BEHIND THE NUMBERS
EARNINGS QUALITY & DIVIDEND SUSTAINABILITY RESEARCH

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# Homebuilders Impairment Potential (DHI, LEN, PHM, TOL)

We have EQ ratings on two Home Builders – DR Horton (DHI) and Lennar (LEN). We are lowering both to 3- at this time. One of the largest risks to a home builder is an impairment to its inventory and that risk level has increased with the coronavirus. We are also going to examine PulteGroup (PHM) and Toll Brothers (TOL) on just this risk for comparison. All four of these companies had a stellar start to 2020 and now three of the four have commented on a significant drop in buyers since late March. As a result, we think this is a very timely topic.

In addition, while we expect there to be some impairments during this time – there are several reasons why the enormous and recurring write-offs that occurred in 2006-09 may not be what is coming. Optimists like to say "it's different THIS time" and pessimists point to history to say "it's never different THIS time." In looking at the history of housing drops and recoveries both tend to be swift – we think the more apt phrase in talking about today vs. 2007-09 is "It was different LAST time and may NOT be THIS time."

- The rate of decline for the homebuilders on new orders has been very quick. Orders have gone from increasing at 20%-30% rates y/y to falling 50% in a week. Companies pulled guidance. They are still building (construction has not been widely shut down) and still completing new orders and sales.

- While people debate V, L or U-shaped recoveries to housing for how long this may take – looking back at 60 years of housing starts – there have been basically 9 quick drops and recoveries. Only 2008 was U-shaped. A recovery that largely absorbs current inventories and occurs in under a year should limit impairments.

- There are many moving parts to an impairment, but the key risk many do not understand is the charge-off can be much larger than the inventory levels suggest as the builders have to complete the full community build-out, which means they are going to continue investing cash in a potentially weaker deal than planned. They have to estimate the total cash flows coming in and the timing of them. In many ways it is like thinking a 10% hit to a portfolio is a small item, until you realize that it actually means 80% of equity is gone and requires a 40% capital raise.

- What really makes an impairment large for a home builder is declining home prices as it is trying to sell spec homes on its books and falling prices reduce the forecasted cash flows to value assets in inventory. Also, the cash flows are discounted to PV on a fairly high hurdle rate, so the longer time to realize proceeds shrinks the value of those assets in the forecasts too.

- In 2006, housing was already in decline for most of these companies and there were only modest impairments against very high inventory levels well into the housing bubble unwinding. Pricing had not collapsed in 2006. It wasn't until 2007-09 that the impairments became enormous. The companies were still running fast into an already slowing market.

- In this case of 2020, all were reporting higher orders and strong traffic literally the day before the economy was shut down. On the positive side, construction has not been turned off and continues at this time. Thus, contracted homes are still being completed. Pricing is holding up and one company has reported trends seem to be improving already on traffic. If these companies have impairments on par with 2006 – we believe investors will be positively surprised.

- In looking at inventory situations now vs. 2006, we think adjusted for unit volume and pricing compared to actual inventory levels – Pulte and DR Horton look to be in solid shape compared to Lennar and Toll Brothers. In all cases, the fact that pricing is so strong may well limit inventory impairments further. LNR, PHM, and DHI have also seen very high gross margin recovery. The margins would need to fall to generate an impairment – which would likely take several quarters of weak pricing and that hasn't started yet.

- The companies that have reported since the shut-downs started talked extensively about how quickly they have delayed starting new construction and are completing what is under contract. That is key because it preserves liquidity. More important for impairment risk is it limits the supply of new homes and helps hold up pricing levels.

- The U-shaped recovery from 2008-12 is helping now – because the market has been undersupplied in new homes for many years. Normally, the market needs 1.3-1.5 million homes at equilibrium – it ran under 1 million for four years and only recently hit 1.5 million. There also are not wide-spread defaults and repossessed homes hitting the market to compete with builder inventory. Tight supply is holding pricing up too which again mitigates impairment levels.

## Overview – Strong Sales until Late March and Building Continues in April

Homebuilding has normally been one of the largest swinging cyclical industries there is. The group has seen enormous swings in interest rates, unemployment, inflation over the years, and nearly everyone over the age of 10 has been through a few of these cycles:

These are US housing starts by month going back to 1959. These are in thousands of homes, so the equilibrium of 1500 represents 1.5 million housing starts. While people talk about long swoons in business and those are definitely visible in the historical data – there are several periods of very quick recoveries too. In fact, the only U-shaped recovery for housing starts was 2009-12. Most other recovery periods have been V-shaped and fairly quick ones.

