

# Fiscal and Monetary RTM Models for a Closed Economy

November 6, 2008

THESE RESULTS ARE FOR A CLOSED ECONOMY MODEL: THAT IS, IT IS THE SAME SETUP WE USED BEFORE SANS EQUATIONS OF US INTEREST RATES, US CPI AND US IIP. So this is akin to what the literature on UK and US voting typically does: they omit any influences of the global economy.

All results are based on a posterior of 35000 draws with the first 10000 draws discarded. A quick scan of the Geweke diagnostics for the  $A_0$  parameters indicates that the model parameters have converged.

| Model                    | Sample period |               |
|--------------------------|---------------|---------------|
|                          | 1984:4–1997:4 | 1997:5–2006:9 |
| No Fiscal Accountability | 2396          | 2701          |
| Full Accountability      | 2422          | 2703          |
| log Bayes Factor         | 26            | 2             |

Table 1: Log marginal data densities and log Bayes Factors

This is some evidence for the accountability specification with fiscal policy! You cannot compare these log MDDs to the ones for the open economy model — the dependent variable matrix is different (the earlier one had 12 variables, this one only uses 9).

The next several pages include IRFs that parallel those we already have in the paper. The difference here is that these are for a closed economy model (i.e., where I left out all of the equations for the US stuff). All of these IRFs have 68% likelihood-based error bands (as recommended in Brandt and Freeman 2006). I've included the IRFs for the closed economy and open economy models so you can see the changes that come from including the USIR, USCPI, and USIIP variables / equations in the model.

Figure for the closed economy version flips the sign of the IR responses to SE shocks in both periods. The IR response to PM shocks for 1997-2006 flip signs in the closed economy model. The VI shock to IR for 1984-1997 flips sign for the closed economy model.

Figure 2 for the closed economy version of the model is very different from the open economy model. First, the signs change the SE, PE and PM shocks (for both periods). The magnitudes are also larger than what we see in the open economy version of the model.

