## Comments on

## **Investor Confidence Initiatives**

## A Cost-Benefit Analysis of Proposed Multilateral Instrument 52-110 Audit Committees

Prepared for the Ontario Securities Commission June 2003

We have examined the CBA of proposed Multilateral Instrument 52-110: Audit Committees, with a great deal of interest. Unfortunately, we have grave concerns about both the methodology and the results of that study. In our view, if this paper were to be used to justify regulations requiring independent audit committees for Canadian listed securities, then the Commission would almost certainly damage its credibility and its reputation for the fair and honest use of that office. The major areas of concern we have with the paper are with regard to the measurement of benefits. Addressing some of these concerns will require only a little work. Other concerns are more far reaching.

- 1) It is not clear from the text that the econometrics is correct even if we accept the proposed model specification. If the analysis is indeed Two Stage Least Squares then the SDRATIO in the EVA@ equation should be the *predicted value* from the first stage regression rather than the actual value. The text does not distinguish between these two concepts and is quite confusing to the reader.
- 2) Even if the TSLS procedures were done correctly and we were to accept the specification, there is still the problem of assessing the statistical and economic impact of independent audit committees on EVA@. The significance is not the impact of the audit committee on SDRATIO, but a combination of that plus the significance of SDRATIO on EVA@. It is not at all clear that the make up of the audit committee is a significant determinant of this. Furthermore, simply using the R<sup>2</sup> to determine the dollar impact is incorrect. Rather you need some measure of the size of the forecast error and this is going to depend on the magnitudes of the independent variables for each and every firm. This is especially important in the Canadian case because the size of the representative firm without an independent audit committee is significantly smaller than the average size of the entire sample.
- 3) A maintained hypothesis in most econometric work is that the relationship examined is stationary. Your analysis also makes that assumption. However, with this CBA, the assumption is less credible because you are effectively examining an intertemporal problem with cross section data. In particular, the sample contains time series averages that constitute only *half* a business cycle. (Thus, as shown in Table 4, EVA is negative for the average firm in the

sample.) Certainly agents take the entire cycle into account when forecasting cash flows and/or profits. Your data should therefore take into account the entire cycle or you will simply have an exposure to a (predictable) shift in parameters. In our view a six-year interval for generating average returns and deviations should likely be sufficient. In relating tables 4 and 5, please clarify whether NET INCOME is defined as after tax cash flow, and therefore EVA@ is simply NET INCOME- WACC times ASSETS.

- 4) Even if the econometrics is clarified and measurement of the statistical and economic significance is done correctly, we have a fundamental issue with the functional form and choice of variables. Specifically, you are asking the wrong question for the Canadian environment because it matters how the costs and benefits are distributed between small and large firms. First, there appears to be a strong correlation between size and independent audit committees. Thus the costs would be borne by small firms if this regulation were passed. Second, to the extent that your "firm size" variable does not pick up all size related factors affecting EVA@, there will be a spurious relationship picked up by the audit independence variable. Similarly, if (as indicated in table 7) AUDITINDEP is the only explanatory variable used in the first stage estimation of SDRATIO, you incorrectly attribute size, risk, and industry influences on that dependent variable to the audit committee variable. Combining this, you have an overstatement of the benefits of an independent audit committee to all firms in general and small firms in particular and a distribution of costs that will hit small firms in particular. Part of this problem (4) could be mitigated by using EVA@ divided by Total Capital Invested so that you are left with the excess return to a firm (over a six year period) as the dependent variable. At least that would remove some of the size bias of your current analysis but you would have to rethink how best to redefine your independent variables. Finally, you indicate that including the board independence dummy had no significant impact on the incidence of earnings management, and you conclude that only audit independence matters. To be credible, you should report the results of replacing the audit independence dummy with the board independence dummy, and testing whether adding the audit dummy to the board independence dummy affects the results.
- 5) While we agree that size, risk, and industry, as well as some measure of audit committee independence, belongs in the EVA regression, they also belong in the SDRATIO equation as independent variables. Granted you indicate you include them in the TSLS process but table 7 confuses the issue and suggests that the regression determining SDRATIO only used AUDITINDEP as the independent variable. It is important to include those other variables both to generate the predicted SDRATIO in the EVA equation, and to use in making forecasts of the economic benefit of independent audit committees.
- 6) We all have problems picking the appropriate independent variables to represent the underlying concepts we are attempting to model. Capturing

industry effects is particularly thorny and you should be complemented in using some imagination in trying to do so. Our concern is where tax law may encourage/require firms to, in fact, have a higher SDRATIO. To address this, you might include dummies for such industries if you have prior information. (eg, petroleum exploration may be one such group). A second concern has to do with risk measures. You might want to consider using a cash flow measure rather than the cost of capital in the EVA regression. A possible candidate is the standard deviation of cash flow divided by total capital invested on the grounds that the less certain the cash flow of a firm, the greater the cost of capital. Similarly, you might include such a variable in the SDRATIO regression as well. It may be that there is some natural non-linear relationship between the volatility of cash and profits that is not linked to size or auditing. (Tax law may be one reason).

To summarize our concerns with this specific CBA: the statistical techniques are in need of either clarification (points 1 and 5) and/or correction (point 2); the data is systematically biased and in all probability violates the assumption of stationarity (point 3); there could be a better choice of independent variables (point 6); and, most importantly, the choice of dependent variable has a systematic bias in support of the hypothesis and disturbing implications for the distribution of benefits among Canadian firms. In effect, if you use this cost benefit study, you will lose a significant amount of credibility when future initiatives are undertaken and second, the result will be that small firms will bear most of the costs and have lower benefits than expected based on results that are skewed toward larger firms. This result would certainly not bode well for any attempts at unifying the regulatory process in Canada and would be one more item alienating the West.

We have tried to be constructive in our criticisms of this study: For each of our criticisms we have provided alternatives that are both feasible and, we believe, remove the biases existing in the present draft without introducing new ones. We think the study will be more convincing if these comments are taken into account and as such provide better answers to the issues you address. There is, finally, one more comment we wish to make: you are to be commended for taking the Crawford commission recommendations to heart. This was certainly not a "boilerplate" CBA. Undertaking more such studies and providing the opportunity for economists and others outside the Commission to comment on them will most certainly lead to better and more informed regulation of Canadian financial markets.

Joel Fried fried@uwo.ca David Burgess dburgess@uwo.ca

Department of Economics The University of Western Ontario London Ontario N6A 5C2