

TABLE 3—EFFECTS OF PREFERENCE PARAMETERS ON RATES OF RETURN AND WELFARE COSTS

γ	θ	ρ	ρ^*	r^e	r^f	V	Welfare effects (percent)	
							$\sigma = 0$	$p = 0$
4	0.25	0.054	0.027	0.069	0.010	20.7	1.65	24.7
4	0.50	0.052	0.027	0.069	0.010	20.7	1.65	24.0
4	1	0.048	0.027	0.069	0.010	20.7	1.64	22.6
4	4	0.027	0.027	0.069	0.010	20.7	1.60	17.3
3.5	0.25	0.062	0.027	0.074	0.035	18.7	1.31	16.5
3.5	0.50	0.059	0.027	0.074	0.035	18.7	1.30	16.1
3.5	1	0.054	0.027	0.074	0.035	18.7	1.30	15.5
3.5	4	0.022	0.027	0.074	0.035	18.7	1.27	12.7
3	0.25	0.063	0.027	0.074	0.048	18.7	1.12	12.0
3	0.50	0.060	0.027	0.074	0.048	18.7	1.12	11.8
3	1	0.053	0.027	0.074	0.048	18.7	1.12	11.5
3	4	0.014	0.027	0.074	0.048	18.7	1.10	9.9
1	0.25	0.041	0.027	0.047	0.044	37.1	0.74	4.7
1	0.50	0.036	0.027	0.047	0.044	37.1	0.74	4.6
1	1	0.027	0.027	0.047	0.044	37.1	0.74	4.6
1	4	-0.030	0.027	0.047	0.044	37.1	0.73	4.3

Notes: The baseline results are in bold, γ is the coefficient of relative risk aversion, θ is the reciprocal of the IES in the formula for utility in equation (9), ρ is the rate of time preference, and ρ^* is the effective rate of time preference, given in equation (12); ($\rho = \rho^*$ holds when $\gamma = \theta$). The formulas for the expected rate of return on equity, r^e , the risk-free rate, r^f , and the price-dividend ratio, V , are given in equations (6), (7), and (5), respectively, after replacing ρ by ρ^* . The value of ρ^* is set at 0.027 to generate $r^f = 0.010$ with the baseline parameters. The value for ρ (0.052 in the baseline specification) is then varied in each case to maintain $\rho^* = 0.027$ (in equation (12)). Since ρ^* is held constant, the values for r^e , r^f , and V depend on γ but not on θ . Each welfare effect gives the percentage reduction in initial output, $1 - (Y_t^*)/Y_t$, that maintains attained utility while setting to zero either the standard deviation, σ , of normal economic fluctuations or the disaster probability, p . The effects are for a given expected growth rate, g^* , given in equation (2). The values for $1 - (Y_t^*)/Y_t$ come from equation (23).