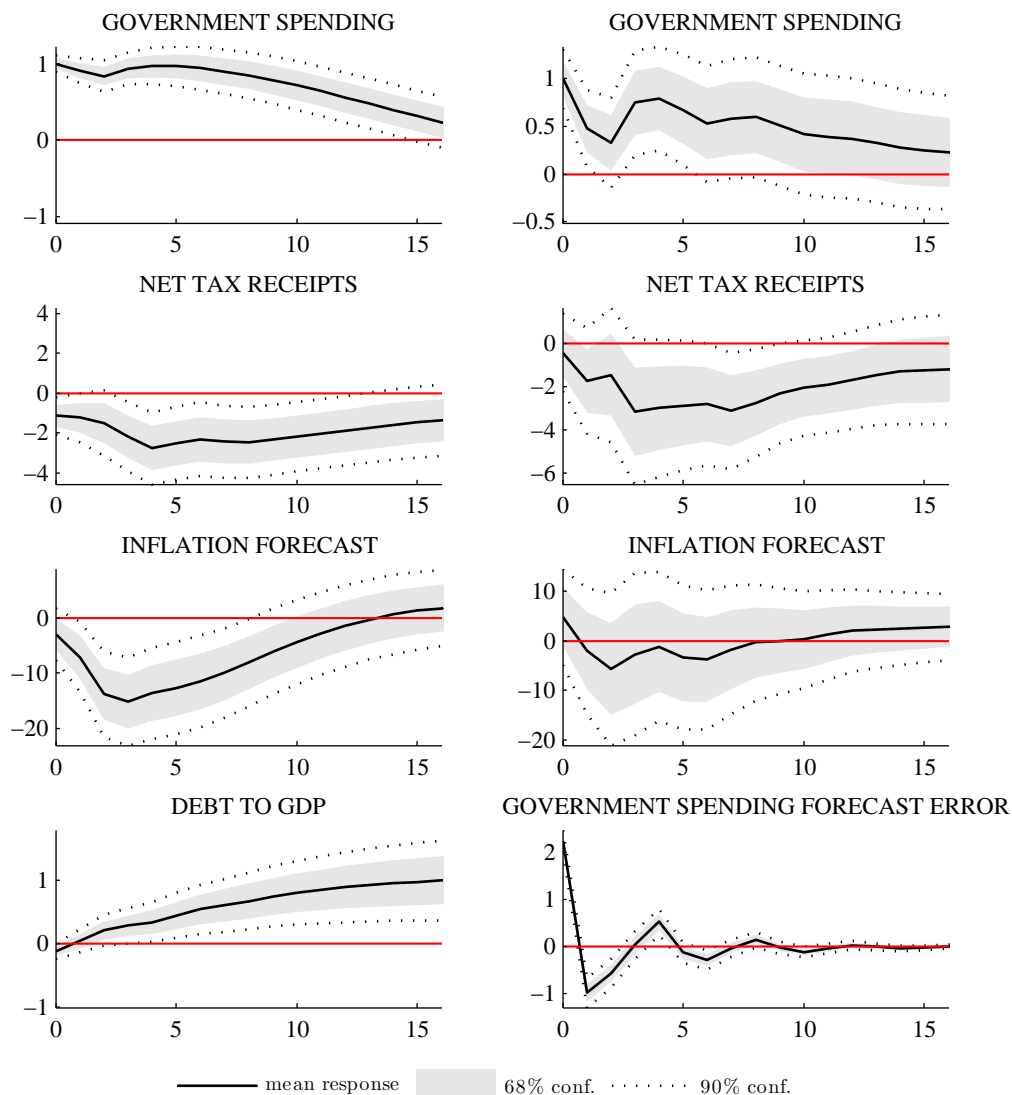


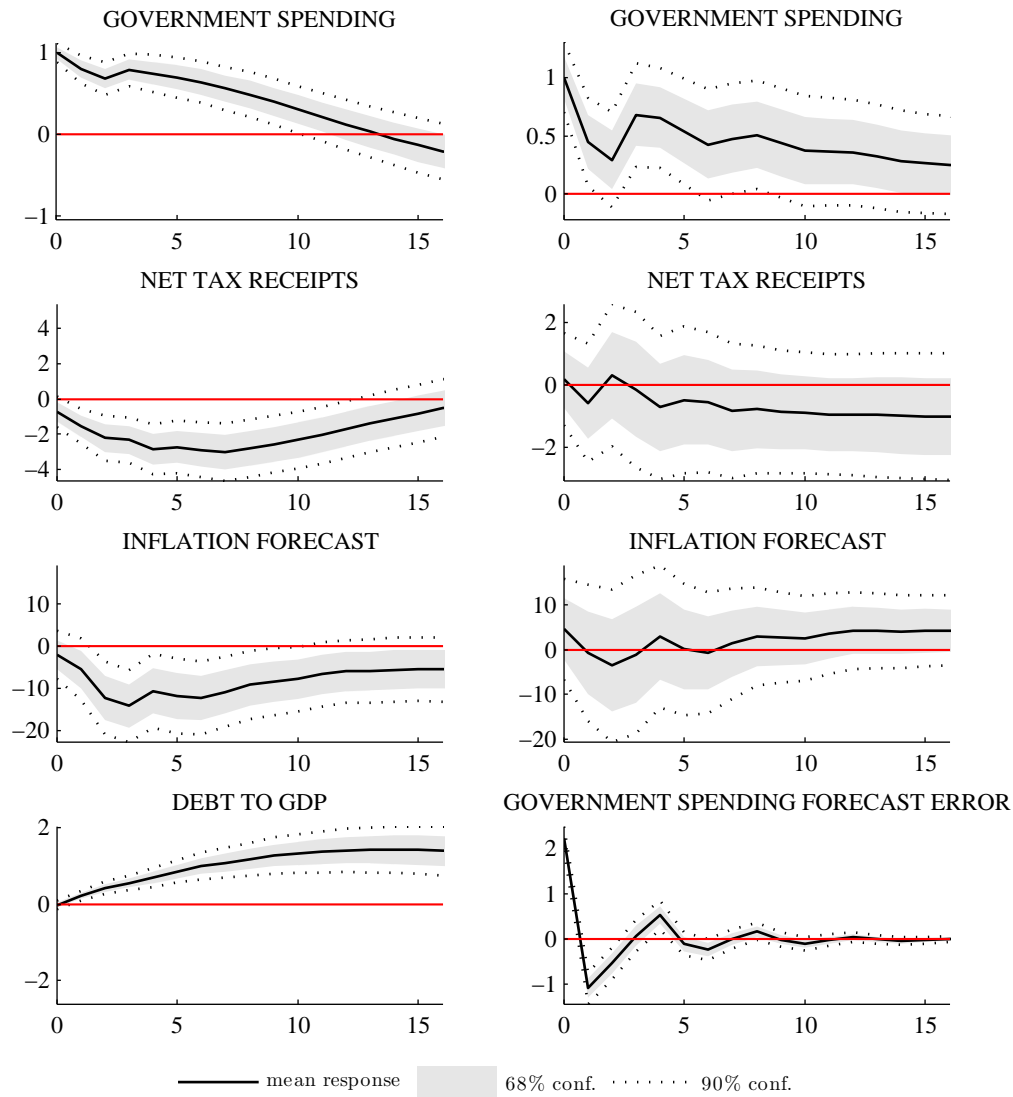
## D Additional figures

**Figure 9:** The effects of a positive 1% government spending shock on government spending, net tax receipts, inflation forecasts, and the debt-to-GDP ratio. **Sample period: 1979.IV-2015.IV.** Left column: Blanchard-Perotti identification, right column: Auerbach-Gorodnichenko identification.



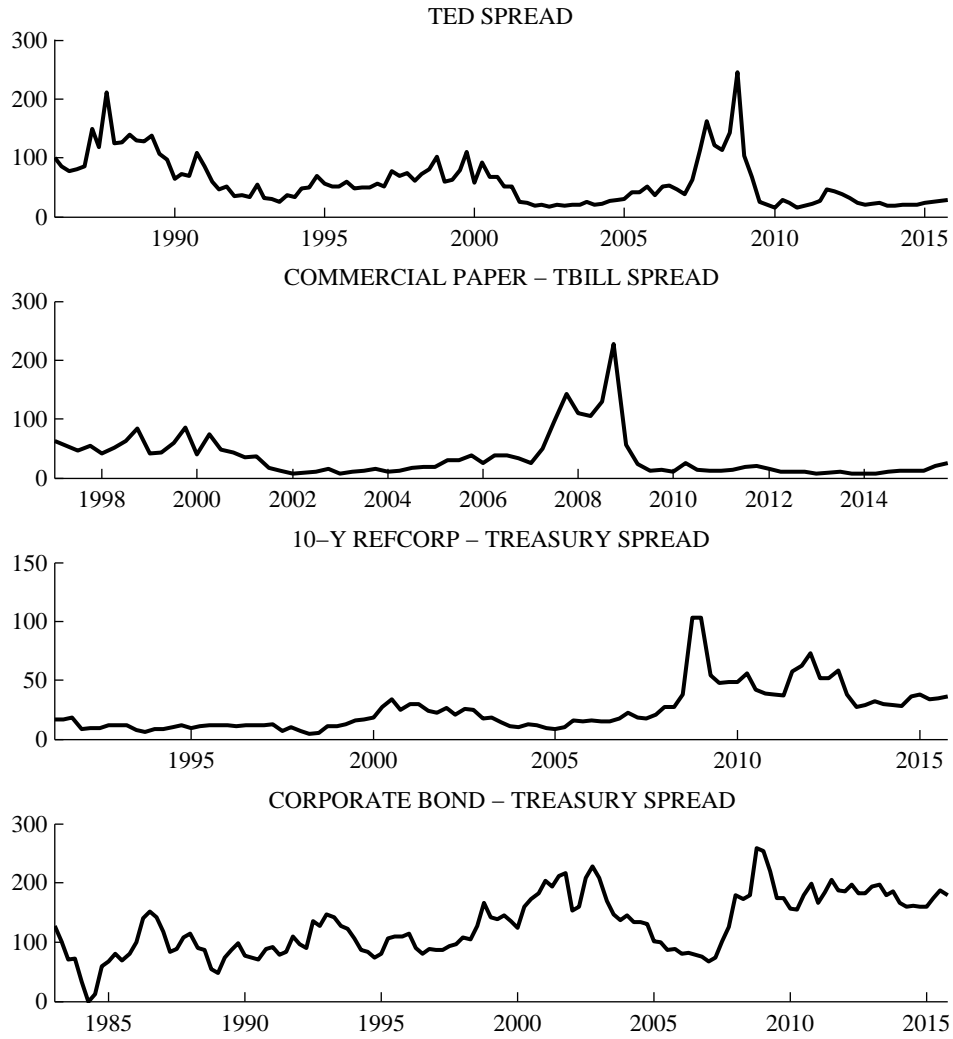
*Notes:* Responses stem from VARs that include  $g$ ,  $y$ ,  $tax$ ,  $E\pi$ ,  $c$ ,  $R^m$ , and  $clf$ .  $d$  additionally included in  $BP$  identification.  $fe$  additionally included in  $AG$  identification. Shocks to  $g$  or  $fe$ , respectively, ordered first in Cholesky decomposition. See Table 1 for description and definition of variables. Horizontal axis show quarters. Responses of government spending and net tax receipts in percent, responses of debt to GDP and the forecast error in percentage points, responses of the inflation forecast in basis points.