What is interesting to us is that in the last two quarters, all of these companies were still seeing strong orders and building was brisk:

| DR Horton | Mar 20 | Dec 19 | PulteGroup | Mar 20 | Dec 19 |
|---|---|---|---|---|---|
| y/y unit orders | 20% | 19% | y/y unit orders | 16% | 33% |
| y/y unit backlog | 14%* | 2% | y/y unit backlog | 20% | 20% |
| y/y unit deliveries | 8% | 13% | y/y unit deliveries | 16% | 2% |

- DR Horton provided preliminary results for March 20 and the backlog was for 6-months not 3.

| Lennar | Feb 20 | Nov 19 | Toll Bros | Jan 20 | Oct 19 |
|---|---|---|---|---|---|
| y/y unit orders | 18% | 23% | y/y unit orders | 31% | 18% |
| y/y unit backlog | 2% | -4% | y/y unit backlog | 9% | 3% |
| y/y unit deliveries | 17% | 16% | y/y unit deliveries | 5% | -1% |

All of these companies are still building at this time in nearly all markets. Those that have made comments all talked glowingly about the start of March. They are all now expecting order rates to slow in April and May and cancellation rates to increase:

DR Horton April 7, 2020 –

> "***Economic fundamentals remained solid in the housing market throughout most of the second quarter of fiscal 2020, as interest rates on mortgage loans remained low, demand was strong*** *and there was a limited supply of homes at affordable prices across most of the Company's markets. During the latter part of March and into April, the impacts of the COVID-19 pandemic (COVID-19) and the related widespread reductions in economic activity began to adversely affect the Company's business operations and the demand for its homes.* ***The Company has experienced increases in sales cancellations and decreases in sales orders in late March and early April, compared to the weeks leading up to the pandemic."***

PulteGroup April 23, 2020

> "***The U.S. housing industry carried tremendous momentum into 2020, until the devastating effects of the COVID-19*** *pandemic began impacting the country," said Ryan Marshall, PulteGroup President and CEO. "As the coronavirus spread and state and local governments implemented various restrictions and stay-in-place orders,* ***we experienced a material slowdown in consumer traffic and sales activity beginning in mid-March.****"*
>
> *"Our reported Q1 order growth, however, is not reflective of current market conditions. In the first quarter,* ***net new orders were up more than 30% over the prior year for both January and February.*** *It's now old news when I say that with the virus spreading rapidly and governments implementing shelter in place restrictions, home buying demands slowed dramatically as March progressed."*
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> *"To appreciate the magnitude of the slowdown* ***in the first full week of March our net new order exceeded 800 homes. In the final full week this number dropped to just 140. As a result, our March 2020 orders in total were down 11% from March of 2019. From orders being up 30 plus percent to being down 11% in just a few weeks*** *is unlike anything we have experienced before."*

Lennar March 19, 2020

> "*What* ***we have seen so far since the end of the first quarter is that new orders have continued to be strong. For the first two weeks, new orders were up 16%, exceeding plan in each of our operating regions and traffic in our Welcome Home Centers has remained relatively strong. Nevertheless, we have started to see a slowdown in traffic over the past several days,*** *while at the same time we have seen a higher conversion rate of traffic to sales as those coming out are now more serious buyers."*
>
> *"****As the economy slows, we expected our traffic will decline and we will see the corresponding slowdown in sales****. We've moved to an appointment only environment in most of our Welcome Home Centers and in all of our communities we tour only one family at a time to prioritize the safety of our associates and of our customers."*

## The Mechanics of An Impairment – It Can Be Much Larger than Inventory Levels Would Portend

Inventory Impairments for homebuilders are different from other write-offs. In most cases, an asset has a fixed value on the balance sheet that either doesn't change – like goodwill, or is being sold, amortized, or depreciated and is getting smaller going forward. The future estimated cash flow is discounted to the present and is compared to the carrying value of the asset. In the case of most companies, inventory is a fairly short-lived item and it may not be the largest asset on the balance sheet. For home builders, inventory exceeds book value:

| | DHI | LEN | TOL | PHM |
|---|---|---|---|---|
| Inventory | $11,899 | $18,643 | $8,198 | $7,858 |
| Equity | $10,503 | $12,980 | $4,705 | $5,530 |
| Inv/EQ % | 113% | 144% | 174% | 142% |

The homebuilders have large inventory balances as simply a part of doing business. It can take years to acquire, plan, build, and sell an entire subdivision. The discount rates are large. Most of these companies use 12%-16% hurdle rates for assets under a year and up to 25% for longer ones. Also, unlike capitalized software that is amortizing over 3-years and may already be on the books for 30-50% of cost when doing an impairment test – home builder inventory is getting larger – not smaller when the problems arise.

