# GM's Dec 2 Restructuring Plan: Professor Anant Sundaram's Comments/Thoughts

## The Quality of the Submission:

- The December 2 "Restructuring Plan for Long-term Viability" submitted to the Senate Banking Committee (and the House of Reps) by GM is a somewhat opaque document.[1]

- While recognizing that there are competitive constraints that prevent full disclosure, analyses such as these by companies requesting funds in distress usually provide sufficient data for a lender to assess whether to fund the restructuring. Making such an assessment requires financial data to be provided so as to make a fair judgment about what the company's cash flow position will be, typically, 3-5 years out.

- I had difficulty connecting the dots. Forming judgments required me to make heroic inferences and assumptions from limited and disparate data items that were provided.

- It has the look and feel of having been pulled together in a hurry, similar to how students might pull in an 'all-nighter' when there is a drop-dead deadline for a term paper. (Of course, that never happens at the Tuck School! ☺)

- If this was a term paper in my finance class, based on clarity of approach, consistency of terminology and analysis, and transparency in allowing someone to evaluate the merits of what is being proposed, I have to say, reluctantly, that it would get a C+.

## The Main Questions

- From the taxpayers' standpoint, the three main questions are: (1) Will this plan succeed; (2) If it does, what will GM be worth? (3) Will the loan get repaid, and will the warrants be worth something?

- I will focus on Question (2), in particular, "what will equity in a post-restructured GM be worth?" Specifically: Will GM sustainably re-emerge from bankruptcy, i.e., if all goes according to plan, will the value of the business be greater than the claims against it? (Question (1) is difficult to answer, since 'success' will depend on a handful of factors that are imponderables presently; the answer to Question (3) will follow from the analysis of Question (2).)

- In forming my judgment, I will give GM the benefit of doubt. I will assume that their 'baseline' forecasts turn out as hoped-for. Where I have to make assumptions – and I have to make lots of assumptions! – I will err on the side of being optimistic on GM's behalf.

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[1] GM's filing of this document with the SEC, made on December 3, 2008 can be found here: http://sec.gov/Archives/edgar/data/40730/000095015208009895/0000950152-08-009895-index.htm

## What Will GM Be Worth If Its Plan Succeeds?

- The starting point for any valuation analysis is a sales forecast, since that often provides a 'reasonableness' test regarding many of the numbers that follow. The next set of data that one needs is how the restructuring will lower costs and their capital spending plans. Finally, the third crucial set of data relate to how much is owed to whom at the end of it all, since shares will be worth some-thing positive only if there is value left over after all the liabilities have been paid off.

- All of this data are necessary to undertake a valuation of the business based on the present value of its forecasted future cash flows.

- In this instance, given the paucity of data in the Submission, it was not possible to do an analysis based on future cash flows. So I had to use another approach, the approach of valuation based on multiples. Although widely-used, it has a back-of-the-envelope quality to it, and is necessarily less transparent than cash flow-based valuation.

- Using the enterprise value, or 'EV' (i.e., market value of equity plus debt), of comparable firms as a multiple of metrics such as their sales or operating income, I ask, "what would GM be worth if such a multiple were applicable to *its* sales or operating income?"

- Specifically, I use three metrics – sales, operating income (EBIT), and EBITDA (earnings before interest, taxes, depreciation, and amortization)[2] – and apply to GM's 2012 numbers a multiple based on the current averages for three (still) successful global car companies: Toyota, Daimler, and Honda.

- The multiples I derived (and use), based on these three firms and their market valuation as of December 2008, are:

| | |
|---|---|
| **EV/Sales:** | **0.49x** |
| **EV/EBIT:** | **8.20x** |
| **EV/EBITDA:** | **4.33x** |

- In assigning these valuation multiples to GM's future, I am assuming the company will, four years from now, evolve to its comparables' current multiples.

*Revenue Forecast and Multiple*

- Step 1: There was no sales forecast provided. But I was able to make an inference from data in Figure 4 (p. 21), which shows the forecast of so-called 'structural cost' (whatever that means!) in North America through 2012, and what it will be as a % of revenues.

- I was thus able to back out their North America revenue forecast.

[2] The Submission did provide, without any real data or analysis of revenues and costs, the point estimates of EBIT and EBITDA for 2012.

- Step 2: Based on the assumption that their North America revenue will remain the same as a proportion of global revenues as in 2008 (approx 57%), I forecast their global revenue.

- It is:

| | |
|---|---|
| **2009:** | **$136B** |
| **2010** | **$151B** |
| **2011** | **$156B** |
| **2012** | **$164B** |

*Note 1: This implies an average sales growth rate of 6.5% per year; after a slump in sales in 2009 to $136B (from 2008 revenues that are expected to be somewhere between $140B and $150B), GM is assuming an aggressive 11% increase 2009-10, and slower growth for the subsequent two years. But, during the prior five years, GM's sales have grown at a rate of only 0.36% per year, i.e., one-twentieth of what they are forecasting for the next four.*

*Note 2: This growth in sales is assumed to happen during a period when GM's structural costs are expected to decline by 3.5% per year, and they expect to jettison four brands and 2000 dealerships, and lower direct headcount by 20,000 - 30,000 employees.*

*Note 3: If GM maintains its forecasted North American market share of 22.5% (currently 21.7%), it would imply they will sell 3.38M vehicles in North America in 2012, for an average sticker price of $27,700. In September 2008, the average sticker price of a North American sale was $23,000. This is an expected 20% jump in average price of each vehicle sold.*

- Step 3: Applying the EV/Sales multiple of 0.49 to the forecasted 2012 revenues of $164B, the forecasted enterprise value is $80B four years from now.

- Step 4: I discount this number to a 'present value' (i.e., I account for the time value of money for an investor who has to wait four years). Using a calculated cost of capital of 12% for GM, I get an **end-2008 enterprise value of $50B for GM**.

*EBIT and EBITDA Forecasts and Multiples*

- Table 2 of the Appendix (p. 45 of the 8-K filing on Dec 3) shows 'baseline' forecasts of EBIT of $6B and EBITDA of $15.3B.

- Assume this does, indeed, turn out to be the case.

- Step 1: Applying multiples of 8.2x and 4.33x to these EBITDA and EBIT forecasts, the 2012 forecasted EV of GM are $50B and $66B, respectively.

- Step 2: As before, I calculate the present value at a 12% discount rate, which comes out to **$32B and $42B**, respectively as end-2008 EV estimates.

Bottom line:

- Thus, assuming GM's plans turn out as intended, **it could be worth between $32B and $50B as an enterprise**. I.e., there is real value here.

However….

- They currently **owe $66B** (incl. VEBA) to debtholders and current/former employees.

- They hope to negotiate this down by $32B, to $34B. If they can do that, given the analysis above, **GM's equity could be worth somewhere between $2B and $16B**. *(Note: GM's current market cap is about $2.9B at the time of writing, i.e., towards the lower end of this estimate).*

- **But what if they can only get their debt obligations down by, say half of $32B, i.e., only $16B?** Then, **GM's equity would be worth somewhere between $–14B and $0B**, which would basically put it in **negative territory**.

Key Issues:

- In the absence of a court order, what will make the lenders/labor go along?

- If I was the 'car czar,' over the next few months, I will be keeping a keen eye out for progress on whether and how far they can get lenders and labor to bring down the $66B number to at least what is promised (~$34B), hopefully even lower. The rest may be largely fluff.

- It is important, however, to not underestimate potential tussles and refereeing that will be required to mediate between these two crucial stakeholders.

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