**Figure 10:** The effects of a positive 1% government spending shock on government spending, net tax receipts, inflation forecasts, and the debt-to-GDP ratio in a sample excluding the financial crisis. **Sample period: 1979.IV-2008.IV.** Left column: Blanchard-Perotti identification, right column: Auerbach-Gorodnichenko identification.



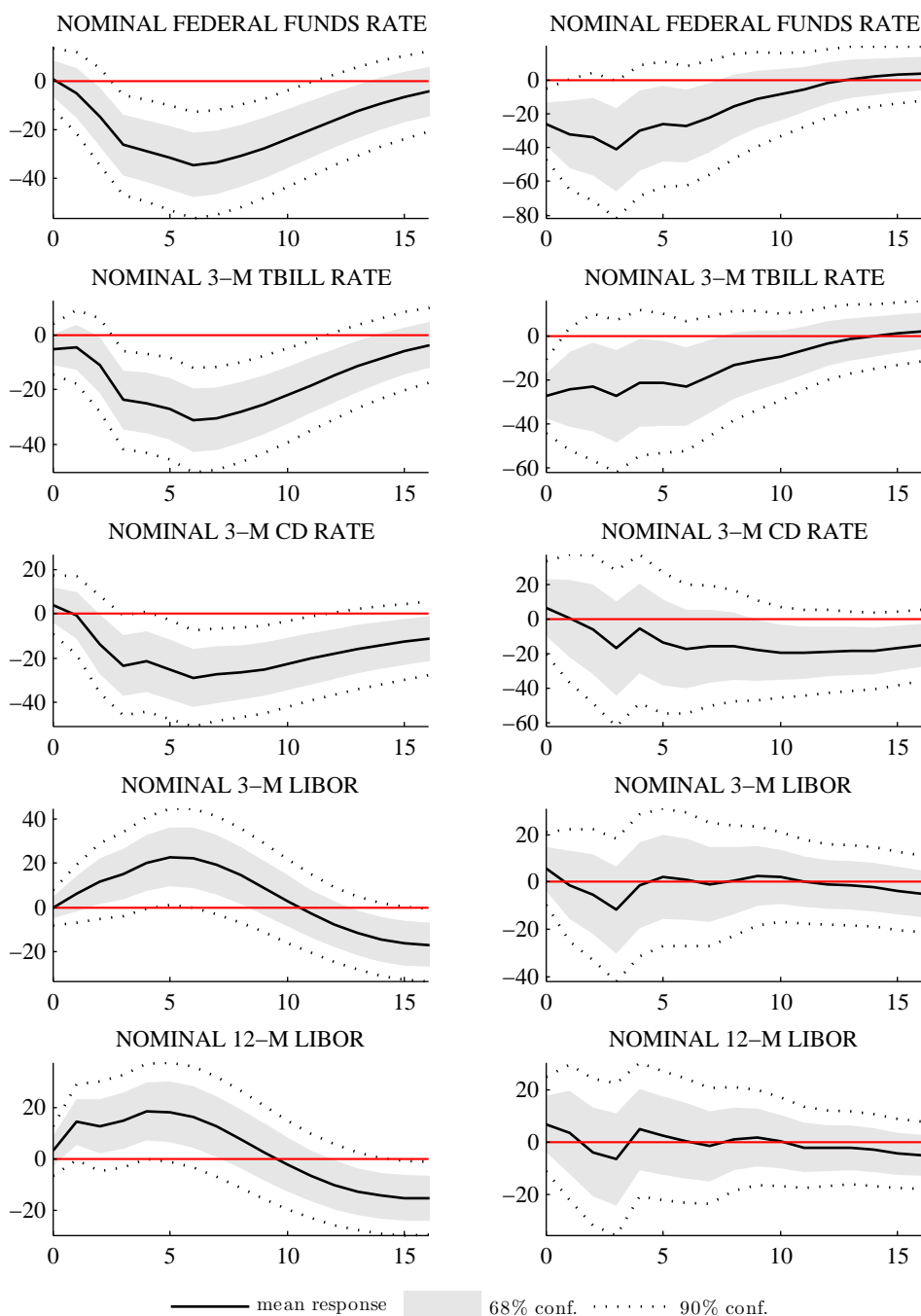
*Notes:* Responses stem from VARs that include  $g$ ,  $y$ ,  $tax$ ,  $E\pi$ ,  $c$ ,  $R^m$ , and  $clf$ .  $d$  additionally included in *BP* identification.  $fe$  additionally included in *AG* identification. Shocks to  $g$  or  $fe$ , respectively, ordered first in Cholesky decomposition. See Table 1 for description and definition of variables. Horizontal axis show quarters. Responses of government spending and net tax receipts in percent, responses of debt to GDP and the forecast error in percentage points, responses of the inflation forecast in basis points.

