BEHIND THE NUMBERS
EARNINGS QUALITY & DIVIDEND SUSTAINABILITY RESEARCH

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# Ford Motor Company (F) – EQ Review

| 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 earnings quality coverage of F with a rating of 4- (Acceptable) indicating acceptable but possibly worsening quality.**

Overall, we see very little to be alarmed about Ford for accounting quality reasons, presentation, or using accounting techniques to pad results. Inventory levels are up and the company is picking up some pricing via hyper-inflation from South America. However, the valuation is only 6.8x trailing EPS with a yield of 6.7%. Also, the dividend only consumes about 27% of trailing 12 months free cash flow and Ford is not devoting cash flow to repurchasing shares.

We do think investors may want to monitor incentive levels changing per vehicle and whether Ford's low valuation based on earnings is due to a high percentage of sales of trucks as evolving government standards on safety, fuel economy, and emission levels may work against trucks and unwind some operating leverage in margins. At this point, the balance sheet is strong and many of the rising costs can be absorbed. However, if some of the potential risks hurt sales much, the income could start to fall quickly. So, while we see the balance sheet and low valuation as cushions, there is a significant risk that Ford is downgraded to a 3 or even a 2 rating:

- Debt and liquidity look strong at Ford. The Auto unit has a net cash position even assuming the entire pension is funded.

- The pension underfunding is minor and the cash funding is expected to come in at only $650 million this year. Ford did get a modest boost to income of about $150

million by increasing the discount rate to compute obligations but lowering the rate to compute interest cost and service cost last year.

- Ford Credit is near the low end of the target leverage ratio. Over 30% of loans are very short term to dealers with strong credit ratings. Only half total loans extend beyond one-year. Ford Credit also has a large cash position. Bad debt figures are very low and improving.

- JV exposure has been costing the company earnings of late, but much of that is non-cash. Despite a decline in income of over $1 billion in recent years, the maximum exposure to covering debt for Ford is only $237 million.

- We are not concerned with trade receivables but do think inventories are higher than normal after growing faster than sales for several quarters. Margin pressure could be a risk in this area.

- Accrued liabilities from extended service contracts, warranties, other non-cash expenses have helped add over $1 billion per year to cash flow of late. These are not an issue except, this source of cash flow may decline if sales drop.

- The forthcoming changes requiring lower emission levels, lower CO2 levels, higher gas mileage by the federal government, California, and Europe through the year 2025 – could be a problem for Ford. Many of these goals would be difficult to navigate while selling trucks and SUVs which is 81% of US sales. Ford specifically states that bigger vehicles generate greater profits. The different standards can also mean more parts, different engines, different fuels and the building of multiple versions of the same car. All of that may cost more money per unit as well as require higher selling incentives to entice people to buy some of those models.

- We already seeing evidence that many costs that would be tied to these various new regulations are already rising faster than sales such as R&D, subsidized interest expense, subsidized residual values, and warranty payments. We think that is why the Auto unit is seeing a squeeze on operating profits already.

- Investors may also want to focus on how much higher pricing has helped in recent years. Ford has boosted prices, especially in the US to offset rising costs. Those costs include steel and tariffs, but also labor and warranties. Pricing was slow to pick up and lagged the economy and may lead commodities down if costs actually do retreat.

However, we doubt that Ford would see much decline in labor or warranties. Most importantly, even with higher volumes and pricing – they still have not fully offset the higher costs or FX losses.

## Overall Debt and Liquidity of the Balance Sheet Looks in Great Shape

While Ford has three main units, we are going to focus on automotive and credit as the far and away dominant areas compared to mobility. In that regard, the automotive unit supports its own operations and the others. It actually as a net cash position even assuming it had to pay all pension underfunding:

| Ford Auto | 2Q19 |
|---|---|
| Cash | $9.4 |
| Securities | $13.7 |
| Financed Debt | $14.0 |
| Net cash | $9.1 |
| Pensions | $5.7 |

We should add that the pensions are only underfunded by 6% in the US and 12% in the rest of the world. A minor tick against Ford, the US plans saw an increase in the discount rate to compute Pension Benefit Obligations last year from 3.60% to 4.29%, that helped some. Plus, the company cut its discount rate to calculate service cost and interest cost at the same time. That saved it about $150 million in pension cost last year. The non-US pension liabilities are being calculated on a 2.48% discount rate, so that explains some of the underfunding there. Pension expense is sometimes even income in recent years and the company expects to contribute $650 in cash in 2019. Pensions do not appear to be a problem.

