Macroeconomics – Econ202A

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Interest Rate Elasticity of Saving. Summers (1981)

TABLE 1 — THE INTEREST ELASTICITY
OF AGGREGATE SAVINGS

	Value of r		
	.04	.06	.08
$\gamma = .5$			
η_r	3.71	2.26	2.44
S/WL	.121	.274	.451
$\gamma = 0$			
η_r	3.36	1.89	1.87
S/WL	.068	.142	.210
$\gamma = -.5$			
η_r	3.09	1.71	1.54
S/WL	.049	.096	.135
$\gamma = -1$			
η_r	2.87	1.59	1.37
S/WL	.038	.073	.099
$\gamma = -2$			
η_r	2.38	1.45	.122
S/WL	.028	.048	.063
$\gamma = -5$			
η_r	.741	1.09	1.18
S/WL	.014	.019	.025

Note: The calculation assumes $n = .015$, $g = .02$, $T' = 50$, $T = 40$, and $\delta = .03$. The savings rate is measured as a fraction of labor income.

Hall, (1978)

EQUATIONS RELATING CONSUMPTION TO LAGGED CONSUMPTION AND PAST LEVELS OF REAL DISPOSABLE INCOME

	Equation No. and Equation	R^2	s	D-W	F	F^*
3.1	$c_t = -16 + 1.024\, c_{t-1} - .010\, y_{t-1}$ (11) (.044) (.032)	.9988	14.7	1.71	.1	3.9
3.2	$c_t = -23 + 1.076\, c_{t-1} + .049\, y_{t-1} - .051\, y_{t-2}$ (11) (.047) (.043) (.052) $-.023\, y_{t-3} - .024\, y_{t-4}$ (.051) (.037)	.9989	14.4	2.02	2.0	2.4
3.3	$c_t = -25 + 1.113\, c_{t-1} + \sum_{i=1}^{12} \beta_i\, y_{t-1} \ \Sigma\beta_i = .077$ (11) (.054) (.040)	.9988	14.6	1.92	2.0	2.7

Campbell & Mankiw (1989)

Table 2   EVIDENCE FROM ABROAD
$$\Delta c_t = \mu + \lambda \Delta y_t$$

Country (sample period)	First-stage regressions		λ estimate (s.e.)	Test of restrictions
	Δc equation	Δy equation		
1 Canada (1963–1986)	0.047 (0.127)	0.090 (0.030)	0.616 (0.215)	0.007 (0.263)
2 France (1970–1986)	0.083 (0.091)	0.166 (0.015)	1.095 (0.341)	−0.055 (0.714)
3 Germany (1962–1986)	0.028 (0.211)	0.086 (0.031)	0.646 (0.182)	−0.030 (0.639)
4 Italy (1973–1986)	0.195 (0.013)	0.356 (0.000)	0.400 (0.094)	−0.034 (0.488)
5 Japan (1959–1986)	0.087 (0.020)	0.205 (0.000)	0.553 (0.096)	0.018 (0.178)
6 United Kingdom (1957–1986)	0.092 (0.012)	0.127 (0.002)	0.221 (0.153)	0.086 (0.010)
7 United States (1953–1986)	0.040 (0.092)	0.079 (0.014)	0.478 (0.158)	0.004 (0.269)

Note: For all countries, the consumption data are total spending. The set of instruments is: $\Delta y_{t-2}, \ldots$,$\Delta y_{t-4}, \ldots , \Delta c_{t-2}, \ldots , \Delta c_{t-4}.\ c_{t-2} - y_{t-2}$. Also see note, Table 1.

Campbell & Mankiw (1989)

Table 5   UNITED STATES, 1953–1986

$$\Delta c_t = \mu + \lambda \Delta y_t + \theta r_t$$

Row	Instruments	First-stage regressions			λ (s.e.)	θ (s.e.)	Test of restrictions
		Δc	Δy	r			
1	None (OLS)	—	—	—	0.294 (0.041)	0.150 (0.070)	—
2	$\Delta y_{t-2}, \ldots, \Delta y_{t-4}$ $r_{t-2}, \ldots, r_{t-4}$	0.045 (0.061)	0.030 (0.125)	0.471 (0.000)	0.438 (0.189)	0.080 (0.123)	−0.010 (0.441)
3	$\Delta c_{t-2}, \ldots, \Delta c_{t-4}$ $r_{t-2}, \ldots, r_{t-4}$	0.062 (0.026)	0.046 (0.060)	0.455 (0.000)	0.467 (0.152)	0.089 (0.110)	−0.006 (0.391)
4	$\Delta i_{t-2}, \ldots, \Delta i_{t-4}$ $r_{t-2}, \ldots, r_{t-4}$	0.092 (0.005)	0.034 (0.106)	0.431 (0.000)	0.657 (0.212)	0.016 (0.146)	−0.022 (0.665)

Note: See Table 1

Hsieh (2003)

TABLE 2—RESPONSE OF CONSUMPTION TO ALASKA PFD

	dlog(*Nondurable consumption*)			dlog(*Durable consumption*)		
	(1)	(2)	(3)	(4)	(5)	(6)
$PFD_t \times Family\ Size_h$ $\overline{Family\ Income_h}$	0.0002 (0.0324)	−0.0167 (0.0336)	−0.0034 (0.0328)	−0.1659 (0.0878)	−0.1741 (0.0916)	−0.1488 (0.0890)
Controls for:						
Family size	No	No	Yes	No	No	Yes
Year dummies	No	Yes	No	No	Yes	No
Number of observations	806	806	806	806	806	806

Notes: Dependent variable is $\log(C_{IV}/C_{III})$. Standard errors are in parentheses. All regressions are ordinary least squares (OLS) and include a quadratic in age and changes in the number of children and adults in the household.