Table 1. Adjustments to NIPA Accounts

NIPA Concept	Average, 1990-1999	Adjustments to the NIPA Concept	Adjusted Value
Income			
Corporate Sector			
Compensation	.378		.378
Indirect Business Tax	.057	Subtract sales & excise taxes (.037)	.020
Capital Consumption	.069		.069
Profits			
After-tax profits	.047	Add unmeasured investment (.019)	.066
Profits tax	.026		.026
Net Interest	.015	Subtract intermediate financial services (.015)	.000
Value Added	.592		.559
Noncorporate Sector			
Compensation	.246		.246
Indirect Business Tax	.022	Subtract sales & excise taxes (.01)	.012
Capital Consumption	.054	Add depreciation of consumer durables (.063) Add depreciation of foreign subsidiary capital (.016)	.133
Profits	.044	Add net interest (.042) Subtract intermediate financial services (.022) Add imputed capital services (.036)	.100
Net Interest	.042	Subtract net interest (.042)	.000
Value Added	.408		.491
Product			
Private consumption	.588	Subtract sales & excise taxes (.047) Add depreciation of consumer durables (.063) Add imputed capital services (.012) Subtract intermediate financial services (.037) Subtract net investment of foreign subsidiaries (.009)	.570
Government consumption	.156	Add imputed capital services (.024)	.180
Corporate investment	.100		.100
Noncorporate investment	.156	Add depreciation of foreign subsidiaries (.016) Add net investment of foreign subsidiaries (.009)	.181
Unmeasured investment	.000	Add unmeasured investment (.019)	.019
GNP	1		1.050
Capital Stocks †			
Corporate			
Measured	.821	Add inventories (.161) Add land (.060)	1.042
Unmeasured	.000	Add unmeasured capital (.645)	.645
Noncorporate	2.153	Add net capital of foreign subsidiaries (.294)	2.447

† Stocks are mid-year.

Table 2. Steady State for the Model

Category	Data	Formula for the Model
Income		
Corporate Income		
Compensation	.378	wn_1
Indirect Business Tax	.020	$\tau_{1k}k_{1m}$
Capital Consumption	.069	$\delta_{1m}k_{1m}$
Profits	.092	$(r_{1m}-\delta_{1m}-\tau_{1k})k_{1m}+r_{1u}k_{1u}$
Value Added	.559	p_1y_1
Noncorporate Income		
Compensation	.246	wn_2
Indirect Business Tax	.012	$\tau_{2k}k_2$
Capital Consumption	.133	δ_2k_2
Profits	.100	$(r_2-\delta_2-\tau_{2k})k_2$
Value Added	.491	p_2y_2
Product		
Private consumption†	.544	c
Government consumption	.180	g
Corporate investment	.100	x_{1m}
Noncorporate investment†	.207	x_2
Unmeasured investment	.019	x_{1u}
GNP	1.050	$c+x_{1m}+x_2+x_{1u}+g$
Capital Stocks		
Corporate		
Measured	1.042	k_{1m}
Unmeasured	.645	k_{1u}
Noncorporate	2.447	k_2
Total Hours	.250	n_1+n_2
Growth Rates		
Technology	.020	γ
Population	.010	η
Tax Rates		
Corporate profits	.356	τ_1
Noncorporate profits	.000	τ_2
Corporate property	.019	τ_{1k}
Noncorporate property	.005	τ_{2k}
Consumption	.086	τ_c
Labor	.250	τ_n

† In a steady state of the model, gross investment is equal to depreciation plus the change in capital. To make noncorporate investment consistent with the observed stock and depreciation of the noncorporate sector, we increased it slightly. Private consumption was lowered by an equal amount to leave GNP unchanged.

Table 3. Derivation of Parameters from the Steady State

Parameters	Derivation from Steady State	Value
Depreciation rates		
Corporate, measured	$\delta_{1m} = x_{1m}/k_{1m} - [(1+\gamma)(1+\eta) - 1]$	.066
Corporate, unmeasured	$\delta_{1u} = x_{1u}/k_{1u} - [(1+\gamma)(1+\eta) - 1]$	.000
Noncorporate	$\delta_2 = x_2/k_2 - [(1+\gamma)(1+\eta) - 1]$	.055
Capital shares		
Corporate, measured	$\phi_m = r_{1m}k_{1m}/(p_1 y_1)$	.277
Corporate, unmeasured	$\phi_u = r_{1u}k_{1u}/(p_1 y_1)$	.047
Noncorporate	$\theta = r_2 k_2/(p_2 y_2)$	.499
Final goods technology		
Elasticity of substitution†	$1/(1-\rho)$	.333
Relative weights	$\mu/(1-\mu) = p_1 y_1^{1-\rho}/[p_2 y_2^{1-\rho}]$	.223
Scale factor	$A = y/[\mu y_1^\rho + (1-\mu) y_2^\rho]^{1/\rho}$	1.418
Utility parameters		
Risk aversion†	σ	1.500
Discount factor	$\beta = (1+\gamma)^\sigma/(1+i)$	.990
Weight on leisure	$\psi = (1-\tau_n)w(1-n_1-n_2)/[(1+\tau_c)c]$	2.377

† These parameters are not pinned down by steady state values. However, none of our results change when we experiment with their values.

