

TABLE 4. VARIANCE DECOMPOSITION OF HP-FILTERED OUTPUT, LABOR, AND INVESTMENT
(Means and 95% Bounds over 1000 Estimates)

	What Fraction of Variance of HP-filtered Series is Due to ε_z ?			What Fraction of Variance of HP-filtered Series is Due to ε_l ?			What Fraction of Variance of HP-filtered Series is Due to ε_x ?		
	Output	Labor	Investment	Output	Labor	Investment	Output	Labor	Investment
True	32	2.1	10	46	65	29	23	33	61
Restricted SS									
Tight constraints	32 [27,38]	1.9 [0.7,3.2]	10 [5.5,14]	46 [31,63]	65 [43,88]	30 [11,53]	23 [8.1,42]	33 [11,59]	61 [37,84]
Modest constraints	30 [22,40]	1.6 [.1,3.4]	9.3 [4.3,15]	49 [30,76]	69 [41,98]	34 [10,71]	21 [2.1,45]	30 [2.6,60]	57 [24,85]
Loose constraints	33 [20,54]	2.6 [0.0,12]	11 [3.2,27]	47 [15,80]	66 [24,100]	34 [1.9,82]	21 [0.2,50]	32 [0.2,71]	55 [14,97]
Unrestricted SS	29 [1.1,87]	14 [0.0,80]	18 [0.4,83]	41 [1.0,93]	49 [0.9,99]	33 [0.3,95]	31 [0.5,84]	36 [0.4,97]	49 [0.7,97]
VARMA	32 [0.9,93]	28 [0.4,91]	25 [0.7,87]	–	–	–	–	–	–

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 variance decompositions reported in the table. ‘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 ψ , σ , 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 square brackets indicate the range of estimates after eliminating the bottom 2.5% and the top 2.5%.