

D.R. Horton (DHI)- EQ Review and Risk Factors Report

Current EQ Rating*	Previous EQ Rating
4+	NA

*For an explanation of the EQ Review Rating scale, please refer to the end of this report

We initiate coverage of DHI with a 4+ (Acceptable) rating.

This report also assesses risk factors for DHI in the context of our homebuilder overview. See the intro above.

D.R. Horton (DHI) remains one of the cleaner homebuilding operators that has not branched out into a number of new areas such as investing in apartments or selling/installing solar panels. Like other builders, it buys and sells land and has financial services related to mortgage origination and title insurance. However, it sells the loans and servicing rights and does not carry the insurance risk. DHI has 96.5% of revenues related to homebuilding, 1.2% to land sales, and 2.3% to financial products. **That is already a positive in our view.**

The P/E is under 10 and with strong recent EPS growth. The debt is only 36% of equity which includes the debt from its largest JV and does not factor in cash. It is growing the dividend now, which is likely to change based on the business environment both up and down. This is about as clean as a homebuilder comes and that is why it gets a 4+ rating to start. We see some areas of pricing weakness right now that could hurt EPS, but the higher volumes are still driving the total figure upward:

- **Volumes sold by D.R. Horton have already tripled and are back to peak levels – Negative for future growth**

- **The company does 65% of its volume in stronger markets in the Southeast and Southcentral U.S. – it may gain volume in a flat overall U.S. market – Positive**
- **Volume leverages fixed costs – but pricing plays a role too. Pricing gains helped gross margins by 60bp in 2018 or 19-cents in EPS. Signs are apparent that pricing gains may be tougher to push through. About 10% of EPS may be at risk – Negative.**
- **DHI appears to have plenty of land on hand and under option to operate for over 5 years at current sales volumes. The cost of land also appears low and even options prices appear unlikely to squeeze margins much at all – Positive.**
- **A material impairment risk on land or options appears very low. It can lose some earnest money but that is unlikely to be a major issue. It also does not have much exposure to JV debt – Positive**
- **Homebuilding impairments are a larger risk than land in our view – but still very minor. They ran about 15-30bp of sales in recent years. If pricing does flatten for new homes, the accounting model could result in more bearish forecasts for cash flows and cause 100-200bp of margin squeeze instead of 15-30bp. Immediate risk – very low. Moderate-term – risk increases.**
- **We have few problems with the balance sheet, \$3.3 billion in debt matures about \$500 million per year, the company has \$1.36b in cash and mortgage loans for sale. Reserve accounts have held up and look unlikely to produce an earnings problem – Positive.**
- **The cash flow statement shows working capital consuming cash as the volumes of homes built increases. Moderation in volume growth may free up more cash. Debt maturities are manageable at \$300-\$500 million per year if the company opts not to roll it over – Positive.**

D.R. Horton from a Macro Perspective

Our Housing primer report discusses four factors: homebuilding rates returning to normal levels across the country, home ownership rates also returning to normal, population migration within the states from high-tax areas to low-tax areas, and interest rates.

D.R. Horton benefitted from the market for homebuilding recovery across the country. The company saw home sales fall from 51,980 in 2006 to 17,421 in 2011 and came in at 52,740 in 2018. We believe that level of growth is unlikely to recur. Investors should be more focused on volumes increasing at slower rates at this point. **That is a negative going forward.**

The company does continue to benefit by having two-thirds of its sales volumes in the Southeast (Alabama, Florida, Georgia, Mississippi, Tennessee) and Southcentral (Texas, Oklahoma, Louisiana). Those are states still attracting more population movement. **We would rate that as a positive for DRI at this point.** It should help offset slower volume growth nationwide if key markets continue to need new homes to handle rising populations in individual states.

	2018	2017	2016	2015	2014
Growth in Volume	13%	14%	10%	28%	18%
Growth in Price	0%	2%	2%	3%	7%

If we focus on the Southeast at 29% of revenues, Southcentral at 24%, and the West at 24% - while volume growth has held up, pricing has started to see some weakness:

Volume	2018	2017	2016	2015	2014
Southeast	11%	17%	20%	27%	15%
Southcentral	13%	8%	7%	27%	20%
West	15%	8%	5%	27%	18%

Pricing	2018	2017	2016	2015	2014
Southeast	1%	1%	1%	5%	7%
Southcentral	0%	4%	4%	9%	6%
West	-2%	5%	6%	3%	12%

The company operates in stronger housing markets in our view and should benefit relative to some others in the industry even if housing starts nationwide flatten out - DHI could still

see some volume growth. We are not saying that if total U.S. starts fall by 100,000 or more, that DHI will not be hurt.

Pricing is a Key Item:

Our concern is that modestly higher interest rates cause people to push back on housing prices a bit and downgrade cabinets or sinks or require more incentives. These are homes selling for about \$250,000 in the southeast and southcentral and close to \$500,000 in the west. 4% +/- is \$10,000 in selling price for the first two and +/- \$20,000 for the west. That is where we think some of the past growth is most at risk for D.R. Horton.

