

**Anexo 1.** Resultados de pruebas de heterocedasticidad, multicolinealidad y especificación del modelo para la ecuación 1 – condiciones del clima de inversión según características de la empresa – ES 2010 y ES 2016

**Ecuación 1. Variable dependiente del CI – modelo A: (Sh) WK financiado externamente – ES 2010**

Ramsey RESET test using powers of the fitted values of final\_wk\_finext

Ho: model has no omitted variables

$F(3, 294) = 1.45$

$\text{Prob} > F = 0.2282$

White's test for Ho: homoskedasticity

against Ha: unrestricted heteroskedasticity

$\chi^2(46) = 53.67$

$\text{Prob} > \chi^2 = 0.2038$

Cameron & Trivedi's decomposition of IM-test

Source	chi2	df	p
Heteroskedasticity	53.670	46	0.204
Skewness	10.610	11	0.477
Kurtosis	2.530	1	0.112
Total	66.810	58	0.200

	VIF	1/VIF
2.firm size final	2.651	.377
3.firm size final	2.925	.342
4.firm size final	2.521	.397
2.firm age1	7.55	.132
3.firm age1	7.591	.132
1.foreign	1.217	.821
1.government	1.017	.984
1.exporter	1.218	.821
1.small city	1.088	.919
1.size change2	1.511	.662
2.size change2	1.418	.705
Mean VIF	2.792	.

**Ecuación 1. Variable dependiente del CI – modelo A: (Sh) WK financiado externamente – ES 2016**

Ramsey RESET test using powers of the fitted values of final\_wk\_finext

Ho: model has no omitted variables

$F(3, 295) = 1.35$

$\text{Prob} > F = 0.2598$

White's test for Ho: homoskedasticity

against Ha: unrestricted heteroskedasticity

$\chi^2(42) = 35.36$

Prob > chi2 = 0.7556

Cameron & Trivedi's decomposition of IM-test

Source	chi2	df	p
Heteroskedasticity	35.360	42	0.756
Skewness	12.570	10	0.248
Kurtosis	1.940	1	0.164
Total	49.880	53	0.597

	VIF	1/VIF
2.firm size final	4.723	.212
3.firm size final	5.083	.197
4.firm size final	3.3	.303
1.firm age1	1.072	.933
2.firm age1	1.034	.967
1.foreign	1.164	.859
1.exporter	1.117	.895
1.small city	1.023	.977
1.size change2	1.263	.792
2.size change2	1.241	.806
Mean VIF	2.102	.

### Ecuación 1. Variable dependiente del CI – modelo A: (Sh) INV financiado externamente – ES 2010

Ramsey RESET test using powers of the fitted values of final\_wk\_invest

Ho: model has no omitted variables

F(3, 302) = 1.02

Prob > F = 0.3828

White's test for Ho: homoskedasticity

against Ha: unrestricted heteroskedasticity

chi2(47) = 44.47

Prob > chi2 = 0.5781

Cameron & Trivedi's decomposition of IM-test

Source	chi2	df	p
Heteroskedasticity	44.470	47	0.578
Skewness	19.200	11	0.058
Kurtosis	2.190	1	0.139
Total	65.850	59	0.252

	VIF	1/VIF
2.firm size final	2.407	.415
3.firm size final	2.626	.381
4.firm size final	2.369	.422
2.firm age1	7.709	.13
3.firm age1	7.713	.13
1.foreign	1.195	.837

1.government	1.017	.984
1.exporter	1.248	.801
1.small city	1.089	.918
1.size change2	1.485	.673
2.size change2	1.423	.703
Mean VIF	2.753	.

### Ecuación 1. Variable dependiente del CI - modelo A: - (log) % Tiempo gerente con oficiales - ES 2016

Ramsey RESET test using powers of the fitted values of log\_final\_reg\_meanj2

Ho: model has no omitted variables

F(3, 292) = 1.22

Prob > F = 0.3022

White's test for Ho: homoskedasticity

against Ha: unrestricted heteroskedasticity

chi2(42) = 31.56

Prob > chi2 = 0.8801

Cameron & Trivedi's decomposition of IM-test

Source	chi2	df	p
Heteroskedasticity	31.560	42	0.880
Skewness	9.280	10	0.506
Kurtosis	4.120	1	0.042
Total	44.960	53	0.776

	VIF	1/VIF
2.firm size final	4.942	.202
3.firm size final	5.291	.189
4.firm size final	3.423	.292
1.firm age1	1.075	.93
2.firm age1	1.036	.966
1.foreign	1.165	.858
1.exporter	1.125	.889
1.small city	1.024	.977
1.size change2	1.259	.794
2.size change2	1.239	.807
Mean VIF	2.158	.

### Ecuación 1. Variable dependiente del CI - modelo A: (log) Días de inspección - ES 2010

Ramsey RESET test using powers of the fitted values of log\_final\_reg\_meanj4

Ho: model has no omitted variables

F(3, 281) = 0.90

Prob > F = 0.4406

White's test for Ho: homoskedasticity

against Ha: unrestricted heteroskedasticity

chi2(45) = 48.22

Prob > chi2 = 0.3440

Cameron & Trivedi's decomposition of IM-test

Source	chi2	df	p
Heteroskedasticity	48.220	45	0.344
Skewness	8.270	11	0.689
Kurtosis	8.860	1	0.003
Total	65.350	57	0.209

	VIF	1/VIF
2.firm size final	3.205	.312
3.firm size final	3.56	.281
4.firm size final	2.943	.34
2.firm age1	7.298	.137
3.firm age1	7.349	.136
1.foreign	1.225	.816
1.government	1.017	.983
1.exporter	1.257	.796
1.small city	1.076	.929
1.size change2	1.515	.66
2.size change2	1.434	.697
Mean VIF	2.898	.

