Response to the comments by Referee 1

We are thankful to the referee for his comments. The comments are mostly on 'inadequate literature review' and 'editorial omissions' and can very easily be accommodated in the subsequent revision of the paper.

My response to the comments is as follows:

- 1. In response to this comment we think a through language editing will solve the problem which we will sure to undertake.
- We used acronyms for following two reasons: Firstly, we thought instead of using different synonyms like foreign firm, multinational company or Multinational Corporation, use of an acronym MNC for Multinational Corporation will be easier for the readers to understand. Secondly, we thought that the use of acronyms for different entry strategies of the foreign firm will also be helpful for the reader. However as per the suggestion of the referee this problem can easily be tackled.
- 3. Inadequate literature review: As per the suggestion of the referee this can be easily accommodated.

The paper mentioned the papers by Silve and Bernhardt (1998) and Banerjee (2003) but did not explains these models.

The paper by Silve and Bernhardt (1998) considers the issue of end-user piracy in the presence of network externality and showed that in presence of network externality and a heterogeneous consumer base, it is profitable for the monopolist to allow (limited) end-user piracy. However, our study considers the issue of entry mode of a Multinational firm to a less developed country market in the presence of commercial piracy, which is not exactly related to the issue discussed by Silve and Bernhardt (1998). For this reason, we acknowledge their seminal work but did not discuss it in detail.

Banerjee (2003) considers the issue of government monitoring in the presence of commercial and the pricing strategy of a monopolist. He analyzes two cases: the leader-follower game and the monopoly pricing game.¹ The problem of entry mode or the decision of outsourcing by fragmenting the production process by the foreign firm or the endogenous choice of copy-protection strategies , which are the main focus of our analysis were not present in his analysis. For this reason we again acknowledge the paper but did not discuss it in detail in the previous draft of the paper.

However according to the suggestion of the referee it can easily be accommodated.

¹ López-Cuñat and Martı´nez-Sánchez (2011) gave a detailed and critical description of this study.

4. The results are not related to the earlier literature along the paper.

The studies that we come across did not cover the issue dealt in the present paper: that is the choice of entry mode of a foreign firm with the possibility of product fragmentation in the presence of commercial piracy. That is why we did not compare our results with the existing literature. However this can easily be added in the paper.

5. According to footnotes 27, 28 and 29, complete production in____

In Section 3.2 ,page 15 we define the assumptions related to the case where the MNC is shifting its entire production process in the less developed economy. In this case under accommodating strategy the following is shown:

The AC-strategy – Under AC-strategy let x_{LDC}^{ac} be the level of anti-copying investment incurred by the MNC, where the probability of copying the original product is $h(x_{LDC}^{ac})$ such that 0 < h(.) < 1, h'(.) < 0 and h''(.) > 0 and $Lt h(x_{LDC}^{ac}) \rightarrow 0$. It implies that the copying probability is higher in the

AC-strategy in complete-LDC production than the AC-strategy of fragmented production for same level of anti-copying investment (as h(x) > kh(x) for 0 < k < 1).

Further, equation 25, 26 27 shows the corresponding profit where the firm is not undertaking the shipment cost, that is t=0. Based on this analysis footnotes 25,26 and 27 were written. Section 2 basically describes the sequence of game and the general assumptions that are applicable to both modes of entries. The assumptions relevant to a particular mode of entry are placed in the corresponding sections.

The definition of the functions of demand is much improved. For instances, p^{cp}_{frag} is not defined. I think it represents the consumer who is indifferent between buying and not buying.

 p_{frag}^{CP} is the price of the product of the foreign firm under fragmentation mode of entry where the MNC is undertaking the complete copy protection strategy. As per the suggestion of the referee we will incorporate this definition in the subsequent revision of the paper.

- 7. For comment 7a, we would change the sequence of equation numbering. For comments b to c we are extremely grateful to the referee for pointing out the typos and will surely rectify it. Again thank you for giving such a careful reading of the paper.
- 8. Also it is confusing that some proofs are in the appendix and others in the article text. Especially when you do not know where it ends the proof in the text.
- 9. The proofs should be numbered.

Following the referee's suggestion we will put all the proofs in the appendix numbering them consecutively.

- 10. SORRY again a typo. It will be equation (23) which defines the monitoring rate.
- 11. G has been defined in the last line of page 9.
- 12. In Section 4, equilibrium are described in Equilibrium 1, Equilibrium 1a, Equilibrium 2 and Equilibrium 3. I think this could be grouped into a proposition.

Thanks for the suggestion. We will do accordingly.

13. Bad quality of graphs

Most of the graphs were drawn using the software used for simulation and then copied and pasted in the word file. This has caused the problem.

Other Comment

We will surely incorporate them.

References

Banerjee, D.S. (2003). 'Software piracy: a strategic analysis and policy instruments,'

International Journal of Industrial Organization, Vol 21, pp 97–127.

López-Cuñat, J.M., Martı'nez-Sánchez, F., 2011. Anti-piracy policy and quality differential in markets for information goods. WP-AD 2011-02

Silve, J., Bernhardt, D. (1998). 'Pirated for profit,' Canadian Journal of Economics, Vol. 31,pp 886-99.