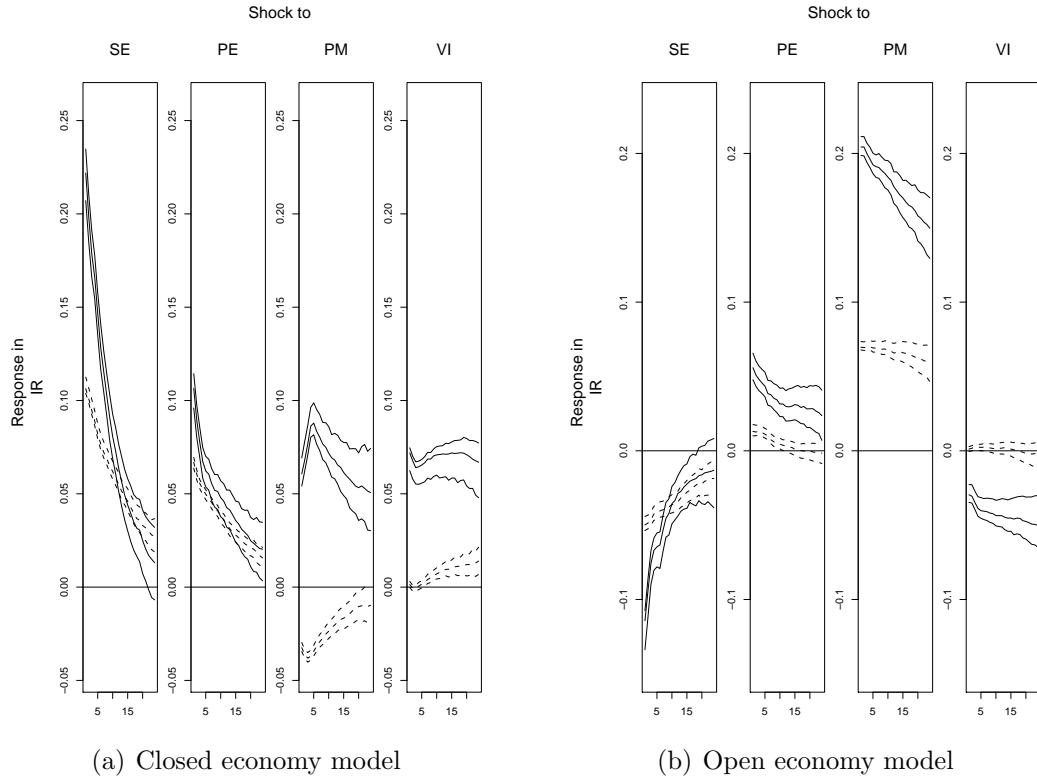


Figure 1: Response of UK interest rates. Solid (dashed) lines are the responses for the 1984-1997 (1997-2006) period accountability model. Error bands are 68% regions computed via eigendecomposition

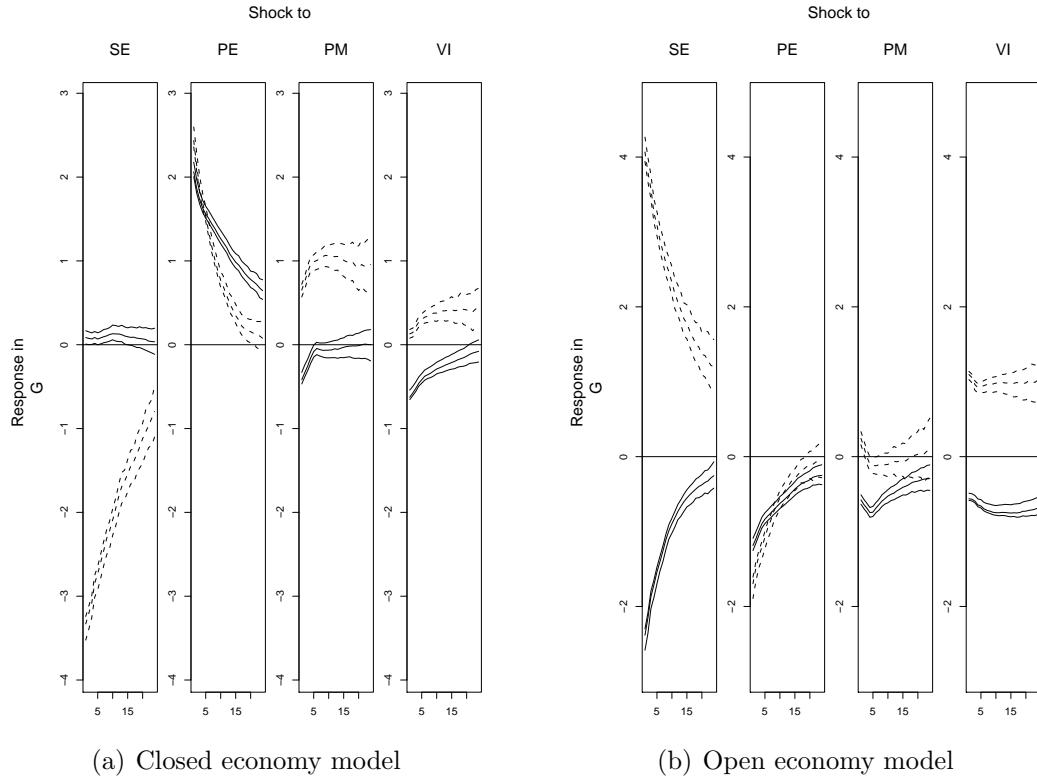


Figure 2: Response of UK public sector debt index (fiscal policy). Solid (dashed) lines are the responses for the 1984-1997 (1997-2006) period accountability model. Error bands are 68% regions computed via eigendecomposition