**Figure 11:** Time series of interest rate spreads analyzed in Section 3.3.



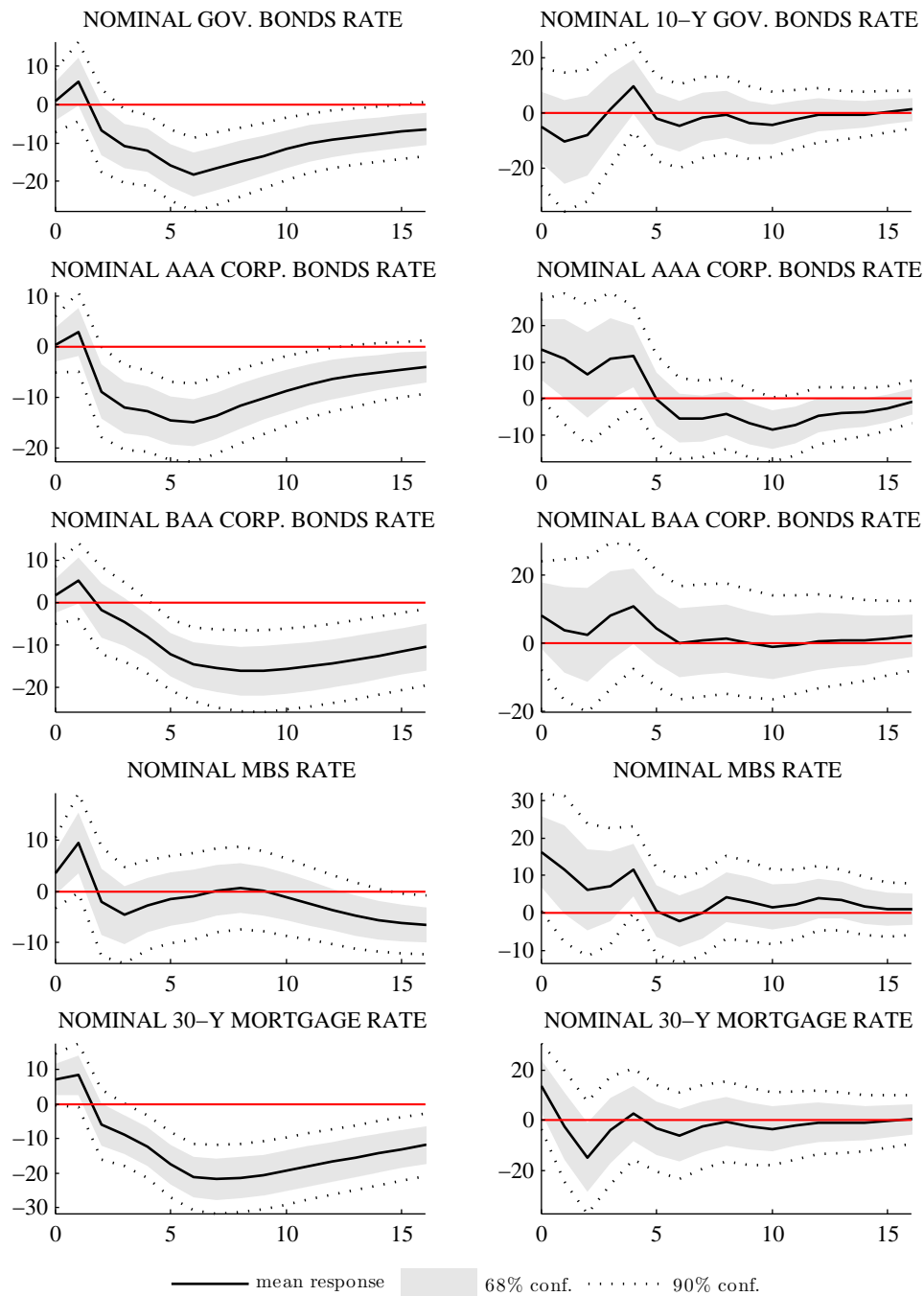
*Notes:* Spreads shown in basis points.