The company has noted that it has faced higher construction cost and passed those through as higher selling prices:

“Gross profit from home sales increased 21% to \$3.3 billion in 2018 from \$2.7 billion in 2017 and increased 130 basis points to 21.3% as a percentage of home sales revenues. The percentage increase resulted from improvements of 60 basis points due to the average selling price of our homes closed increasing by more than the average cost, 40 basis points from a decrease in warranty and construction defect expenses and 30 basis points from a decrease in the amortization of capitalized interest.”

60bp of margin in 2018 adjusted for a 21% effective tax rate was worth 19-cents per share. That's 5% of EPS. That also only factors in the increase in selling prices over higher costs. What if there is no price increase in a given year? The company already saw lower pricing in the West last year and only modest gains in the Southcentral. Pricing alone from the Southeast was 21-cents of the \$3.81 DHI posted in 2018. Higher pricing in the Southcentral was 21-cents in 2017 versus the \$2.74 posted.

In the first quarter of 2019 (ended in December), DHI reported that its East division had a 290bp drop in gross margin due to higher home costs and the Southcentral had a 100bp drop in gross margin due to lower average selling prices for new homes.

From a macro standpoint, we think DHI can continue to see some volume gains in its key areas that produce 65% of total unit sales. **However, the pricing gains are already flattening or reversing in some places. That alone could swiftly cut EPS growth. This is more of a risk for DHI in our view as pricing can impact EPS by as much as 10%**

D.R. Horton also caters to a higher percentage of first-time homebuyers. There is a plus to that in that those buyers do not have to sell another house. However, it also means they are not rolling over equity from another inflated home value into the new purchase and have fewer resources overall. That should make them more price sensitive than other buyers.

Land and Land Accounting

There are two questions to ask here: Does the company have enough land to operate for the foreseeable future and what is its financial exposure?

We do believe DHI has enough land to meet demand for several years. The volume of homes sold last year was just under 53,000. As noted earlier, that is a high level historically. The company already has 128,500 lots that are owned directly. Of that total 36,500 are fully developed and ready for home construction. The remaining could likely be developed very quickly to the extent they need water/sewer installed, sidewalks and roads. That gets the company through over two years at high sales volumes. **There is another 180,900 under option or purchase contract, which is another 3.5 years of land supply.**

The land directly owned should require little in additional investment. That cash is already spent. The lots under option have already required a deposit of \$449 million and an additional \$6.9 billion would be spent if DHI acquires everything on option. DHI bought a 75% interest in land developer called Forestar. Forestar holds 18,800 of the 180,900 lots under option and would require \$706 million in additional payments (that is part of the \$6.9 billion). While it would be influenced on actual location – we're not seeing too much in land inflation to squeeze D.R. Horton margins.

Based on lots owned now and balance sheet value – DHI is about \$38,500 per lot. The lots under option represent a per lot value of \$40,600. That's only a 5% difference and where they are in the country would impact that. **Essentially, that should give DHI a stable cost for a key part of the homebuilding operation for several years to come. Plentiful land and locked in low prices are positives for D.R. Horton.**

In 2006, investors used to focus solely on the land on the books and earnest money paid for options. They would argue that was the downside of the deal. In reality, it was a bit more complicated. The easy part, if the land is listed as is – the carrying value needed to be compared to what the selling prices are at fair market value. A simple lower of cost or

market comparison: If land was selling for \$50,000 and was on the books for \$35,000 – no action was needed. If land was selling for \$25,000 and was on the books for \$35,000 – a \$10,000 impairment would be required.

Land that is part of the housing community project is a larger issue. The builder is unlikely to plan on selling many individual lots in the middle of the community. So, the value of the land is on the books, then the builder makes an assessment of what it will cost to develop the remaining land to reach the stage when everything is a finished lot and that is compared to the fair market value of finished buildable community land. This may be 100 lots at \$40,000 and it will require an additional \$500,000 to finish development – thus the expected investment is \$4.5 million ($100 * \$40,000 + \$500,000$). That \$4.5 million figure is compared to fair market value and a lower of cost or market assessment is made that may require no action or an impairment to be recorded. This is a bigger issue for spec homes than it is for land and we'll discuss that below. The point to keep in mind is it can mean the homebuilder has more exposure than simply the money already invested or earnest money on deposit.

Finally, if a homebuilder forfeits options on the joint venture – that may wipe out that entity and the builder may want to keep it alive. Often the JVs have debt and the reason for the entity is to allow the builder to control some land without tying up its own capital. The JV would be doing its own set of impairment assessments and dealing with creditors who may be looking at land sales happening over 6 years instead of 2 to repay them. The homebuilder may have an incentive to support the JV longer with cash infusions to keep the lot options alive.