**The future cash flow for the homebuilder is selling the house. When people are worried about impairment risk – the value of the future home is often going down.** Also, buyers may walk away from deals on homes already under contract and construction. The buyer may forfeit money to the builder, but the builder may no longer find that selling that house takes 6-months rather than 2-months. A $300,000 home that is discounted back at 6-months at 16% is worth $15,000 less than one discounted back 2-months. Also, if the economy is weaker, the builder may need to cut the price to sell the house in 6-months. Cutting the $300,000 house's price by 10%, now cuts the value by $43,000 vs. the house being delivered in 2-months.

**The builder also works to keep his costs down and economies of scale working. The company does not start building homes only when it has orders from buyers.** It may have 20 homes with customers and there are another 8 lots in the immediate area –

it will often start building on those lots too. There are multiple reasons such as keeping the crews busy – if it's too cold to pour concrete – those workers can hang drywall in other homes for example. **These are called spec homes (new builds without a buyer). The builder will actively seek to sell those spec homes also often telling prospects who want Model-C that there are two Model-C's for sale already under construction and they can have one in 6-8 weeks instead of 4-months.** However, when buyers vanish, the time taken to sell spec homes often lengthens too. **It is common for spec homes to make up 20% of the inventory at times. Thus, falling prices and longer times to sell – can impact much more of the inventory than customers simply walking away.**

Those are two ways to get an impairment from weaker sales caused by lower selling prices or longer lead times to make the sale. The third problem is what makes home building inventories even more prone to write-downs. The builder has the money spent thus far on the homes under construction listed as inventory on the balance sheet. However, to test for impairments, it has to estimate what the total remaining costs are to complete the construction and enable the homes to be sold. These costs can be significant but are not on the books. Yet, they can influence the size of the write-down in a huge manner. Here is an example:

A homebuilder believes it can sell 100 homes for $300,000 each over 18-months and each house will cost $250,000 to build. Ultimately – the equation should look like $30 million in revenue less $25 million in costs for a gross profit of $5 million. But the mechanics aren't as vanilla as that.

After 6-months, assume it has acquired the lots for 80 of the homes, has completed 50% of the construction on 20 homes, 25% on 20 other homes. It hasn't delivered any of the homes yet. So, inventory is carrying all the current investment to date:

| 6 months in | Inventory |
|---|---|
| 80 lots at $30,000 | $2,400 |
| 20 homes 50% built | $2,100 |
| 20 homes 25% built | $1,050 |
| Total Inventory | $5,550 |

Many people think there is only $5.55 million in inventory at risk, but in testing for an impairment, the builder has to look at the future cash flows and the future

building costs – there is another $18.45 million in future costs that are coming. Now what happens if the market declines and the builder forecasts that it will take 3-years not 18 months to sell all the homes and the average price will be $240,000. There would be an impairment test that looks like this:

| | 12 months | 24 months | 36 months | PV of Cash |
|---|---|---|---|---|
| Sale of 25 homes @ $275 | $6,875 | | | $6,875 |
| Sale of 50 homes at $240 | | $12,000 | | $10,236 |
| Sale of 25 homes $205 | | | $5,125 | $3,729 |
| Current Inventory | $5,550 | | | -$5,550 |
| Cost to buy 20 lots | $600 | | | -$600 |
| Cost to complete 1st 40 homes | $5,250 | | | -$5,250 |
| Cost to complete 2nd 60 homes | $12,600 | | | -$12,600 |
| Estimated Cash Flow | | | | -$3,160 |

This is a very simplistic example and we only discounted the numbers for 24 months and 36 months. In this case, the subdivision would have an impairment of $3.16 million even though inventory for it is currently only $5.55 million. And, that $5.55 million in current inventory is only 23% of the total estimated cost, but it is going to absorb 100% of the total project's adjustment.

The other issue to keep in mind is not only can the impairment become much larger than what people initially think – the company has to continue paying the sizeable remaining costs to complete homes and subdivisions. That is why you hear these companies talking about liquidity so much and trying to slow construction or lot acquisition where possible. In the case of some land deals, the company can walk away and forfeit deposits. On partially completed spec homes – it is often cheaper overall to complete the construction.