Ford Credit has a leverage ratio of 8.3x at this time – toward the low-end of the 8-9x range Ford targets. Ford Auto has agreements to provide more capital to Ford Credit if the leverage ratio exceeds 11.5x and maintain a minimum equity balance of $500 million. Ford Credit also has access to $3 billion of credit on Ford's credit lines if necessary.

A high percentage of Ford Credit receivables are to dealers to finance inventory for short periods of time and the credit quality is strong with 95% of lending focused at Ford's best credit dealers. Other assets at Credit are loans and leases to consumers with terms generally 3-5 years and are secured by the car or truck.

| Ford Credit | 2Q19 | 4Q18 |
|---|---|---|
| Dealer Loans | $33.9 | $34.4 |
| Consumer Loan | $74.2 | $76.1 |
| Allowance | $0.5 | $0.6 |
| Net Loans | $107.6 | $109.9 |
| Short term | $53.8 | $54.4 |
| Long term | $53.8 | $55.5 |

Ford Credit also has $14.9 billion in cash and securities on hand. We will also note that many loans are securitized but Ford keeps them on the balance sheet. Of the dealer loans shown above, $25.9 billion have been securitized and consumer loans have $39.3 billion in securitizations now. It may be possible to complete more securitizations if needed to raise additional cash.

The bad debt reserves are 0.5% of receivables and the total past due is only 0.8% with the bulk still under 60 days. The problem loans are actually decreasing slightly. One could make the case that, loan losses are likely to move up more than down – however, even back in 2010, the loss reserves were 1.0%.

Finally, joint ventures have seen income drop considerably in recent years. In 2018, the income fell $1.29 billion to become a loss of $110 million. In 2016 and 2015, the JVs were earning about $1.4 billion. While that is often non-cash earnings and that impact EPS, Ford lists the maximum loss potential it would have to pay for JVs is $237 million as of 12/31/2018. The drop in income is sizable, the potential loss looks more than manageable.

## Working Capital Bears Some Watching

Inventories are higher in dollar terms of the last two years and have also added 5-6 days of COGS over that time:

| Ford Inv last 4Qs | 2Q19 | 1Q19 | 4Q18 | 3Q18 |
|---|---|---|---|---|
| Inventory | $12.4 | $12.3 | $11.2 | $12.8 |
| DSI | 33.7 | 33.2 | 30.7 | 34.5 |

| Ford Inv prior 1 yr | 2Q18 | 1Q18 | 4Q17 | 3Q17 |
|---|---|---|---|---|
| Inventory | $12.6 | $12.4 | $11.2 | $11.3 |
| DSI | 34.5 | 31.6 | 36.0 | 31.6 |

| Ford Inv prior 2 yr | 2Q17 | 1Q17 | 4Q16 | 3Q16 |
|---|---|---|---|---|
| Inventory | $11.1 | $10.5 | $8.9 | $10.2 |
| DSI | 28.5 | 27.5 | 31.3 | 28.4 |

We think this area is a concern as sales have started to turn down and inventories, while slightly lower, have not declined too much:

| | 2Q19 | 1Q19 | 4Q18 | 3Q18 | 2Q18 |
|---|---|---|---|---|---|
| Sales y/y chg | -0.2% | -4.1% | 6.8% | 3.3% | -2.3% |
| Inv y/y chg | -1.0% | -0.3% | 0.4% | 13.7% | 13.3% |

This looks like an obvious place to expect some margin pressure as inventories have been growing faster than sales for some time and DSIs are inflated.

