We thank the referee for their thoughtful consideration of our manuscript. Their review has revealed issues that have given us very helpful guidance in improving the paper. To provide context for our responses we have reproduced the three main comments given by the referee in **serif**, each of which is followed by our response.

1. Reproduce the works of Rudebusch and Svensson (1999, 2002) and of Goodhart and Hofmann (2005a,b) for the G7 countries instead of the US.

Goodhart and Hofmann (2005a,b) demonstrated the *IS* puzzle in the G7. The referee's comment and suggestion indicate that this point was not made clearly in the current version and we will rewrite the discussion of their work to make this clear. We trust that this will address the referee's request that the existence of the *IS* puzzle for these countries be demonstrated.

2. Robustness of time varying relation in the IS relation and the origins of the IS relation.

The referee's request for an empirical motivation of non-instantaneous equilibrium response is an opportunity for us to enhance this aspect of the discussion. The time dependence is shown by the lead-lag nature of the output and rate gaps seen in figures 3 and 4; if the relationship was instantaneous the temporal changes in these time series would (modulo noise) be contemporaneous and they clearly are not. This point is not made in the current version and we will modify accordingly.

Regarding the request to present the results in terms of the investment rate, we feel that this question, while intriguing, would take us afield of the topic of the paper – the origin and solution of the IS puzzle – since the IS puzzle is defined in terms of the real rate. Consequently, we ask that this be left for future research.

3. Strengthen the contribution of the paper to the literature.

The work of Laubach and Williams (2003) and of Garnier and Wilhelmsen (2009) mentioned by the referee is, conceptually, a natural extension of that of Goodhart and Hofmann (2005a,b) and making this connection would indeed be helpful. We are happy to enhance our discussion with this aspect of the literature.

References

- Garnier, J. and Wilhelmsen, B.-R. (2009). The natural rate of interest and the output gap in the euro area: a joint estimation. *Empir. Econ.*, 36:297–319.
- Goodhart, C. and Hofmann, B. (2005a). The IS curve and the transmission of monetary policy: Is there a puzzle? *Appl. Econ.*, 37(1):29–36.
- Goodhart, C. and Hofmann, B. (2005b). The Phillips curve, the IS curve and monetary transmission: Evidence for the US and the euro area. *CESifo Econ. Stud.*, 51(4):757–775.

- Laubach, T. and Williams, J. C. (2003). Measuring the natural rate of interest. *Rev. Econ.* Stat., 85(4):1063–1070.
- Rudebusch, G. and Svensson, L. E. O. (1999). Policy rules for inflation targeting. In Monetary Policy Rules, chapter 5, pages 203–262. University of Chicago Press, Chicago, IL.
- Rudebusch, G. and Svensson, L. E. O. (2002). Eurosystem monterary targeting: Lessons from US data. *Eur. Econ. Rev.*, 46(3):417–442.