Table 4a. Baseline Parameters

Description	Values
Preference parameters	$\sigma = 1.5$, $\beta = .99$, $\psi = 2.377$
Technology parameters	$\rho = -2$, $\mu = .182$
Depreciation rates	$\delta_{1m} = .066$, $\delta_{1u} = .0$, $\delta_2 = .055$
Capital shares	$\phi_m = .277$, $\phi_u = .047$, $\theta = .499$
Growth rates	$\gamma = .03$, $\eta = .01$
Average tax rates	$\tau_1 = .356$, $\tau_2 = 0$, $\tau_{1k} = .019$, $\tau_{2k} = .005$, $\tau_c = .086$, $\tau_n = .25$
Technology shock	$E\varepsilon_z = 0$, $E\varepsilon_z^2 = .013^2$
Adjustment cost parameter	$b = .12$

Table 4b. Parameters of the Stochastic Processes and the Adjustment Cost for Alternative Stochastic Versions

Examples	Values†
Technology only	$E\varepsilon_z^2 = .013^2$, $b = .12$
Technology and Labor tax	$E\varepsilon_z^2 = .01^2$, $\rho_n = .95$, $E\varepsilon_n^2 = .01^2$, $b = .15$
Technology and Corporate capital share	$E\varepsilon_z^2 = .011^2$, $\rho_\phi = .95$, $E\varepsilon_\phi^2 = .006^2$, $b = 3.1$
Technology, Labor tax, and Corporate capital share	$E\varepsilon_z^2 = .007^2$, $\rho_n = .95$, $E\varepsilon_n^2 = .01^2$, $\rho_\phi = .95$, $E\varepsilon_\phi^2 = .006^2$, $b = 3.1$

† All innovations have a zero mean.

Table 4c. Predictions of the Model

	Average Value to GNP	Average Returns		
		Equity (1)	Debt (2)	Premium (1) − (2)
Deterministic Version	1.84	4.08	4.08	0.00
Stochastic Versions, Shocks to:				
Technology only	1.85	4.10	4.07	0.03
Technology and Labor tax	1.85	4.09	4.08	0.01
Technology and Corporate capital share	1.85	4.08	4.07	0.01
Technology, Labor tax, and Corporate capital share	1.85	4.07	4.07	0.00

Table A1. Balance Sheet of U.S. Households Relative to GNP

	Average 1946-99	1999
Assets	3.96	5.29
Tangible assets	2.10	1.99
Corporate equity	0.69	1.84
Debt assets	1.17	1.46
Liabilities	0.46	0.74
Net Worth	3.50	4.55

Table A2. Financial Assets of Pension Funds Relative to GNP

	1999
Total	1.47
By type of plan	
Defined Contribution†	.54
Defined Benefit	.52
Public Defined Benefit	.41
By type of asset‡	
Equity	.63
Debt	.57

† This figure includes IRA and Keogh assets.
‡ These figures do not include IRA and Keogh assets.

Table B. Average Asset Returns for Examples 2 and 3

	Economies	
	Without Storage	With Storage
Average return on debt	-0.76	3.62
Average return on equity	11.67	5.28
Equity premium	12.43	1.66

Figure 1. Ratio of the Value of Corporate Equity to GNP

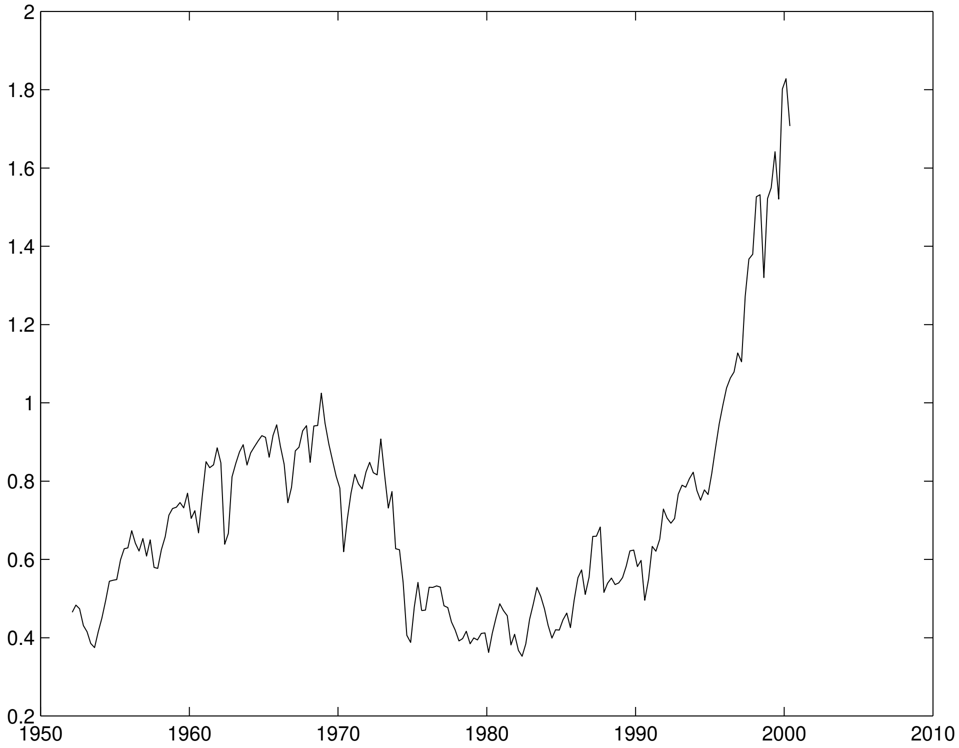

Figure 2. Portion of Financial Wealth in Stocks: 1994 vs. 1989