## Where the Companies Stand Now Verses 2006-2009

We fully expect there to be some impairments. Actually, impairments happen all the time due to cost overruns, delays in construction, design changes – they just tend to be minor. The bigger aspects of large impairments tend to center more on having to complete spec homes and hold them longer periods as well as having to cut prices to stimulate sales.

The inventory levels are high for these companies – but looking back at historical levels, they do not appear as problematic now as the numbers would indicate:

- In 2006, most of these companies were already seeing a turn-down in sales off nearly record peaks and still had high inventories.
- Adjusting for the difference in home prices from 2006 to today and volumes, not all these inventories look too bad.
- In 2006, companies were still building – in April 2020, some have already announced plans to delay construction and wait to see how the economy reopens

| PulteGroup | 1Q20 | 2019 | 2009 | 2008 | 2007 | 2006 |
|---|---|---|---|---|---|---|
| **Homebuilding Inv** | $7,858 | $7,681 | $4,940 | $4,201 | $7,028 | $9,374 |
| Gross Margin | 24% | 23% | 9% | 10% | 13% | 19% |
| Units Sold | 5,373 | 23,232 | 15,013 | 21,022 | 27,540 | 41,487 |
| Avg Price | $413 | $427 | $258 | $284 | $322 | $337 |
| Inventory Impairment | | | $751 | $1,200 | $1,600 | $204 |

Pulte was on pace for selling about 8% fewer homes in 2020 than it was in 2007. It's price per house now is 33% higher than in 2007, yet it's inventory is only 12% higher. The inventory level in 2007 was after two impairments of $1.8 billion and two years of declining business.

Pulte also slammed on the breaks to prevent more inventory build – from the April 23rd call:

- we have been successful in delaying well over 90% of the lots scheduled for purchase in the near term. We would hope to have similar success as and when we need to deal with contracted land positions scheduled to close in the future.
- In the rare situations where we have been unable to agree on some form of extension with the land seller, we have walked away from the lots and our pre-acquisition expense. In the first quarter, these charges amounted to only $4 million.
- we are working to intelligently slow land development such that it is more appropriately aligned with the current sales environment.

- We've also implemented strategies to limit the amount of capital we are investing in vertical construction. This includes contacting backlog customers and reconfirming their status before beginning construction of that sold unit. Having said that between our existing spec starts and an elevated cancellation rate, we have spec units in production that we are also moving on to a slower track. At quarter-end we had a total of about 3,100 specs in the pipeline of which almost 40% were early enough in the build cycle that we are able to suspend further construction.

| Lennar | 1Q20 | 2019 | 2009 | 2008 | 2007 | 2006 |
|---|---|---|---|---|---|---|
| **Homebuilding Inv** | $18,643 | $17,777 | $4,088 | $4,500 | $4,500 | $7,831 |
| Gross Margin | 21% | 21% | 16% | 17% | 14% | 20% |
| Units Sold | 10,313 | 51,491 | 11,478 | 15,735 | 33,283 | 49,568 |
| Avg Price | $402 | $400 | $243 | $270 | $297 | $315 |
| Inventory Impairment | | | $373 | $377 | $2,409 | $502 |

Lennar added CalAtlantic since the 2006-08 timeframe which sells higher-priced homes. Based on the numbers, its inventory is 4x the level of 2007 after a massive impairment and 240% of the 2006 level. Pricing is only up 28% and volume is setting new highs is up about 7% - that does not support the increase in inventories overall in our view. Lennar is also working to limit more inventory build. From the March 19th call:

- We are working collaboratively with our strong relationships with national, regional, and local developers to activate a circuit breaker, pausing by extending the closing date of our land purchases.

- We've also slowed down the amount of cash we are investing in land development, and rephasing our developments to reduce the number of home sites developed at one time. Finally, we're also adjusting our start pace and further limiting the amount of spec inventory production in order to closely match new starts with new sales.