**Figure 12:** The effects of a positive 1% government spending shock on selected short-term nominal interest rates. Left column: Blanchard-Perotti identification, right column: Auerbach-Gorodnichenko identification.



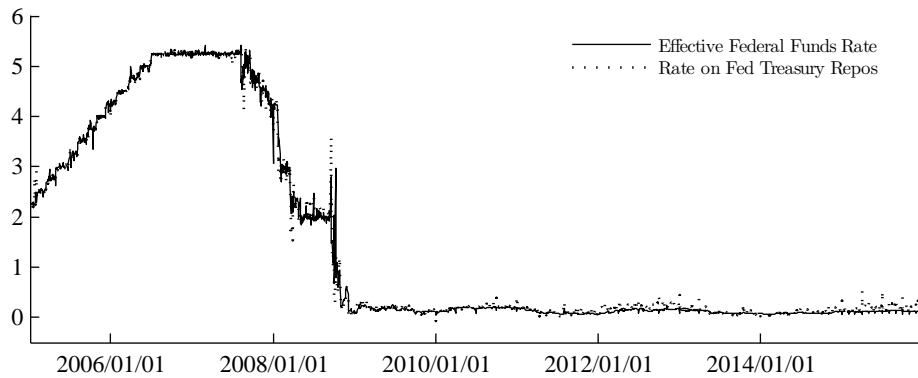
Notes: All VARs include  $g$ ,  $y$ ,  $tax$ ,  $c$ ,  $E\pi$  and the variable whose response is shown.  $d$  additionally included in *BP* identification.  $fe$  additionally included in *AG* identification. VARs with  $R^m$  and  $R^{T-bill}$  further include *clf*. VARs with  $R^{cd}$ ,  $R^{Libor3}$ , and  $R^{Libor12}$  further include  $R^m$ . Shocks to  $g$  or  $fe$ , respectively, ordered first in Cholesky decomposition. Sample: 1979.IV-2015.IV for  $R^m$  and  $R^{T-bill}$ , 1979.I-2013.II for  $R^{cd}$ , 1986.I-2015.IV for  $R^{Libor3}$  and  $R^{Libor12}$ . See Table 1 for description and definition of variables. The nominal rates considered here are the counterparts to the real rates defined in Table 1. All responses in basis points.

**Figure 13:** The effects of a positive 1% government spending shock on selected long-term nominal interest rates. Left column: Blanchard-Perotti identification, right column: Auerbach-Gorodnichenko identification.



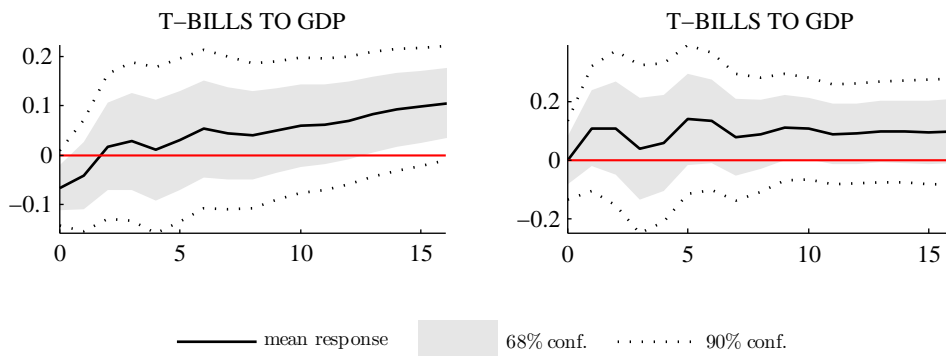
Notes: All VARs include  $g, y, tax, c, R^m, E\pi$  and the variable whose response is shown.  $d$  additionally included in *BP* identification.  $fe$  additionally included in *AG* identification. Shocks to  $g$  or  $fe$ , respectively, ordered first in Cholesky decomposition. Sample: 1979.IV-2015.IV for  $R^{T-bond}, R^{BAA}$ , and  $R^{mortg}$ , 1983.I-2015.IV for  $R^{AAA}$ , and 1984.IV-2015.IV for  $R^{MBS}$ . See Table 1 for description and definition of variables. The nominal rates considered here are the counterparts to the real rates defined in Table 1. All responses in basis points.

