Table A3.1.—Equations for earned degrees conferred

Dependent Variable	Equation	R^2	Durbin-Watson statistic[1]	Estimation technique[2]	Rho	Time period
Associate's degrees Men	ASSOCM = 107,075 + 54.9UGFT2M (1.5) + 39.2UGPT2M (2.4)	0.83	1.6	AR1	0.70 (4.3)	1970-71 to 1999-2000
Associate's degrees Women	ASSOCW = 85,571 + 185.3UGFT2W (6.2)	0.99	1.4	AR1	0.98 (36.6)	1970-71 to 1999-2000
Bachelor's degrees Men	BACHM = 239,629 - 11.0P1824M (-3.7) + 174.9UGFT4M (6.1)	0.89	1.6	AR1	0.61 (3.8)	1970-71 to 1999-2000
Bachelor's degrees Women	BACHW = 204,060 - 16.7P1824W (-3.1) + 246.1UGFT4W (17.5)	0.99	1.1	AR1	0.78 (5.8)	1970-71 to 1999-2000
Master's degrees Men	MASTM = 29,237 + 427.8GFTM (4.9)	0.94	1.3	AR1	0.90 (12.1)	1970-71 to 1999-2000
Master's degrees Women	MASTW = 35,951 + 548.2GFTW (14.0)	0.99	1.1	AR1	0.92 (14.5)	1972-73 to 1999-2000
Doctor's degrees Men	DOCM = 18,863 + 22.7GFTM1 (1.3) - 904.1RUC (-0.1)	0.89	1.1	AR1	0.96 (21.8)	1970-71 to 1999-2000
Doctor's degrees Women	DOCW = - 1,479 + 0.3P3544W (2.2) + 33.4GFTW (5.3)	0.99	2.1	AR1	0.70 (3.6)	1972-73 to 1999-2000
First-professional degrees Men	FPROM = 10,581 + 227.5FPFTM (7.1)	0.88	1.9	AR1	0.50 (2.6)	1970-71 to 1999-2000
First-professional degrees Women	FPROW = - 1,174 + 285.1FPFTW (23.1) + 221.5FPPTW (2.1)	0.99	1.5	OLS		1971-72 to 1999-2000

[1]For an explanation of the Durbin-Watson statistic, see J. Johnston,*Econometric Methods*, New York: McGraw-Hill, 1972, pages 251-252.

[2]AR1 indicates an estimation procedure for correcting the problem of first-order autocorrelation. OLS indicates Ordinary Least Squares. For a general discussion of the problem of autocorrelation, and the method used to forecast in the presence of autocorrelation, see G. Judge, W. Hill, R. Griffiths, H. Lutkepohl, and T. Lee, *The Theory and Practice of Econometrics,* New York: John Wiley and Sons, 1985, pages 315-318.

Where:

ASSOCM = Number of associate's degrees awarded to mer
ASSOCW = Number of associate's degrees awarded to women
BACHM = Number of bachelor's degress awarded to men
BACHW = Number of bachelor's degress awarded to women
MASTM = Number of master's degrees awarded to men
MASTW = Number of master's degrees awarded to women
DOCM = Number of doctor's degress awarded to men
DOCW = Number of doctor's degress awarded to women
FPROM = Number of first-professional degrees awarded to men
FPROW = Number of first-professional degrees awarded to women
UGFT2M = Full-time male undergraduate enrollment in 2-year institutions, lagged 2 years, in thousands
UGPT2M = Part-time male undergraduate enrollment in 2-year institutions, lagged 2 years, in thousands
UGFT2W = Full-time female undergraduate enrollment in 2-year institutions, lagged 2 years, in thousands
P1824M = Population of 18- to 24-year-old men, in thousands
P1824W = Population of 18- to 24-year-old women, in thousands
UGFT4M = Full-time male undergraduate enrollment in 4-year institutions, lagged 2 years, in thousands
UGFT4W = Full-time female undergraduate enrollment in 4-year institutions, lagged 3 years, in thousands
GFTM = Full-time male graduate enrollment, in thousands
GFTW = Full-time female graduate enrollment, in thousands
P3544W = Population of 35- to 44-year-old women, in thousands
GFTM1 = Full-time male graduate enrollment lagged one year, in thousands
GFTW = Full-time female graduate enrollment, in thousands
RUC = Unemployment rate
FPFTM = Full-time male first-professional enrollment lagged 2 years, in thousands
FPFTW = Full-time female first-professional enrollment lagged 1 year, in thousands
FPPTW = Part-time female first-professional enrollment lagged 2 years, in thousands

NOTE: R^2 indicates the coefficient of determination. Numbers in parentheses are t-statistics.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Earned Degrees Conferred Model.

(This table was prepared May 2002.)