and unprecedented speed of hardware/software iteration that comes as a benefit of vertical integration.

It will ramp much faster than expected, in order to capitalize on their first mover advantage.

GM agreed with our suggestion that large scale commercial operations would start relatively soon (we expect this in 2020). GM's operations will first target the most lucrative markets (densely populated cities), which are also arguably the most challenging for AVs. And this will be done in a highly disruptive manner (sub $1 per mile). We believe that this will make GM's service overwhelmingly attractive vs. incumbents such as Uber and Lyft ($1.53+ per mile). But the real goal is to make it more compelling than private vehicle ownership in dense urban centers (Uber, Lyft, etc account for just 0.1% of miles driven; in NYC private vehicle ownership costs >$3 per mile; in SF, Philadelphia, Washington, Boston avg. costs are >$1 per mile). A few details gleaned from our discussions led us to conclude that GM is most likely planning to go to market through their own Transportation as a Service platform, competing with Lyft and Uber (GM will be highly disruptive to those players; GM does not intend to sell the technology to unaffiliated third parties; and GM appears to have thought through many details of how the TaaS service will operate). We also believe that the faster ramp could evolve into a competitive moat, as the company's AI develops more rapidly (i.e. Their product will be better/more capable than most others), and their network establishes natural monopolies in key cities.

The economics of their plan appear even more attractive than we had modeled.

Useful life/avg miles per vehicle is a key cost driver (depreciation accounts for $0.24 of the $0.53 cost per mile assumed in our model). And GM believes that this cost is likely to be much more favorable than we've assumed, since their platform will be EV based, they will be engineered for long life cycles (400,000-1,000,000 miles, vs. the 210,000 miles that we assumed), and GM is planning for field refurbishment/overhaul of wear items (e.g. Interiors), similar to the practice of the aviation industry. Even using the low-end of GM's expectations reduces our estimate depreciation/mile from $0.24 to ~$0.13, an almost 50% reduction. Running this through our model, the changes could increase our estimated PV by ~4x (to $120 bn from $30 bn).

Another key benefit of the EV platform is that it facilitates easier automation, significantly lower fuel costs ($0.03-$0.04 per mile, vs. the ~$0.11/mile that we assumed in our gas-powered vehicle model), and lower maintenance costs. These also imply significant upside to our model.

GM also suggested that their Mobility business will be more cash generative than we assumed, as an asset-backed financing market will form to support the large capital deployments being planned. This would meaningfully mitigate the massive Capex requirements that we anticipate (i.e. just launching 10,000 cars at $50,000/vehicle is $0.5 bn of fleet CAPEX).

And GM did not refute the logic we used to conclude that the business will be spun.

In response to our questions about potential for a spin, GM pointed out that they've established a track record of taking aggressive and sometimes unconventional measures to unlock value for shareholders. And GM acknowledged that a competitively advantaged AV based Mobility Platform would attract a larger universe of growth investors, something that they have been seeking to achieve for years. Many growth investors are are already expressing their views on potential for disruption, driving valuations of Uber, Tesla, Delphi, Autoliv, and Nvidia. Indeed, GM acknowledged implicitly weaker access to capital/cost of capital resulting from GM's lower valuation. This has resulted in one competitive disadvantage that GM may not be able to fix while the business remains internal to GM. We'd also note potential advantages from involvement of "strategic" investors in an independent mobility entity (particularly if an investor were to facilitate access to the China market).

Bottom Line

We are seeking to avoid hyperbole in discussing the implications for GM's stock. But clearly, the opportunity is very large. As we pointed out in our upgrade, even a small percentage of the 3+ trillion miles driven in the U.S., and 7 trillion globally, represents a massive opportunity. We believe that our $15 bn assumed valuation for Maven (we incorporated just $10 per share into our target) is very conservative. We derived a $30 bn ($20 per GM share) valuation through our DCF... and note that this analysis primarily focused on the U.S. Mobility market... International Markets, and adjacent opportunities (e.g. Delivery, Data) could easily double this. As noted above, GM also pointed out that a number of our financial assumptions are conservative. We're reiterating our Buy. Key