**Figure 14:** Federal funds rate and treasury repo rate.



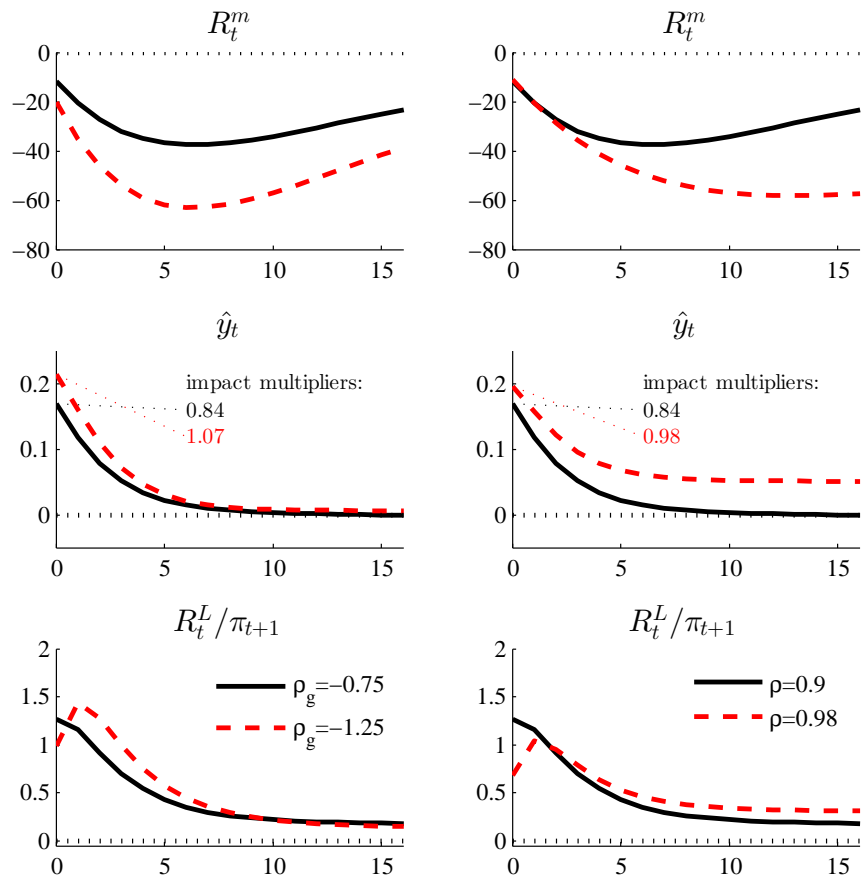
Notes: Data source for rate on Fed Treasury Repos: DTCC GCF Repo Index.

**Figure 15:** The effects of a 1% positive government spending shock on the T-bill-to-GDP ratio.



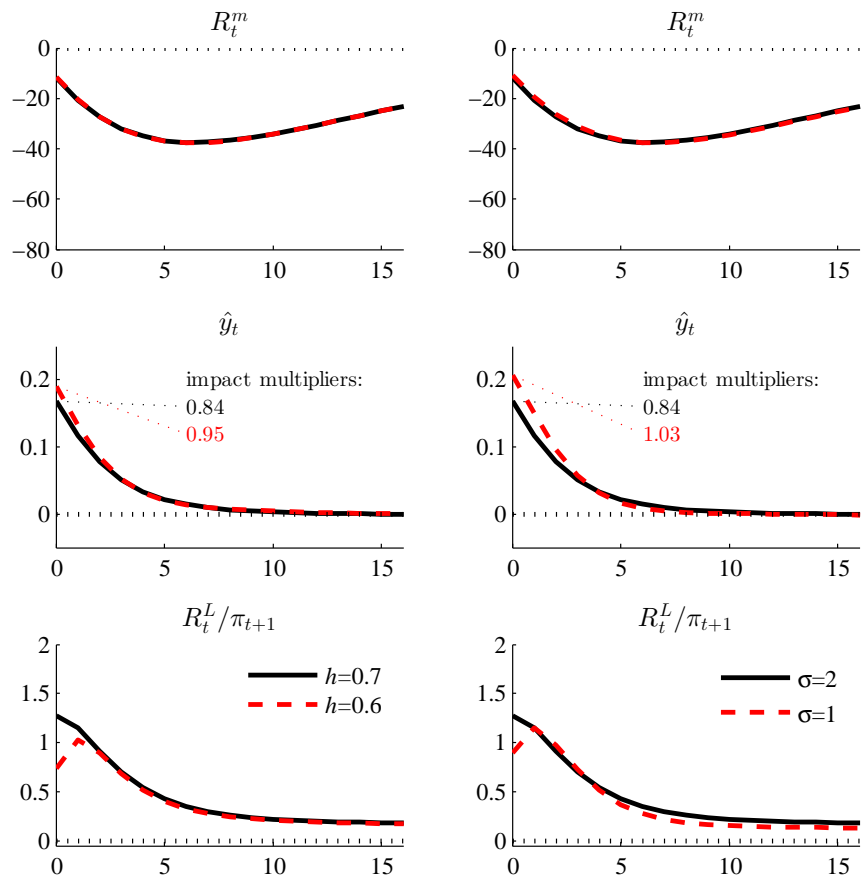
Notes: VARs include  $g$ ,  $tax$ ,  $y$ ,  $R^m/E\pi$ ,  $clf$ , and the T-bill-to-GDP ratio.  $d$  additionally included in  $BP$  identification.  $fe$  additionally included in  $AG$  identification. Shocks to  $g$  or  $fe$ , respectively, ordered first in Cholesky decomposition. Sample: 1983.I-2015.IV. See Table 1 for description and definition of variables. Horizontal axis show quarters. Responses in percentage points.