We do not see much reason for concern in Trade Receivables. There was a slight pick up as the economy gained strength and that appears to have leveled off now.

| Ford A/R last 4Qs | 2Q19 | 1Q19 | 4Q18 | 3Q18 |
|---|---|---|---|---|
| Receivables | $10.9 | $12.0 | $11.2 | $11.2 |
| DSO | 25.7 | 28.9 | 23.1 | 27.2 |

| Ford A/R prior 1 yr | 2Q18 | 1Q18 | 4Q17 | 3Q17 |
|---|---|---|---|---|
| Receivables | $11.0 | $12.4 | $10.6 | $10.3 |
| DSO | 25.9 | 28.5 | 23.4 | 25.7 |

| Ford A/R prior 2 yr | 2Q17 | 1Q17 | 4Q16 | 3Q16 |
|---|---|---|---|---|
| Receivables | $10.2 | $10.7 | $11.1 | $10.0 |
| DSO | 23.3 | 24.9 | 30.3 | 23.7 |

Another item that is worth watching is accrued liabilities:

| Work Cap Change | 2018 | 2017 | 2016 |
|---|---|---|---|
| Trade Rec. | -$2.4 | -$0.8 | -$1.4 |
| Accts Rec. | -$2.2 | -$2.3 | -$2.9 |
| Inventory | -$0.8 | -$1.0 | -$0.8 |
| A/P & accruals | $6.6 | $6.1 | $6.8 |
| Total | $1.1 | $2.0 | $1.6 |

We would expect payables and inventory to move in tandem and they are. But Ford is also routinely picking up over $1 billion in cash from operations from accrued liabilities. Some of this related to selling warranties and extended service plans. Others can be related to reserve allowances that aren't cash expenses. These are legitimate items and there is nothing wrong with the accounting procedures. However, that is an area that could reverse quickly if sales drop and more claims are paid than new warranties/service deals sold for example and hurt cash flow.

## Some Risk Factors that Are Worth Watching

We want to discuss some areas of the income statement that may be under pressure from various government actions. This section will be a quick primer on several trends that are times working against each other and could result in Ford having more problems and higher costs related to vehicle design, having to create more models of the same vehicle, offer more incentives essentially pressure sales and margins. We will admit that often we are a bit jaded about risk factor sections as some companies report items with some absurd risks with very minor possibilities of occurring such as "If the world-wide power grid goes down or all world trade stops – we could face difficulty in manufacturing or selling our products."

In the case of Ford, some of the risks we found have timeframes in the next 5 years and could have big impacts on Ford's inventory line up and manufacturing costs:

- There are different standards on emission levels allowed by the Federal Government and the State of California, with California being tighter than the Federal rules. There are other states that have matched California's standards as well. Both sets of standards are currently set to get tougher annually through 2025.

- California wants 15% of vehicles sold in the state to be Zero Emission by 2025 – meaning battery/electric cars instead of gasoline/diesel.

- The European Union has another set of CO2 emission standards that will also tighten in the near future. These may require more equipment to be installed on new cars to treat exhaust and can wipe out the cost advantage of diesel over gasoline.

- The EPA has a rule in place for a 50mpg standard for 2025 models and California may want to set its own standard here too.

- At the same time, there are federal safety laws requiring vehicles meet higher safety tests.

There are a number of problems for Ford as these laws are tightened and enforced. Reducing emissions can mean smaller engines and thus smaller cars. Higher mileage also normally means smaller cars with smaller engines and less weight. The problem is bigger cars – especially trucks is where Ford makes its income. The company notes this is in the 10-K also:

> *"Our financial results depend on the profitability of the vehicles we sell, which may vary significantly by vehicle line. In general, larger vehicles tend to command higher prices and be more profitable than smaller vehicles, both across and within vehicle segments. For example, in North America, our larger, more profitable vehicles had an average contribution margin that was about 140% of our total average contribution margin across all vehicles, whereas our smaller vehicles had significantly lower contribution margins."*

Here were Ford's 2018 US sales by vehicle type – 46% trucks and 35% SUVs:

| US Units (000s) | 2018 |
|---|---|
| Trucks | 1,139 |
| SUVs | 872 |
| Cars | 486 |
| Net Loans | 2,497 |

Also, if factories have to be changed more frequently to make different parts and assemble different versions of the same vehicle – a gas-powered version, diesel-powered version, a hybrid version, an electric version and each may require different tweaks to chassis, and body design or many different parts – they will cost more to build. Plus, Ford has to estimate the demand for each one. One version may sell out, another may be ignored requiring Ford

to ramp up sales incentives and discounts to move the vehicles and thus total sales in dollars declines while total costs rise.

