1 Responses to the second referee report

The comments in the report were very useful and clearly demonstrated deep insight into the issue discussed in our paper.

Commenting on the choice of capital stock variable: The major concern (similarly as referee I) is about the choice of capital stock variable to replace the simulated variable used by Peter Ireland. We agree completely that this choice is both extremely difficult and important. Capital stock is notoriously difficult to measure with some minimum level of objectivity. The measure we have used here is from the OECD database Economic Outlook and is defined as "Private fixed total capital formation". In a previous version of the paper we also tried "Gross fixed total capital formation". In the paper the latter name is still in the text by mistake. From these measures it would of course be possible to create K_t as in (3) using the $\delta = 0.975$. However, the correponding variable would be very close to I(2) and would be excludable from the outset as none of the other variables are close to I(2). This makes it extremely difficult to estimate a traditional Cobb-Douglas function and there might not be other solutions than using capital formation instead.

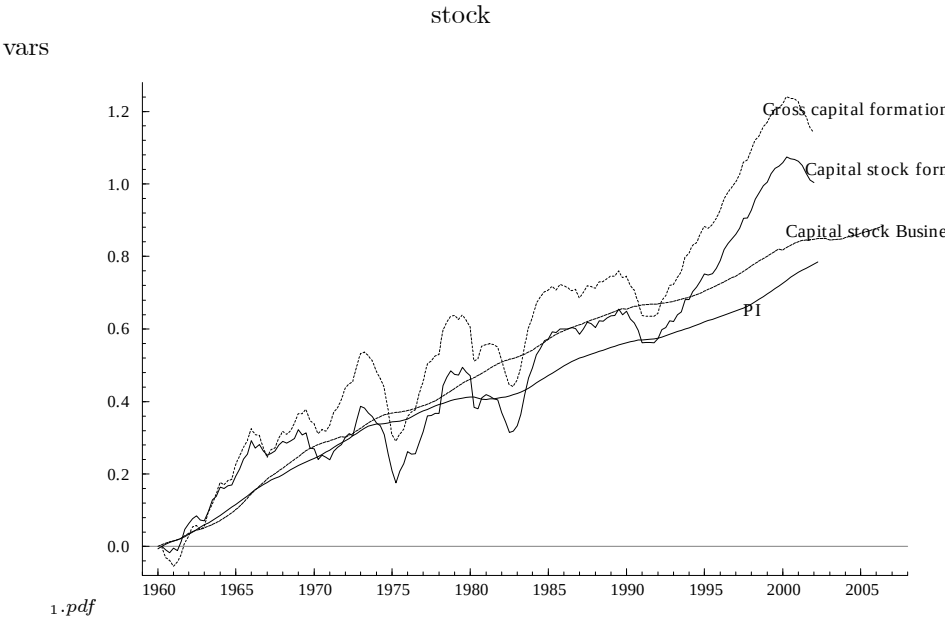

Figure 1 shows the graphs of Ireland's capital stock variable together with "log capital stock of the business sector, log private fixed capital formation and log gross fixed capital formation. All series are per capita and all are normalized by subtracting the first observation (1960:2) from the series to facilitate comparison. We note that the PI simulated per capita capital stock variable exhibits less growth over the sample compared to the three measured series. Thus, imposing the RBC assumption of identical linear growth rates on the

data generates a variable which is different from any of the measured ones. Furthermore, gross capital formation deviates most from PI's measure whereas the capital stock of the business sector looks most similar in this respect. Thus, it might be a good idea to check the sensitivity of the results with respect to the latter measure.

To conclude: cumulating any of the two capital formation series would give us a series that would be totally different from PI's capital stock variable. To use the capital stock of the business sector might be a good idea to check the robustness of the results[1]. However, checking the robustness of the results to the choice of capital stock is probably not enough as the results are likley to be influenced by other omitted variables (as discussed in the conclusions).

The dummy variables were primarily identified by checking whether extraordinary residuals coincided with extraordinary institutional events. The 1987 dummy is a little questionable in this respect, but all econometric tests showed that it could not be excluded from the model.

Our plan is to continue with the Baysian DSGE models sometimes in the future.

[1] Nonetheless, the question remains why the growth of this variable is smaller than private fixed capital formation.