**Figure 16:** Responses to a positive 1% government spending shock for the model version with positive liquidity premium: baseline calibration and variations in  $\rho_g$  (left column) and  $\rho$  (right column).



Notes: Absolute responses of  $R_t^m$  and  $R_t^L/\pi_{t+1}$  in basis points. Relative responses of  $\hat{y}_t$  in percent.

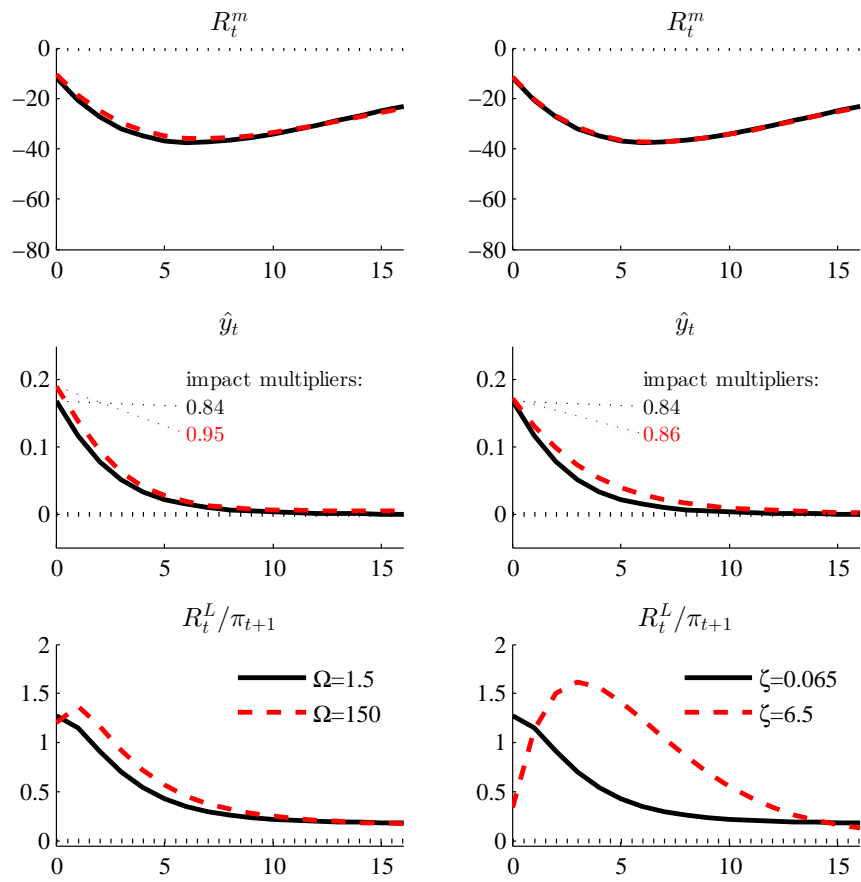
**Figure 17:** Responses to a positive 1% government spending shock for the model version with positive liquidity premium: baseline calibration and variations in  $h$  (left column) and  $\sigma$  (right column).



Notes: Absolute responses of  $R_t^m$  and  $R_t^L/\pi_{t+1}$  in basis points. Relative responses of  $y_t$  in percent.