**Ecuación 1. Variable dependiente del CI - modelo A: Monto de pagos informales (% del valor del contrato) - ES 2010**

Ramsey RESET test using powers of the fitted values of log\_final\_corru\_meanj6

Ho: model has no omitted variables

F(3, 91) = 1.15

Prob > F = 0.3329

White's test for Ho: homoskedasticity

against Ha: unrestricted heteroskedasticity

chi2(31) = 12.91

Prob > chi2 = 0.9983

Cameron & Trivedi's decomposition of IM-test

Source	chi2	df	p
Heteroskedasticity	12.910	31	0.998
Skewness	5.810	10	0.831
Kurtosis	1.050	1	0.304
Total	19.780	42	0.999

**Ecuación 1. Variable dependiente del CI - modelo A: Monto de pagos informales (% de ventas anuales) - ES 2010**

Ramsey RESET test using powers of the fitted values of log\_final\_corru\_meanj7a

Ho: model has no omitted variables

F(3, 156) = 0.32  
 Prob > F = 0.8117

White's test for Ho: homoskedasticity  
 against Ha: unrestricted heteroskedasticity  
 chi2(34) = 47.11  
 Prob > chi2 = 0.0668

Cameron & Trivedi's decomposition of IM-test

Source	chi2	df	p
Heteroskedasticity	47.110	34	0.067
Skewness	30.140	10	0.001
Kurtosis	1.900	1	0.168
Total	79.150	45	0.001

	VIF	1/VIF
2.firm size final	6.372	.157
3.firm size final	6.607	.151
4.firm size final	2.936	.341
1.firm age1	1.026	.974
2.firm age1	1.047	.955
1.foreign	1.066	.938
1.exporter	1.05	.953
1.small city	1.03	.971
1.size change2	1.292	.774
2.size change2	1.269	.788
Mean VIF	2.37	.

### Ecuación 1. Variable dependiente del CI - modelo A: (log) Perdidas por cortes eléctricos (% de ventas) - ES 2010

Ramsey RESET test using powers of the fitted values of log\_final\_inf\_meanc9a

Ho: model has no omitted variables

F(3, 275) = 0.42  
 Prob > F = 0.7411

White's test for Ho: homoskedasticity  
 against Ha: unrestricted heteroskedasticity  
 chi2(45) = 46.65  
 Prob > chi2 = 0.4042

Cameron & Trivedi's decomposition of IM-test

Source	chi2	df	p
Heteroskedasticity	46.650	45	0.404
Skewness	19.560	11	0.052
Kurtosis	2.490	1	0.115
Total	68.700	57	0.138

VIF	1/VIF
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2.firm size final	2.826	.354
3.firm size final	3.11	.322
4.firm size final	2.521	.397
2.firm age1	7.79	.128
3.firm age1	7.816	.128
1.foreign	1.186	.843
1.government	1.018	.983
1.exporter	1.193	.839
1.small city	1.081	.925
1.size change2	1.506	.664
2.size change2	1.423	.703
Mean VIF	2.861	.

**Ecuación 1. Variable dependiente del CI - modelo A: (log) Perdidas en tránsito (% de ventas) - ES 2010**

Ramsey RESET test using powers of the fitted values of log\_final\_inf\_meand11

Ho: model has no omitted variables

F(3, 77) = 2.02

Prob > F = 0.1188

White's test for Ho: homoskedasticity

against Ha: unrestricted heteroskedasticity

chi2(33) = 31.81

Prob > chi2 = 0.5261

Cameron & Trivedi's decomposition of IM-test

Source	chi2	df	p
Heteroskedasticity	31.810	33	0.526
Skewness	31.570	10	0.001
Kurtosis	10.100	1	0.002
Total	73.480	44	0.004

	VIF	1/VIF
2.firm size final	6.384	.157
3.firm size final	6.242	.16
4.firm size final	5.559	.18
2.firm age1	8.369	.119
3.firm age1	8.343	.12
1.foreign	1.302	.768
1.exporter	1.741	.574
1.small city	1.201	.833
1.size change2	1.511	.662
2.size change2	1.476	.677
Mean VIF	4.213	.

**Ecuación 1. Variable dependiente del CI - modelo A: (log) Perdidas en tránsito (% de ventas) - ES 2016**

Ramsey RESET test using powers of the fitted values of log\_final\_inf\_meand11

Ho: model has no omitted variables

F(3, 187) = 1.06

Prob > F = 0.3662

White's test for Ho: homoskedasticity

against Ha: unrestricted heteroskedasticity

chi2(32) = 31.69

Prob > chi2 = 0.4820

Cameron & Trivedi's decomposition of IM-test

Source	chi2	df	p
Heteroskedasticity	31.690	32	0.482
Skewness	9.260	10	0.507
Kurtosis	0.460	1	0.499
Total	41.420	43	0.540

	VIF	1/VIF
2.firm size final	25.803	.039
3.firm size final	24.836	.04
4.firm size final	12.104	.083
1.firm age1	1.057	.946
2.firm age1	1.07	.935
1.foreign	1.127	.887
1.exporter	1.077	.929
1.small city	1.023	.978
1.size change2	1.291	.775
2.size change2	1.246	.802
Mean VIF	7.063	.