- We started a number of years ago, a soft pivot to lighter and shorter duration land position. And those shorter duration land positions will certainly not suffer the kind of impairments that we've seen in prior cycles.

| DR Horton | 1Q20 | 2019 | 2009 | 2008 | 2007 | 2006 |
|---|---|---|---|---|---|---|
| **Homebuilding Inv** | $11,899 | $11,282 | $3,663 | $4,683 | $9,344 | $11,343 |
| Gross Margin | 21% | 20% | 13% | 11% | 17% | 24% |
| Units Sold | 13,126 | 56,565 | 17,034 | 21,251 | 33,687 | 51,980 |
| Avg Price | $301 | $298 | $205 | $220 | $244 | $267 |
| Inventory Impairment | | | $408 | $2,485 | $1,330 | $271 |

DR Horton may be in the best shape looking at the raw numbers compared to 2006. Its pricing is up 13% and its volume looked to be up another 13%. Yet, its inventory is up only about 5%. The company has not commented much other than a short press release on April 7th releasing preliminary results for the quarter. It noted that cancellations have increased, and new orders have dropped as expected. It is also limiting land acquisitions and development spending and adjusting inventory levels – (that may mean working to sell spec homes).

| Toll Brothers | 1Q20 | 2019 | 2009 | 2008 | 2007 | 2006 |
|---|---|---|---|---|---|---|
| **Homebuilding Inv** | $8,198 | $7,873 | $3,184 | $4,127 | $5,573 | $6,096 |
| Gross Margin | 18% | 20% | 15% | 21% | 27% | 31% |
| Units Sold | 1,611 | 8,107 | 2,965 | 4,743 | 6,687 | 8,601 |
| Avg Price | $799 | $864 | $568 | $608 | $751 | $799 |
| Inventory Impairment | | | $465 | $645 | $620 | $152 |

Toll Brothers reported too early for this to be an issue at the time. We would be concerned that its buyers may be more dependent on savings with it selling homes that average $800,000 and may not be a function of buyers only paying via income. Also, inventories were up 34% from 2006, yet pricing is flat, and volumes are down.

Our initial conclusion is there will be some impairments. It is unlikely these companies can go from an environment of seeing sales orders rising at 15%-20% to falling 50% in a week and not having some inventory issues. If nothing else, it will take longer to sell the current subdivisions than initially forecast. However, efforts to slow the pace of new inventory growth should help limit the supply of new spec homes on the market too.

It appears that DR Horton and Pulte are in better shape to withstand the impact of coronavirus on inventory. We would point out that one of the positives in the past for

DR Horton was its ties to Texas where energy prices may be a drag longer than the virus.

## Several Other Reasons Point to Smaller Impairments – Supply Is Tight

**The U-shaped recovery from 2008-2012 is still working for these companies because the country simply has not built many homes in recent years.** In the US, there are about 300,000 homes destroyed each year from disasters, a new stadium being built, or are simply torn down for dilapidation or to clear land for a new home. Also, population growth requires about 400,000-500,000 homes per year. On top of that, there are people who own multiple homes either as rentals, vacation retreats, or they are in transition with divorce or moving. All of that adds up to the market needs 1.3-1.5 million new homes every year.

Looking at the housing start graph earlier in this report – the US has been under 1.5 million housing starts from 2008-2020. It was below 1.0 million starts until late 2014 – or about five years. That's with 320-330 million people. We didn't have 200 million people until 1968 or 250 million until 1990. Yet, the country never had periods of more than a month or two of starts below 1.0 million from 1959-2008.

What made 2008-12 so rough is many people were defaulting on mortgages and those homes were being auctioned at the same time the homebuilders were still trying to sell spec homes that were built in stronger times. The result was oversupply and lots of price cutting. In the tables showing inventory impairments – the gross margins are also listed. Those are adjusted for the impairments. Also, the average price of the homes sold by the builders is listed. So, Lennar saw prices fall 23% from $315,000 to $243,000 and gross margin lost 300-500bp. DR Horton saw prices fall 23% too from $267,000 to $205,000 and gross margins lost 700-1300bp.

Lennar and Pulte are posting higher gross margins now than 2006, and DR Horton is close. All of these companies are attributing some of their strong order growth in recent years to a lack of supply for low-priced homes on the market. Whether the coronavirus issues last 2-months or 6 months – there does not appear to be a flood of defaults coming where $200,000 homes were valued at $600,000 only 5 years later and new mortgages took out 125% of that $600,000. There are efforts to help people pay mortgages due to income loss as well.

As a result, the one big positive now is the builders may not have enormous competition for selling their spec homes. That also means pricing may not decline as much. In the example we did above to illustrate an impairment, the 20% change in average pricing played a big part of triggering a $3.16 million hypothetical impairment against a $5.55 million inventory level. If the change was only 10% and applied to all homes – the impairment would be only $822 million or 74% less. Also, lower competition may allow spec homes to be sold more quickly too which would further cut the size of the impairment.

