

# Macroeconomics – Econ202A

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## Summers 1981

**Table 4.  $q$  Investment Equations, 1932–78<sup>a</sup>**

Equation <sup>b</sup>	Independent variable			Summary statistic		
	Constant	$q - 1$	$Q$	Rho	Standard error of estimate	Durbin-Watson
4-1	0.119 (0.006)	-0.038 (0.019)	...	...	0.039	0.29
4-2	0.096 (0.008)	...	0.026 (0.007)	...	0.036	0.21
4-3	0.104 (0.035)	0.039 (0.016)	...	0.944	0.017	1.27
4-4	0.096 (0.025)	...	0.017 (0.004)	0.923	0.016	1.12
4-5	0.084 (0.033)	0.013 (0.018)	0.015 (0.005)	0.933	0.016	1.11
4-6	0.088 (0.024)	...	0.031 (0.005)	0.922	0.016	1.11
4-7	0.230 (0.039)	-0.106 (0.036)	...	...	0.044	0.43
4-8	0.076 (0.012)	...	0.051 (0.013)	...	0.040	0.34

Source: Estimations by the author.  
a. The dependent variable is  $I/K$ . Equations in which rho is omitted were estimated without autocorrelation correction. The numbers in parentheses are standard errors.  
b. For equation 4-6, the coefficient on  $Q$  is the sum of the coefficient on  $Q$  and lagged  $Q$ . Equations 4-7 and 4-8 were estimated using as instruments the lagged values of the tax variables,  $\theta$ ,  $c$ ,  $\tau$ ,  $Z$ , and  $ITC$ .

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# Fazzari Hubbard & Petersen (1988)

**Table 4. Effects of  $Q$  and Cash Flow on Investment, Various Periods, 1970–84<sup>a</sup>**

<i>Independent variable and summary statistic</i>	<i>Class 1</i>	<i>Class 2</i>	<i>Class 3</i>
		<i>1970–75</i>	
$Q_{it}$	–0.0010 (0.0004)	0.0072 (0.0017)	0.0014 (0.0004)
$(CF/K)_{it}$	0.670 (0.044)	0.349 (0.075)	0.254 (0.022)
$\bar{R}^2$	0.55	0.19	0.13
		<i>1970–79</i>	
$Q_{it}$	0.0002 (0.0004)	0.0060 (0.0011)	0.0020 (0.0003)
$(CF/K)_{it}$	0.540 (0.036)	0.313 (0.054)	0.185 (0.013)
$\bar{R}^2$	0.47	0.20	0.14
		<i>1970–84</i>	
$Q_{it}$	0.0008 (0.0004)	0.0046 (0.0009)	0.0020 (0.0003)
$(CF/K)_{it}$	0.461 (0.027)	0.363 (0.039)	0.230 (0.010)
$\bar{R}^2$	0.46	0.28	0.19

Source: Authors' estimates of equation 3 based on a sample of firm data from Value Line data base. See text and Appendix B.

a. The dependent variable is the investment-capital ratio  $(I/K)_{it}$ , where  $I$  is investment in plant and equipment and  $K$  is beginning-of-period capital stock. Independent variables are defined as follows:  $Q$  is the sum of the value of equity and debt less the value of inventories, divided by the replacement cost of the capital stock adjusted for corporate and personal taxes (see Appendix B);  $(CF/K)_{it}$  is the cash flow-capital ratio. The equations were estimated using fixed firm and year effects (not reported). Standard errors appear in parentheses.