First, I would like to thank the anonymous referee for the comments. I will show that none of these are of substantial concern or relevance to modern general equilibrium theory in general nor to this paper.

1) The referee points out the possibility of simplifying the two period model to a single period model with no uncertainty. I have the impression that the referee is not aware of the consequences in doing so in terms of loss of interesting economic intuition and information. The whole idea of this paper is precisely not to follow the referee’s advice in that aspect but to explore production properties beyond those of the standard one period Arrow-Debreu model.

Adding a sequential structure to the activities of the firm allows to prove the interesting and new results on the relation between short and long run equilibria. It is precisely this property that allows deep economic insight in the organization of production of competitive general equilibrium economies. For example, the sequential structure allows to consider (i) long run production sets $Y$, where all activities of the firm are variable over both periods. This is the typical production set considered in the classical Arrow-Debreu (1959) models. More importantly, the sequential structure of the model also allows to consider (ii) short run production sets $Y(K)$. Here, capital is fixed, and a profit maximizing firm can only choose short run activities, such as labor at given pre-installed production capacity. Recall that in my model a firm buys capital $K$ in $t = 0$. The level of capital $K$ after a careful reformulation determines the total production capacity $\bar{K}$ available to a firm in $t = 1$ (short run) which is fix to the profit maximizing firm in the short run. The paper shows, at variance to the literature that even in the short run with production set $Y(K)$ multiple equilibria are likely to exist, that these are odd and finite in number. These new results have important implications for economic policy. Beyond that, other global properties of the equilibrium set are proved.

As a consequence of the two periods introduced, it should now become evident that ”production capacity” as introduced in this paper plays the role in determining the firm’s size. This is also at variance to the classical Arrow-Debreu model where the size of the firm is fixed.

I introduce uncertainty the same way as in Debreu chapter, 7. Uncertainty is a consequence of introducing time in the model. It also intends to prepare the model to a generalization of it where production capacity is financed via financial markets and where short run activities are financed through revenue generated in period two. The financing of the firm is again another strong reason for the introduction of time and uncertainty in the model. But this is revealing work in progress.

To conclude: The interesting economic scenario considered in this paper is the
simplest framework in which new information on the organization of production can be extracted beyond what is know from the classical one period private ownership model (Debreu, 1959). In addition, this model provides the ideal starting point for considering the financing of production (short and long run production activities). The referee’s comment is hence misleading.

2) It is suggested to state the explicit assumptions on the consumption and production side of the agents. For the last four decades, since the paper by Debreu (1972), modern economics refers to Debreu’s assumptions by mentioning that smooth economies are considered. From that point of view, the results are driven by smoothness. Since I do not consider any relaxation of these assumptions I found no need to waste space with replicating them. I hope that the referee is aware of this well known trend. The referee’s comment is insignificant, but may make some sense for pedagogical purpose.

3) The strongest point in the referee’s view is to claim that all of my results appear to be known. I show the invalidity of this claim by considering the relation between the papers mentioned by the referee: (i) I think the referee refers to a chapter in the forthcoming book by Balasko entitled “General Theory of Value”, (ii) and the paper by Keho (1983) rather the one by Keho (1980).

First, Balasko’s paper deals with the problem of expanding the concept of no trade at equilibrium introduced for exchange economies in i.e. Balasko(1988) to the case of smooth production economies. My paper is not interested in this concept, but in the organization of the activities of the firm using Balasko’s natural projection approach to the study of economic equilibrium. Both papers by Keho (1980, 1983) deal with deriving index theorems, which again are not of any interest to my paper presented here. In addition it is worth mentioning that both authors consider a very different economic environment and are interested in a different set of problems within the world of smooth economies with production.

What the referee believes to be the strongest point turns out to be its weakest as it has no much relevance to the work presented in my paper. Indeed, reading Balasko’s online paper and knowing the general equilibrium literature well shows that my work picks up where Balasko’s work ends.

4) It is from point (3) and from not recognizing the importance of the sequential structure of the model that the referee derives its main conclusion, which is obviously wrong. The final point made by the referee is so general that it lacks meaning without further specification. Saying that the results appear to be known reflects the referee’s limited knowledge of the general equilibrium
theory literature.

In conclusion: The referee’s remarks (1), (3) and (4) add confusion rather than clarification. I hope that my reply sorts out these misleading comments.