Referee Report on the paper “Italy’s ACE and its effect on a Firm’s leverage”

1. Contents

The paper discusses the introduction of ACE in Italy, starting with 2012. It describes the legislation, compares it with other reforms around the world, the scientific literature and the suggestion of the international organization. Finally, it uses a large sample of Italian firms to estimate the effects of the reform on the leverage ratio of Italian firms, one of the main target to the reform, getting quite significant results.

2. General Assessment

The paper is useful in explaining to an international audience what is happening in Italy concerning corporate taxation. The initial paragraphs provide a short but clear and self-containing history of the evolution of corporate taxation in Italy in the last two decades, detailing the pros and cons of the existing system and the main problems of the industrial system, the excessive leverage of private firms. The main scientific contribution of the paper is however contained in the simulation exercise at the end of the paper, and here is where I have more problems understanding what is been made. Finally, the paper would benefit from extending re-writing; some of the material in the Appendix probably needs to be moved in the main text and other dropped. The English sounds confusing at times. Suggestion follows.

3. The estimation

I am honestly confused by this exercise and how is made. Let me summarize what I understand. The authors build a significant sample of Italian private firms, about 100,000, where they have observations on budget data (debt, assets, profits, losses etc.) as well as on other economic indicators (i.e. sales). They observe these firms for four years (total observations are 450,000), from 2006 to 2010. Notice that this is a period where neither DIT (the previous Italian version of ACE) nor other equity related tax benefits were present. Then they run a number of regressions, estimating the effect of the yet- to- be -introduced ACE on the right hand side (plus a number of controls) on firm leverage on the other side. Now this is a counter fact exercise; what the leverage of the different types of firm would have been had the ACE tax benefit being in force during the 2006-10. As it was not in force, the ACE variable should capture other firms’ related tax differences that approximate at the firm level the introduction of ACE benefits, so that one could conclude that a firm i at time t presented a leverage y_{it} because of these differences. For example, I expected some remaining of the previous tax benefits. Not so, according to the paper. The variable ACE in the regressions is indeed “the log of the ratio between Ace benefits and total assets”, computed distinguishing between firms presenting profits and losses (as for the firms running losses the Ace benefits is postponed to further tax periods). So this is a measure of the tax benefits that would have accrued to each single firm, given its historical data, if the ACE had been in force in the period 2006-10. But since it was not in force, why should it have affected the leverage ratio, that is, the variable on the RHS? I do not understand. Perhaps there is some obvious story behind that I miss, but then it needs to be explained in detail.

4. Other general comments

-Assuming there is an answer to the previous point and that the estimated elasticities make sense, the authors should comment more on them. Both Bontempi (2003) and Bernasconi (2005) discuss estimations of elasticity with reference to the introduction of the previous DIT; it would be worth comparing the results and comment upon them. Also what the estimates in the international literature compare with yours?

-I find remarkable that the estimated coefficients of the elasticity parameters appear very stable across estimation techniques (from FE effects to pooled OLS to GMM) and controls; maybe the authors want to comment on them and on why they prefer a particular set of estimations over the others;

- In figure 1, it would be interesting to add to the picture of the average leverage of Italian firms per year; sometimes, these simple pictures are more telling than complex econometric analysis.

- Cutting corporate taxes are always helpful for firms, but they usually come at a cost in terms of lost revenue. Knowing the elasticity, one should be able to compute these effects. How much the ACE reform is going to cost to the Italian public budget? How this compare with the assumed cost in the reform law?

5. Specific comments

p. 2 third paragraph, " to boost Italy's economic growth". This seems to me a bit excessive, considering the slow pace with which the reform is introduced. Did the Italian government present some estimates of the expected effects on growth?

p.3 second sentence after the 2.paragraph, "Worry about this exposure", better use the plural, "Worries about.."

p.4 As a general comment. Given the academic and international organization support for ACE kind of system, it is somewhat surprising that they have not been used more extensively around the world. Do the authors have some ideas about this? Why, for instance, the Croatia experiment was terminated after only six years?

p.5 The original DIT experiment predicted rates of imputed return on equity differentiate for sectors. Now the ACE reform predicts a single tax rate, 3 points plus the average return on public bonds. Any comments?

p.8 Table 1 should be self-explanatory. Say in the footnote at the bottom of the table that the two columns, profit and loss, refers to firm that run profits or losses in the period.

p.8 bottom of the page "profit-making firms profited by a higher ACE benefits" . But if ACE had not been introduced yet, how could firms have profited by the higher benefit?

p. 8 "In this article we have only focused"..better use the present tense, in this article we focus only on..

The Appendices are quite long and sometimes they just repeat what is said in the text. I would maintain Appendix 1 (on sample selection) in the Appendix, while maybe the part on the computation of EMTR, simplifying it considerably (while there is the need of discussing Irap in this context), could be put in a box inside the main text.