4%	7.1%	5.1%

There are several things to note from the above numbers. First, provisions (the expense recognized in the period) was lower than the actual payments made to customers in 2017 by $171 million. This is the first time that has happened in the last four years. We admit this is not a huge discrepancy given the factors the company is having to estimate. However, what is more worthy of notice is the "adjustments" amount which represents the company making adjustments to previous estimated accrual amounts. In all four years, the company apparently determined that it had reserved too much in previous periods and needed to reduce the accrual accordingly. However, when it does this, it is essentially writing these amounts straight back into profits. It is interesting to note that the adjustment is always a reduction, and the amount has been increasing every year, even in a year where payments actually exceeded previous provisions. Such activity looks like a classic example of creating a reserve "cookie jar" that management can dip into to boost earnings when needed. **The $171 million of under-reserving in the year, plus the $223 million in writeback of previous reserves amounts to over $0.11 per share.**

Depreciation Expense Falling as Percent of PPE

We note that depreciation expense fell by almost 10% despite a 5% jump in gross property plant and equipment:

	12/31/2017	12/31/2016	12/31/2015	12/31/2014	12/31/2013
Gross PPE	$29,041	$27,775	$28,430	$31,140	$33,094
Net PPE	$12,439	$12,026	$12,507	$13,136	$14,973
Depreciation Expense	$1,455	$1,611	$1,593	$2,471	$2,200
Depreciation as % of Gross PPE	5.0%	5.8%	5.6%	7.9%	6.6%

The company depreciates its equipment under the straight-line method using estimated useful lives of 25-45 years for buildings and 3-15 years for machinery, equipment and office furnishings. These time frames did not change from the 2017 to 2-16 10-Ks. However, these are wide ranges and the company could have meaningfully altered the lives used for certain assets to artificially reduce depreciation expense.

It is also possible for a company to write down assets in a restructuring and keep them in service, and enjoy lower depreciation expense. MRK has begun to accelerate depreciation on certain assets that are targeted for closure and still in service, so it is be possible that depreciation is being calculated on a lower asset base in those instances. The fact that net PPE increased at a slower pace than gross PPE in the year indicates assets were depreciated faster than they were added. Perhaps some were fully depreciated and were no longer incurring depreciation charges. **Regardless, if depreciation expense has remained steady as a percent of sales from 2016, it would have been $230 million higher than reported, or almost $0.07 per share.**

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