At this point, we rate all of this as a low risk for D.R. Horton. The land on the books is cheap. It's valued at 10%-20% of the value of the total house being planned for it. The cost to complete lots is also likely fairly low and often the land development is largely complete by the time the home construction begins. In terms of deals they can walk away from and forfeit the deposits – D.R. Horton is limited to \$449 million already spent.

That leaves only the Forestar deal where DHI owns 75% of it. Given that DHI went to the trouble of formally buying a controlling interest, it likely wants that land. Forestar only has \$120 million in debt which is on DHI's books already and the remaining purchase price on Forestar lots is \$522 million.

Homebuilding Inventory Is More Material

This is where D.R. Horton has more potential risk in our view. When a community of homes is built, the company builds some model homes and those will eventually be modified and sold as homes too. Also, margins in homebuilding are impacted by getting many tasks done on a continuous basis rather than fits and starts. For example, it may be cheaper to pour concrete for 12 houses on one day and later have the electricians wire each house and simply move to the next one only 12 feet away and finish that one... They can maximize subcontractor and crew time in this manner and schedule them more easily too.

One of the issues that arises with this construction method is the homebuilder doesn't necessarily leave lots 3, 18, 33, 56, and 87 empty while homes are built all around them simply because no one bought those lots yet. The builder starts construction on those lots too and hopes to sell them during construction or after completion. These homes under construction without a buyer become spec homes. All of this is subject to impairment testing – the value of the model homes, the value of the spec homes, and the value of the homes under contract and the estimated cost to complete and sell all three are compared to the carrying value.

Much like land and lot improvements – these homes and the whole community is part of inventory for a period of time. Unlike land, there are more variables. For example, if the home was sold for \$300,000 and later on, the price of lumber adds \$10,000 to costs – that can trigger an impairment. A design issue that has to be modified after construction has begun can also cause an impairment. The builder has to compare the future cash flows of what it expects to receive against the amount invested and expected to be invested. The sales figure can be influenced by the level of incentives to move the house, the current market for home prices, a less desirable view. All costs incurred including the land plus all expected future costs to complete the project have to be taken into account too. Capitalized interest is also part of Cost of Goods Sold so arguably that could impact future expected cash flows if rates increase.

As we noted above, with lots, the value is about \$40,000. With homes, they can be \$500,000 in California or \$250,000 in Texas. It may only be a 2% problem, but it's a 2% problem on a larger cost figure. There are currently 33,700 homes in inventory at D.R. Horton – the bulk of those are under construction and are under contract to be delivered. The total homebuilding inventory is about \$5.8 billion.

There is very little in the near term that would lead us to forecast a big write-off here. In fact, impairments have been minor of late:

Impairments	2018	2017	2016
Land	\$13.4	\$17.0	\$11.1
Home Inv.	\$10.9	\$23.2	\$20.3

This is only 15-30bp of margin in recent years.

Rising real estate values a big factor in preventing impairments. Quite frankly, one would likely need to forecast declining prices for homes to generate a material level of impairment when impairments were \$1.2 billion and \$2.4 billion in 2007 and 2008. We do not consider that realistic possibility at the moment. We currently consider the impairment risk low and we again point to DHI operating heavily in stronger markets. Impairments are likely to always happen, in 2015 they were \$60 million and \$85 million in 2014. A market of rising home prices likely keeps these impairments minor. A flat pricing market may create a 100-200bp risk factor for margins.

D.R. Horton's Balance Sheet and Cash Flow Are Solid

Removing the risk of a major write-down and having a sizeable amount of land to operate already in place, gives comfort for the income statement. It also helps the balance sheet since land and homes in inventory are \$11.6 billion of \$14.5 billion in total assets. The balance sheet shows conservatism also.

First debt is only \$3.3 billion including Forestar against \$737 million in cash and \$9.3 billion in equity. In addition, to the cash, there is \$622 million in mortgage loans for sale. As we noted, DHI sells mortgage loans and servicing rights immediately and deals largely with US mortgage agency approved loans. The debt is fixed rate and is well staggered. Maturities are \$300-\$500 million per year. The company continues to accrue warranty and legal reserves too. Warranty reserves are nearly 3 years of 2018's payout rate. Legal reserves are nearly 7 years of 2018's payout.

The cash flow statement shows working capital investment growing as the company's volume of homes built rises. That is not surprising. If the rate of growth slows just a little,

DHI's cash flow may improve materially. In 2018, income of \$1.46 billion became cash from operations of \$545 million because of about \$1 billion in higher working capital. Capital spending is minor as the subcontractors deal with much of the equipment.

Explanation of EQ Rating Scale

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 recent 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.

Key Points to Understand About the EQ Score

The EQ Review Rating is much more than a blind, quantitative scoring method. While we utilize proprietary adjustments, ratios, and methods developed over decades of earnings quality analysis, the foundation of all of our analysis is reading recent SEC filings, press releases, conference call transcripts and in some cases, conversations with managements.

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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