We think with the emphasis on the 2025 models and we have the 2020 models out now – there will continue to be more discussion and focus on what these new rules may do to Ford's margins. Some rough sensitivity analysis – If Ford lost $500 per US vehicle in a combination of higher costs and higher sales incentives – it would cut income for US auto operations by $1.25 billion. All of North America's auto operations for Ford had $7.6 billion in income last year.

## Some Components of Contra-Sales and Costs Already Rising Faster than Sales

| Auto Sales | 2018 | 2017 | 2016 | 2015 |
|---|---|---|---|---|
| Sales | $148.3 | $145.7 | $141.5 | $140.6 |
| Growth | 1.8% | 3.0% | 0.6% | |

If the company has to do more engineering and add more parts and new technology, to meet new government standards – that costs more in R&D and already is:

| | 2018 | 2017 | 2016 | 2015 |
|---|---|---|---|---|
| R&D | $8.2 | $8.0 | $7.3 | $6.7 |
| Growth | 2.5% | 9.6% | 9.0% | |

Newer parts may break and do not have a history of operation. Also, additional parts added to cars may break and need to be repaired. We do not have an issue with how Ford accrues for warranties, which normally exceeds payments. But notice how the payment of claims is rising:

| | 2018 | 2017 | 2016 | 2015 |
|---|---|---|---|---|
| Warranties | $4.4 | $3.5 | $3.3 | $2.8 |
| Growth | 26.1% | 5.2% | 15.3% | |

**Then, less desirable cars often need incentives to move them.** This can be cash-back offers or discounts. It can also mean 0% financing. Plus, cars that need incentives to be sold at retail, often have lower values later on. Ford accounts for actions here as reductions to sales. Again, we do not have a problem with their accounting there. We found two sets of numbers that show support payments to Ford Credit to pay for discounted interest rates on

loans and support higher residual values to lower the monthly payment to consumers. We want to be clear, reporting both sets of numbers maybe double counting – but we are more concerned with the growth rate:

| Incentives | 2018 | 2017 | 2016 | 2015 |
|---|---|---|---|---|
| Paid to F. Credit | $6.8 | $6.1 | $5.3 | $4.5 |
| Growth | 11.5% | 15.1% | 17.8% | |

| Incentives | 2018 | 2017 | 2016 | 2015 |
|---|---|---|---|---|
| Int. Subsidy | $2.4 | $2.0 | $1.6 | $1.3 |
| Growth | 20.0% | 25.0% | 23.1% | |
| Depr. Subsidy | $2.4 | $2.1 | $1.9 | $1.5 |
| Growth | 14.3% | 10.5% | 26.7% | |

## Is Ford Overly Dependent on Taking Pricing?

Just looking at the recent results, Ford has been boosting prices in response to rising materials costs, losses on FX and falling income from JVs. This is a bit further than an EQ report normally goes, but we were curious just how exposed Ford may be on income if they simply cannot sell so many trucks in the US. We're just thinking bigger picture here:

| Y/Y EBIT Stats | 2Q19 | 2018 | 2017 | 2016 |
|---|---|---|---|---|
| US Pricing | $445 | $425 | $175 | -$334 |
| ROW Pricing | $400 | $1,546 | $420 | $277 |
| US Volume | -$128 | $1,587 | $264 | $28 |
| ROW Volume | $105 | -$555 | $396 | $624 |
| **Total P/V** | **$822** | **$3,003** | **$1,255** | **$595** |
| **Costs** | **-$367** | **-$3,965** | **-$1,887** | **-$1,258** |
| FX | -$245 | -$409 | -$811 | $81 |
| JVs | $4 | -$1,291 | -$523 | $0 |

Ford can certainly argue that materials costs are up and tariffs add to that. Much of the cost increases are higher warranties as we outlined above and commodities. Plus, FX has been a bigger issue of late too. We agree that if the economy slowed – it should lower commodity prices and perhaps FX will recover too – but we doubt labor and warranties decline very much. Plus, if pricing couldn't offset higher costs amid increasing demand – wouldn't pricing lead the way down too and fall more than commodities?

It just looks to like much of the pricing is coming from the US (and South America of late). It was a good year for volume in 2018, but it didn't last long. Cost increases are routinely exceeding the benefits of higher pricing and volumes. In 2016, the reason pricing was negative in the US was incentives exceeded price increases.

There may be more operating leverage to the downside than to the upside if commodity prices retreat again.

# 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 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.

**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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