Table 1. Impact Coefficients of Impulse Responses
(Means and Root Mean Squared Errors)

| | What Happens after 1% $\varepsilon_z$ Shock? | | | What Happens after 1% $\varepsilon_l$ Shock? | | | What Happens after 1% $\varepsilon_x$ Shock? | | |
|---|---|---|---|---|---|---|---|---|---|
| | $\Delta \log y_t/l_t$ | $\log l_t$ | $\log x_t/y_t$ | $\Delta \log y_t/l_t$ | $\log l_t$ | $\log x_t/y_t$ | $\Delta \log y_t/l_t$ | $\log l_t$ | $\log x_t/y_t$ |
| True | .58 | .27 | .88 | .50 | -1.52 | -1.88 | .35 | -1.06 | -3.52 |
| Restricted SS | | | | | | | | | |
| Tight | .59 | .25 | .84 | .50 | -1.50 | -1.86 | .34 | -1.04 | -3.48 |
| constraints | (.03) | (.05) | (.18) | (.05) | (.15) | (.46) | (.07) | (.21) | (.31) |
| Modest | .59 | .22 | .79 | .49 | -1.53 | -2.01 | .31 | -.97 | -3.36 |
| constraints | (.04) | (.08) | (.22) | (.07) | (.18) | (.61) | (.10) | (.30) | (.45) |
| Loose | .58 | .25 | .85 | .48 | -1.48 | -1.86 | .32 | -.96 | -3.28 |
| constraints | (.06) | (.16) | (.35) | (.08) | (.29) | (.96) | (.16) | (.44) | (.63) |
| Unrestricted SS | .42 | .19 | .70 | .35 | -1.12 | -1.46 | .28 | -.83 | -2.63 |
| | (.36) | (.68) | (1.44) | (.36) | (.75) | (1.66) | (.31) | (.76) | (1.63) |
| VARMA | .31 | .22 | .58 | – | – | – | – | – | – |
| | (.52) | (.96) | (1.88) | | | | | | |

NOTES: For each model, parameters are estimated by the method of maximum likelihood. This is done for 1000 datasets of length 200 periods. The estimated parameters are used to compute the impact coefficients reported in the table. $\Delta \log y_t/l_t$ is the growth in labor productivity, $y_t$ is output, $l_t$ is labor, and $x_t$ is investment. 'SS' indicates state space model and 'VARMA' indicates vector autoregressive moving average model of order (1,1). For the 'Tight constraints' case of the restricted state space model, only $\psi$, $\sigma$, and the stochastic processes of the exogenous shocks are estimated. For the 'Modest constraints,' all parameters are estimated but the parameters are constrained to be economically plausible. For the 'Loose constraints' case, the only restriction imposed is that an equilibrium can be computed. The numbers in parentheses are the root mean square errors. Some statistics are not reported for the VARMA representation because they are not identifiable.