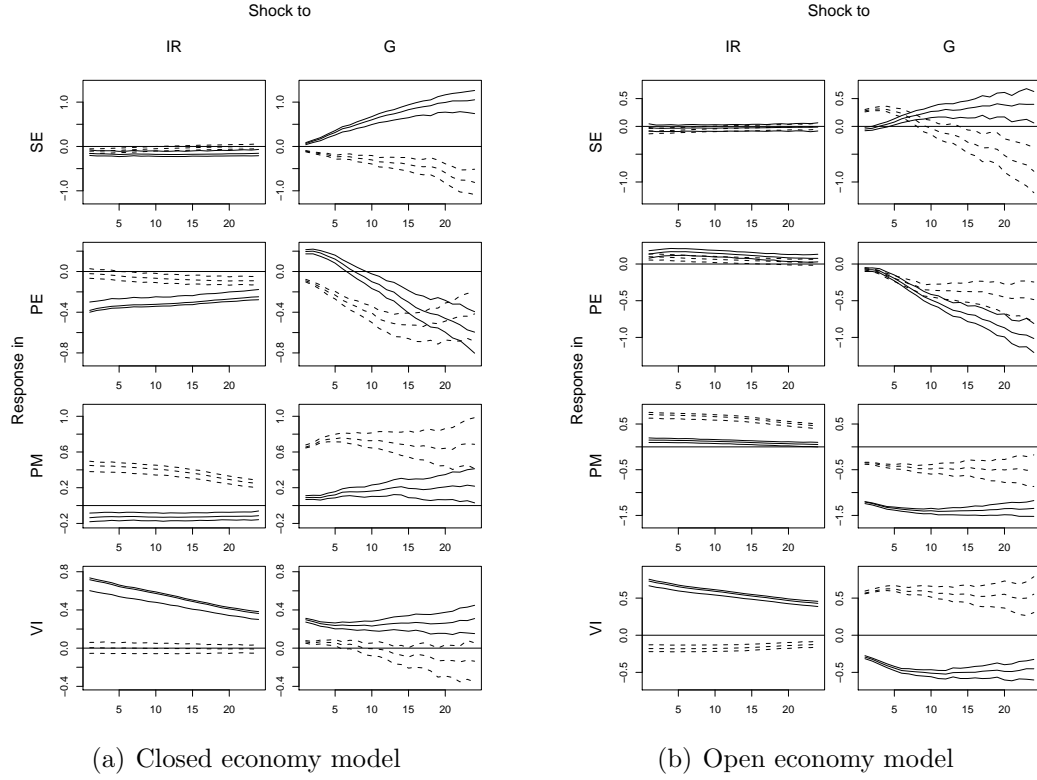
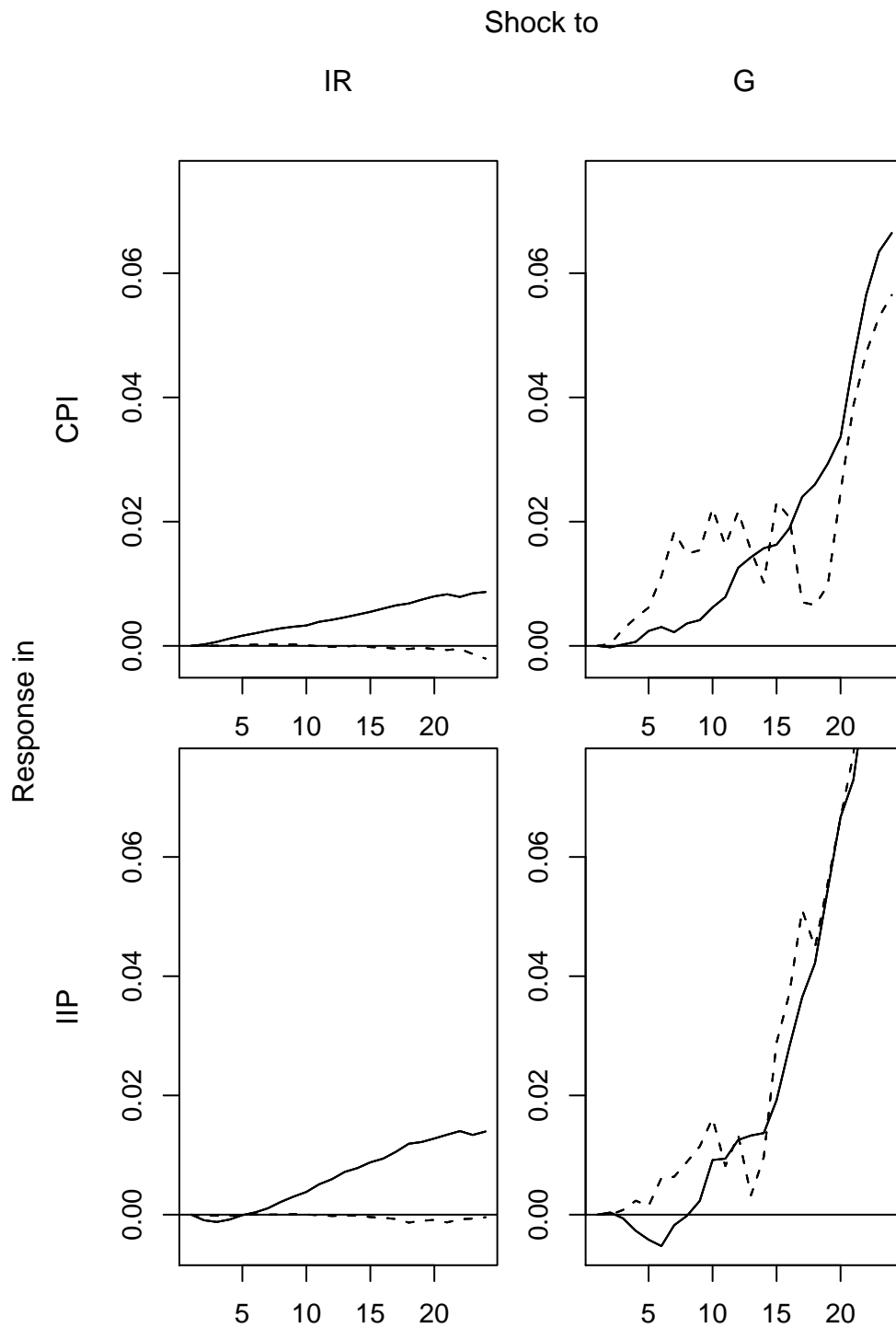
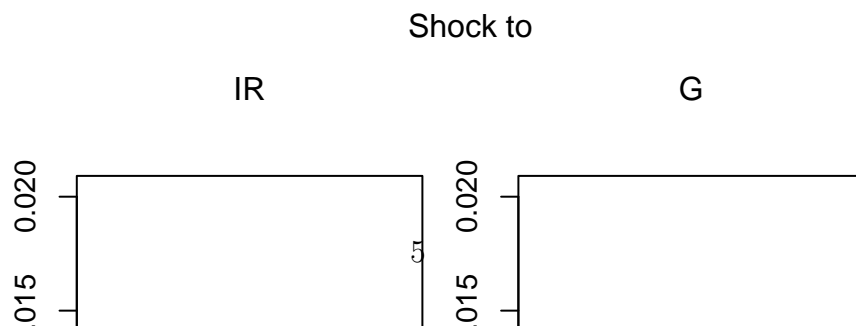
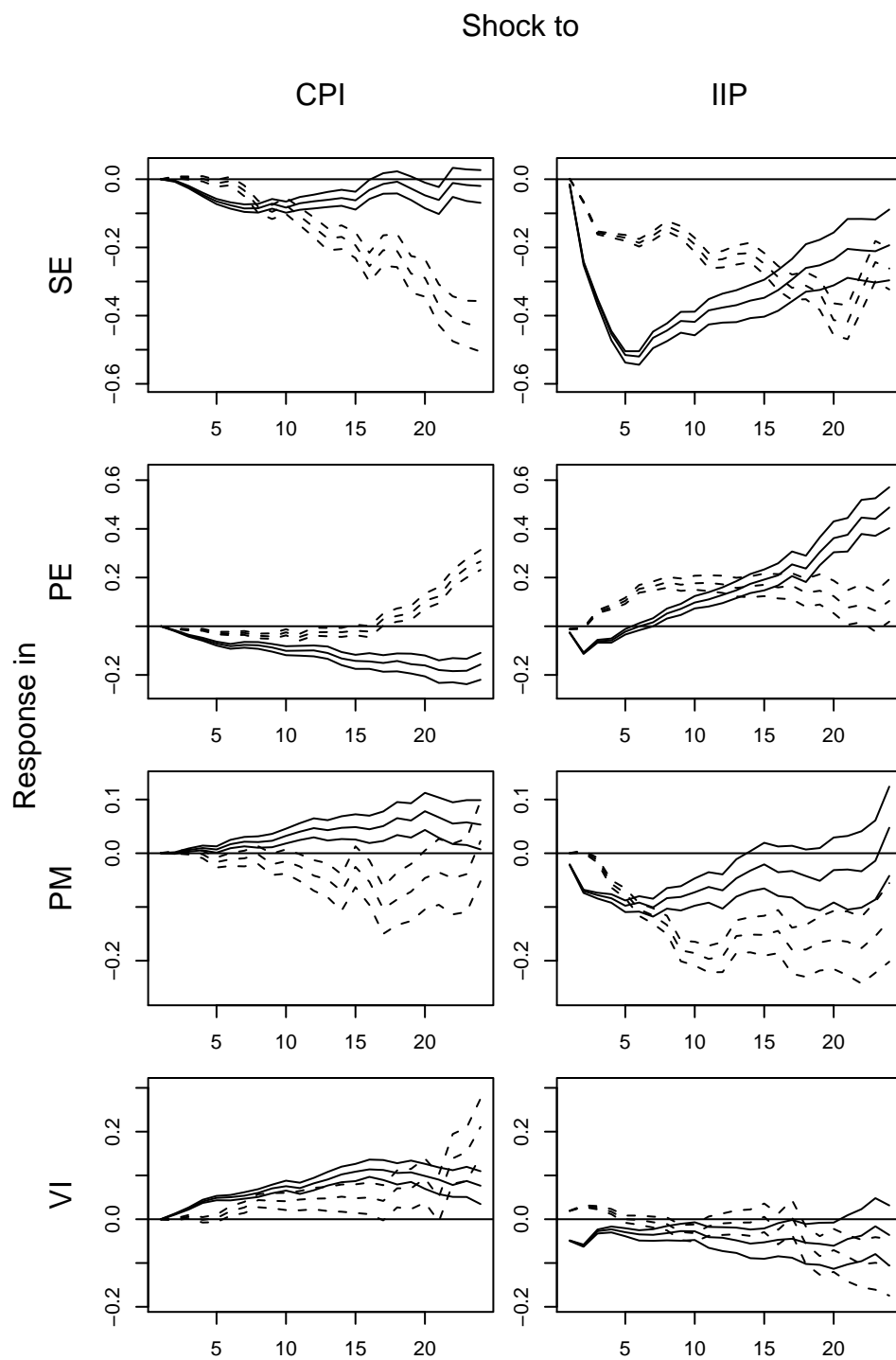


Figure 3: Responses of sociotropic expectations (SE), personal expectations (PE), prime ministerial support (PM), and vote intentions (VI) to shocks to the UK interest rate and net cash index (fiscal policy) variables. Solid (dashed) lines are the responses for the 1984-1997 (1997-2006) period accountability model. Error bands are 68% regions computed via eigendecomposition



(a) Closed economy model





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