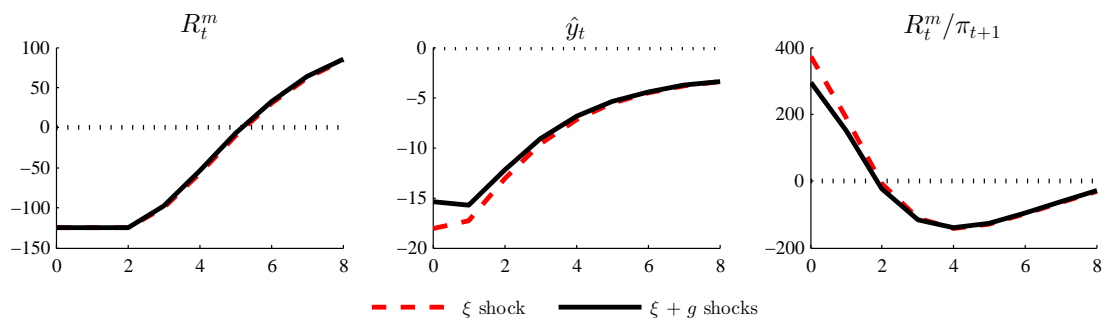


**Figure 18:** Responses to a positive 1% government spending shock for the model version with positive liquidity premium: baseline calibration and variations in  $\Omega$  (left column) and  $\zeta$  (right column).



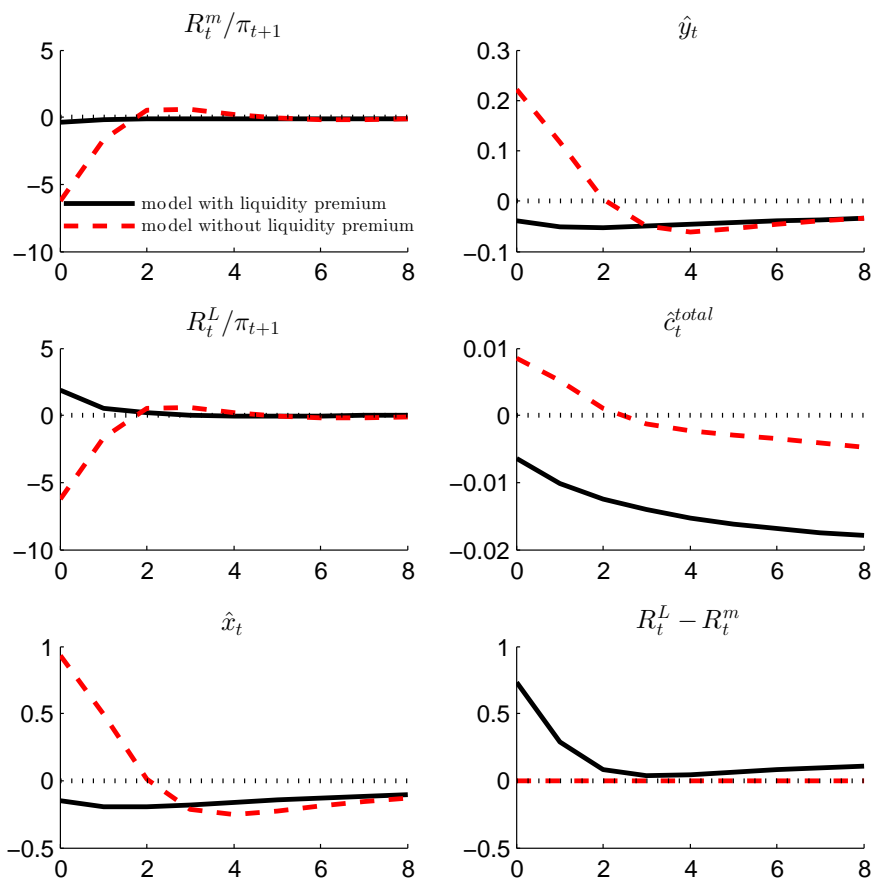
Notes: Absolute responses of  $R_t^m$  and  $R_t^L/\pi_{t+1}$  in basis points. Relative responses of  $y_t$  in percent.

**Figure 19:** Paths of the nominal and real policy rate as well as output in our ZLB experiment analyzed in Section 5.2.3.



*Notes:* Smallest  $\xi$  shock that drives the economy to the ZLB for three periods (auto-correlation set to 0.8).  $g$  shock amounting to 5% of steady-state GDP in order to ensure visibility of the effects of fiscal policy. Absolute deviations of  $R_t^m$  and  $R_t^m/\pi_{t+1}$  from steady state in basis points. Relative deviation of  $y_t$  from steady state in percent.

**Figure 20:** Net effects of a positive 1 pp increase in a labor income tax rate (mean 0.2, autocorrelation 0.9) at the ZLB.



*Notes:* Relative responses of  $y_t$ ,  $g_t$ ,  $c_t$ ,  $\bar{c}_t$ ,  $x_t$ , and  $k_t$  in percent. Absolute responses of  $R_t^m$ ,  $R_t^m/\pi_{t+1}$ ,  $R_t^L/\pi_{t+1}$ ,  $R_t^L - R_t^m$ , and  $R_t^{LS} - R_t^m$  in basis points.