

Procedimiento NLMIXED

Especificaciones	
Conjunto de datos	WORK.DATA
Variable dependiente	gasto_edu
Distribución para la variable dependien	General
Técnica de optimización	Quasi-Newton dual
Método de integración	Ninguno

Dimensiones	
Observaciones usadas	661
Observaciones no usadas	0
Observaciones totales	661
Parámetros	12

Parámetros iniciales

omega0	omega1	omega2	omega3	beta0	beta1	beta2	beta3	beta4	beta5	kappa	sigma	Log verosimilitud negativa
0.48997	2.031	2.8882	0.096084	0.81177	0.10517	1.2877	0.046492	-1.3612	0.073612	0.77104	0.77104	3007.37357

Historial de iteración

Iteración	Invocaciones	Log verosimilitud negativa	Diferencia	Gradiente máximo	Pendiente
1	6	1866.7049	1140.669	3510.42	-9374.78
2	10	1831.9503	34.75461	2482.98	-27229.6
3	12	1558.6101	273.3402	3294.19	-14841.2
4	14	1486.0166	72.59353	1183.49	-104.385
5	16	1450.3200	35.69654	286.815	-52.6200
6	19	1425.6720	24.64801	1185.59	-32.9212
7	21	1389.3411	36.33091	399.462	-26.9878
8	23	1363.4911	25.84997	2157.48	-35.8176
9	25	1327.7953	35.69587	100.518	-38.8009
10	28	1322.4735	5.32174	308.648	-6.30676
11	31	1321.4402	1.033323	127.169	-2.41488
12	34	1320.7608	0.679375	45.9897	-1.57039
13	36	1320.0704	0.690472	100.754	-0.49825
14	38	1319.5193	0.551043	44.9767	-0.36406
15	42	1317.7039	1.815419	36.4147	-0.86611
16	44	1314.7679	2.935951	253.849	-1.85004
17	47	1313.2515	1.516468	407.883	-1.58033
18	51	1309.9278	3.323668	164.209	-1.30921
19	53	1306.4271	3.500749	218.403	-2.42041
20	56	1304.1332	2.293905	7.76129	-2.43073
21	59	1303.7315	0.401645	14.0621	-0.52314
22	62	1303.7117	0.019844	1.80589	-0.02935
23	64	1303.6984	0.013234	8.60219	-0.00771
24	68	1303.6695	0.028886	3.31967	-0.02753
25	70	1303.6543	0.015228	2.99476	-0.01856
26	72	1303.6407	0.013627	1.28678	-0.02246
27	74	1303.6300	0.010712	3.22387	-0.00866
28	76	1303.6128	0.017134	1.34273	-0.01540
29	79	1303.6031	0.009699	0.67712	-0.01219
30	82	1303.5984	0.004714	0.77498	-0.00258
31	88	1303.4975	0.100943	18.8292	-0.00525
32	91	1303.4500	0.047524	2.08191	-0.03986
33	94	1303.4391	0.01084	1.16606	-0.01188

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Historial de iteración						
Iteración	Invocaciones	Log verosimilitud negativa	Diferencia	Gradiente máximo	Pendiente	
34	98	1303.3967	0.042431	1.65445	-0.00613	
35	101	1303.3956	0.001072	0.048371	-0.00205	
36	104	1303.3956	1.826E-6	0.003100	-3.49E-6	
37	107	1303.3956	4.41E-9	0.000234	-8.25E-9	
38	109	1303.3956	7.73E-12	0.000234	-17E-12	

NOTE: FCONV convergence criterion satisfied.

Estadísticas de ajuste	
Verosimilitud -2 Log	2606.8
AIC (mejor más pequeño)	2630.8
AICC (mejor más pequeño)	2631.3
BIC (mejor más pequeño)	2684.7

Estimaciones de parámetro								
Parámetro	Estimación	Error estándar	DF	t valor	Pr > t	Límites de confianza al 95%		Gradiente
omega0	-0.4900	0.4153	661	-1.18	0.2385	-1.3055	0.3256	-1.8E-7
omega1	-2.0310	0.8355	661	-2.43	0.0153	-3.6716	-0.3905	-8.15E-8
omega2	-2.8882	0.8682	661	-3.33	0.0009	-4.5930	-1.1835	-1.13E-7
omega3	-0.09608	0.1338	661	-0.72	0.4730	-0.3588	0.1667	-3.7E-7
beta0	0.8337	0.2499	661	3.34	0.0009	0.3431	1.3243	-1.87E-7
beta1	0.1120	0.1443	661	0.78	0.4378	-0.1713	0.3953	2.771E-7
beta2	1.2732	0.1617	661	7.88	<.0001	0.9558	1.5907	1.9E-7
beta3	0.05700	0.05758	661	0.99	0.3225	-0.05605	0.1701	8.814E-8
beta4	-1.3462	0.08410	661	-16.01	<.0001	-1.5113	-1.1810	-3.28E-7
beta5	0.06949	0.02699	661	2.58	0.0102	0.01650	0.1225	-3.88E-8
kappa	0.5478	0.07817	661	7.01	<.0001	0.3943	0.7013	-2.7E-7
sigma	0.7059	0.02157	661	32.73	<.0001	0.6636	0.7483	-1.29E-6

Matriz hessiana												
	omega0	omega1	omega2	omega3	beta0	beta1	beta2	beta3	beta4	beta5	kappa	sigma
omega0	42.9112	13.9302	13.8914	56.9337	0	0	0	0	0	0	0	0
omega1	13.9302	6.2334	5.1799	17.1129	0	0	0	0	0	0	0	0
omega2	13.8914	5.1799	6.1334	16.2429	0	0	0	0	0	0	0	0
omega3	56.9337	17.1129	16.2429	134.47	0	0	0	0	0	0	0	0
beta0	0	0	0	0	1228.09	579.82	585.11	583.94	1029.43	10850	-6.1246	-161.99
beta1	0	0	0	0	579.82	341.84	307.87	273.40	455.76	5226.51	-8.6554	-72.0048
beta2	0	0	0	0	585.11	307.87	335.49	279.61	457.70	5269.36	-12.6694	-69.6106
beta3	0	0	0	0	583.94	273.40	279.61	583.94	499.65	5191.73	17.2118	-92.6377
beta4	0	0	0	0	1029.43	455.76	457.70	499.65	1029.42	8989.72	19.3002	-154.75
beta5	0	0	0	0	10850	5226.51	5269.36	5191.73	8989.72	97475	-108.14	-1389.59
kappa	0	0	0	0	-6.1246	-8.6554	-12.6694	17.2118	19.3002	-108.14	182.88	170.14
sigma	0	0	0	0	-161.99	-72.0048	-69.6106	-92.6377	-154.75	-1389.59	170.14	2346.07