Discussion of Parking Privatization Analysis from Profs. Dietrich and Makhija

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The excellent report on financial analysis of the proposed parking privatization plan from Prof. Dick Dietrich and Prof. Anil Makhija clearly and cogently explains this complex proposal and how they have modeled and analyzed it. The Dietrich/Makhija report (henceforth "D&M Report") relies to some extent on my estimated values for various parameters in the spreadsheet I devised to encode my own financial model[1]. It turns out our approaches to modeling and analysis of the situation are very similar. A key point of the D&M Report is their estimate of the present value of cash flows that would result if OSU parking facilities were operated as they are now for the next 50 years: $369M. Based on remarks of Provost Alutto in a recent *onCampus* interview[2], the OSU administration expects the value created for OSU by privatization to be about $400M, i.e., the full amount OSU might receive from the private operator—which implies an estimate of $0 for the present value of the same cash flows as the D&M Report estimates at $369M. In my opinion, this huge difference alone should call into serious question all numbers used by the administration to sell this proposal to the OSU community.

Notwithstanding agreement on the approach to analysis, one of the D&M Report conclusions is a bit different from mine. It is [p. 1]: "Only by obtaining bids would the University be able to determine the likely value created, and thus the potential for furthering the University's mission." I conclude, instead, that we already have all the information we need to declare that privatization of parking operations is a bad idea in the same financial sense of value created for OSU[3]. I want to explain the reasons for our difference in this respect.

There are two main parts to the analysis in the D&M Report: "value available to the operator" and "value for OSU" of its parking operations for the next 50 years. The estimate of the former, an expected bid of about $459M, is within the range of likely bids suggested by the Morgan Stanley consultants ($400M-$470M). Given the Morgan Stanley numbers shown to the Parking Advisory Committee in December 2011, I did not even try to do an analysis of the value available to the operator because it involves anticipating some financial parameters and bidding strategies about which I have no knowledge. I simply must accept the Morgan Stanley figures and analysis of this aspect, and I accept the D&M Report figures and analysis as well.

On the other hand, we differ slightly in how to think about the value for OSU of its parking operations. The difference between the bid we might receive for privatization (based on the value available to the operator) and the value for OSU of its parking operations (mentioned earlier) is the "value created" by the privatization plan. So, a difference in the value for OSU of its parking operations translates directly into a difference in the value created and hence a possible difference in the conclusion about whether it could be financially beneficial to OSU.

OSU has many alternatives for how to handle its parking operations. Here are two of them:

- Plan ***P*** (for privatization): OSU leases parking operations to a private operator according to the provisions of the proposed contract outlined in the soon-to-be-issued RFP. The

[1] http://cse.osu.edu/~weide/parking/Parking-2012-03-09.xlsx

[2] http://oncampus.osu.edu/2012/02/getting-down-to-basics/

[3] The D&M Report explicitly avoids addressing questions about non-financial issues, and my response follows suit. We should remember, however, that these other questions (about ethics, fairness, community, etc.) are at least as significant as the financial matters in any decision about whether to privatize parking operations.

D&M Report values this for OSU at about $459M, the estimated cash payment that would be received presently from the winning bidder (hence, its present value).

- Plan ***S*** (for status quo): OSU continues to operate parking under the same or similar policies and procedures as it does now. The D&M Report conservatively values this for OSU at about $369M, an estimate of the present value of a 50-year revenue stream from parking operations based on this year's cash flow and a below-inflation annual increase[4].

The D&M Report considers these two alternatives. It compares the value for OSU of ***P*** to the value for OSU of ***S***, and concludes that the value created by choosing ***P*** over ***S*** might well be positive—perhaps by $90M, i.e., the difference between the estimated $459M cash payment to OSU for plan ***P*** and the estimated $369M value for OSU of plan ***S***.

My analysis makes a different comparison. Suppose a plan ***X*** that you propose can be embedded in a related plan ***X′*** with the property that, if you are willing to adopt plan ***X***, then you also should be willing to adopt plan ***X′***. Suppose further that plan ***X′*** is better than plan ***X*** in whatever relevant respects you care about—and for purposes of the D&M Report, this is its value for OSU. Then plan ***X*** cannot be the right thing for you to do. (Plan ***X′*** might not be the right thing for you to do, either! But plan ***X′*** dominates plan ***X***, and this alone rules out plan ***X***.)[5]

For OSU's parking operations, here is such an embedding. Take any version of plan ***P***, i.e., privatization via a lease of the parking operations to a private operator. Plan ***P′*** is then taken to be exactly the same as ***P*** except that OSU itself replaces the private operator: in effect, OSU leases the parking operations to itself under the same terms it would offer to the private operator. My analysis compares plan ***P*** not to plan ***S*** but rather to plan ***P′***:

- Plan ***P′*** (for embedded privatization): OSU leases parking operations to itself according to the provisions of the proposed contract outlined in the soon-to-be-issued RFP. My model values this plan for OSU at almost $800M, using the same 6% discount rate and other parameter values such as inflation as I understand are used in the D&M Report.

In other words, my analysis indicates that the value created by choosing ***P*** over ***P′*** cannot even be *positive* unless the estimated $459M cash payment to OSU for plan ***P*** should, by some miracle, be so vastly greater than the estimates given in the D&M Report and by Morgan Stanley that it would exceed $800M. By the argument above, plan ***P*** therefore cannot be the right financial route for OSU unless the bid is almost double what anyone expects. This is one reason I conclude we can already declare plan ***P*** a loser even before getting any bids.

There is a second reason, too. The one number in all these estimates that is the least sensitive to modeling error, and least likely to be wildly out of whack compared to reality over the next 50 years, is the expected bid from the private operator. There are important pure-guesswork parameters[4] involved in all these models: the putative 3.3% inflation rate and 9% return on OSU's long-term investment portfolio come immediately to mind. The bid is merely an additive term in the calculation of the value created by privatization. These other unknown (and unknowable) parameters appear in terms raised to the 50^{th} power that are used as multiplicative factors. Even if we had an exact bid value, we should have barely more confidence in any decision about whether to proceed than we have right now.

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[4] This assumes parking rates and expenses might increase at under 1.9%/yr for 50 years, which is quite conservative.

[5] This kind of argument in computer science is called a "reduction" or "subsumption" argument. The same basic idea appears under many names, in many guises, and in many different contexts of which I am largely unaware. For instance, it seems to be related to the notions of "opportunity cost" and "Pareto optimality" in economics.