Pulte pointed this out on their call about this downturn vs. others:

> "*Different than, I think other housing downturns typically there has been a buildup of supply which we don't have right now.* ***There's not a buildup on the resale side. There's not a buildup on the new side and so I would tell you that's largely why we've seen price continue to hold."***

Lennar agreed:

> *"if you think about where our gross margins are, let's say, that's about 21% and the impairment process considers selling and marketing expenses. So, it's around 6%. So, you're already with a 15% net margin as your starting point. So that's reasonably healthy, higher than the net margin that we had around that 2006 timeframe, give or take. So, there's no crystal ball, it's very early. But I do think that that higher bar is very helpful to us."*

> *"You have to remember that when you start to look at impairing assets, there's a built in kind of shock absorber, or buffer between a reduction in the market and impairment and that is our gross margin. As you know, our gross margin has been robust and remained strong.* ***You're also looking at inventory levels across the industry that have been defined by short supply and production deficit. And so, it's going to be some time before we were called on to raise the question of impairment*** *but with that said, it's possible."*

## Compared to 2008, Other Positives Exist Today – Credit and Affordability

We think the lack of other people dumping houses at the same time the builders are selling is the biggest difference. But what made the last crisis worse is many people who would have been potential buyers – had just defaulted on a loan and didn't qualify to buy again. Or, if they went a subprime route, they faced very high interest rates and had to put more cash down. There was simply a shortage of buyers too.

In the current situation, interest rates are falling and home payments are coming down. While the market isn't 2005-07 again where they didn't even verify if the person was actually alive who was getting a mortgage, it's not 2009-10 either where people needed 30% down and a FICO score of 800 to get to loan. That is helping keep more prospective buyers in the game. As one of the managers on the Pulte call noted, affordability and pricing isn't really the issue – pricing has been holding up well so fall – the issue is people can't go outside and shop.

The questions here seem to be over how long the shutdown and lasts and how quickly things bounce back. Pulte noted that recent talk of reopening starting soon has already started to translate to more buyer interest, "We are starting to see some pretty positive trends in our traffic data just starting this week as we think more of the -- I think because more of the country is talking about reopening. We've seen certain states already take action to reopen and I think some of the understanding and the fears around COVID-19 is starting to subside. We're seeing some positive traffic trends which I think bodes well."

# Explanation of EQ Rating Scale

| Rating | Description |
| --- | --- |
| 6- "Exceptionally Strong" | Indicates uncommonly conservative accounting policies to the point that revenue and earnings are essentially understated relative to the company's peers. Higher possibility of reporting positive earnings surprises |
| 5- "Strong" | Indicates the company has no areas of concern with its reported results and we see very little risk of the company disappointing due to recent results being overstated from aggressive reporting in recent periods. |
| 4- "Acceptable" | Indicates the company may have exhibited a minor "red flag", but the severity of the issue is not yet a concern. Minimal risk of an earnings disappointment resulting from previous earnings or cash flow overstatement |
| 3- "Minor Concern" | Indicates the company has exhibited either a larger number of or more serious warning signs than companies receiving a 4. The likelihood of an immediate earnings or cash flow disappointment is not considered to be high, but the signs mentioned deserve a higher degree of attention in the future. |
| 2- "Weak" | Indicates the company's recently reported results have benefitted materially from aggressive accounting. Follow up work should be performed to determine the nature and extent of the problem. There is a possibility that upcoming results could disappoint as the impact of unsustainable benefits disappears. |
| 1- "Strong Concerns" | Indicates that the company's recent results are significantly overstated and that we view a disappointment in upcoming quarters is highly likely. |

In addition to the numerical rating, the EQ Review Rating may also include either a minus or plus sign. A minus sign indicates that our analysis shows the overall earnings quality of the company has worsened since the last review and there is a possibility the numerical rating will fall should the problem continue into the next quarter. Likewise, a positive sign indicates that the overall earnings quality is improving, and the company may see an upgrade in its numerical rating should the trend continue.

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**The EQ Review Rating is not comparable to a traditional buy/sell rating**. The Rating is intended to specifically convey the extent to which reported earnings may be over/understated. Fundamental factors such as forecasts for future growth, increasing competition, and valuation are not reflected in the rating. Therefore, a high score does not in itself indicate a company is a buy but rather indicates that recent results are a good indication of the underlying earnings and cash generation capacity of the company. A low score (1-2) will likely result in us performing a more thorough review of fundamental factors to determine if the company warrants a full-blown sell recommendation.

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