Pricing Carbon Risk Using Carbon Beta

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We have now added a title, author and date to our first LaTeX document!

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Table 1: Carbon Beta and Firm Characteristics: log_scope1 emissions

	(1)	(2)	(3)	(4)
	ret	ret	ret	ret
carbon_beta	0.383	0.393	0.417	0.682
	(0.271)	(0.274)	(0.391)	(0.428)
logsize	-0.375*	-0.401*	0.209	0.192
	(0.218)	(0.232)	(0.337)	(0.321)
bm	-1.482***	-1.491***	-1.621***	-1.630***
	(0.343)	(0.342)	(0.399)	(0.394)
leverage	-1.356	-1.424	-1.465	-1.469
	(1.031)	(1.058)	(1.087)	(1.089)
mom	-1.763	-1.737	-10.39	-10.78
	(7.836)	(7.847)	(10.39)	(10.50)
investa	7.333**	7.455**	13.43***	14.39***
	(3.293)	(3.322)	(4.352)	(4.337)
roe	-0.218***	-0.217***	-0.256***	-0.246***
	(0.0564)	(0.0563)	(0.0547)	(0.0531)
logppe	0.358	0.409	-0.348	-0.128
	(0.237)	(0.303)	(0.393)	(0.376)
beta	0.110	0.106	0.501	0.546
	(0.265)	(0.264)	(0.530)	(0.557)
volat	0.513	0.520	0.306	0.343
	(0.502)	(0.502)	(0.499)	(0.508)
salesgr	0.355	0.354	0.381	0.343
	(0.367)	(0.367)	(0.313)	(0.304)
epsgr	0.00858	0.00858	0.00849*	0.00866*
	(0.00523)	(0.00524)	(0.00507)	(0.00507)
log_scope1		-0.0289		-0.303*
		(0.0953)		(0.178)
Constant	2.888	2.777	5.195	4.536
	(3.051)	(3.118)	(3.661)	(3.603)
Year/Month FE	yes	yes	yes	yes
Industry FE	no	no	yes	yes
Observations	3356	3356	3356	3356
R2-Adj	0.199	0.199	0.197	0.197

Standard errors in parentheses

Dependent Variable (ret): Monthly Excess Return (x100)

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 2: Carbon Beta and Firm Characteristics: log_scope2 emissions

	(1)	(2)	(3)	(4)
	ret	ret	ret	ret
carbon_beta	0.383	0.510*	0.417	0.325
	(0.271)	(0.277)	(0.391)	(0.433)
logsize	-0.375*	-0.290	0.209	0.174
	(0.218)	(0.205)	(0.337)	(0.333)
bm	-1.482***	-1.379***	-1.621***	-1.576***
	(0.343)	(0.326)	(0.399)	(0.391)
leverage	-1.356	-1.753*	-1.465	-1.854
	(1.031)	(1.025)	(1.087)	(1.293)
mom	-1.763	-1.246	-10.39	-8.547
	(7.836)	(7.817)	(10.39)	(10.19)
investa	7.333**	8.210**	13.43***	13.31***
	(3.293)	(3.307)	(4.352)	(4.000)
roe	-0.218***	-0.229***	-0.256***	-0.261***
	(0.0564)	(0.0543)	(0.0547)	(0.0518)
logppe	0.358	0.437*	-0.348	-0.125
	(0.237)	(0.231)	(0.393)	(0.461)
beta	0.110	0.0706	0.501	0.436
	(0.265)	(0.267)	(0.530)	(0.538)
volat	0.513	0.543	0.306	0.385
	(0.502)	(0.503)	(0.499)	(0.509)
salesgr	0.355	0.309	0.381	0.356
	(0.367)	(0.367)	(0.313)	(0.321)
epsgr	0.00858	0.00903*	0.00849*	0.00835*
	(0.00523)	(0.00513)	(0.00507)	(0.00488)
log_scope2		-0.232**		-0.311
		(0.111)		(0.261)
Constant	2.888	2.111	5.195	4.933
	(3.051)	(3.102)	(3.661)	(3.869)
Year/Month FE	yes	yes	yes	yes
Industry FE	no	no	yes	yes
Observations	3356	3330	3356	3330
R2-Adj	0.199	0.202	0.197	0.199

Standard errors in parentheses

Dependent Variable (ret): Monthly Excess Return (x100)

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 3: Carbon Beta and Firm Characteristics: log_total_emissions emissions

	(1) ret	(2) ret	(3) ret	(4) ret
carbon_beta	0.383	0.511*	0.417	0.544
	(0.271)	(0.287)	(0.391)	(0.415)
logsize	-0.375*	-0.453**	0.209	0.170
	(0.218)	(0.179)	(0.337)	(0.318)
bm	-1.482***	-1.494***	-1.621***	-1.634***
	(0.343)	(0.322)	(0.399)	(0.388)
leverage	-1.356	-1.995*	-1.465	-1.872
	(1.031)	(1.039)	(1.087)	(1.205)
mom	-1.763	-2.343	-10.39	-10.47
	(7.836)	(7.993)	(10.39)	(10.52)
investa	7.333**	8.392**	13.43***	13.90***
	(3.293)	(3.352)	(4.352)	(4.077)
roe	-0.218***	-0.220***	-0.256***	-0.253***
	(0.0564)	(0.0564)	(0.0547)	(0.0544)
logppe	0.358	0.644**	-0.348	-0.0659
	(0.237)	(0.269)	(0.393)	(0.411)
beta	0.110	0.0701	0.501	0.486
	(0.265)	(0.269)	(0.530)	(0.547)
volat	0.513	0.549	0.306	0.375
	(0.502)	(0.504)	(0.499)	(0.515)
salesgr	0.355	0.324	0.381	0.349
	(0.367)	(0.372)	(0.313)	(0.317)
epsgr	0.00858	0.00885*	0.00849*	0.00849*
	(0.00523)	(0.00523)	(0.00507)	(0.00494)
log_total_emissions		-0.129**		-0.181**
		4(0.0599)		(0.0876)
Constant	2.888	1.984	5.195	4.647
	(3.051)	(3.060)	(3.661)	(3.724)
Year/Month FE	yes	yes	yes	yes
Industry FE	no	no	yes	yes
Observations	3356	3356	3356	3356
R2-Adj	0.199	0.199	0.197	0.197

Standard errors in parentheses

Dependent Variable (ret): Monthly Excess Return (x100)

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 4: Carbon Beta and Firm Characteristics: log_energy_consumption emissions

	(1)	(2)	(3)	(4)
	ret	ret	ret	ret
carbon_beta	0.383	0.446	0.417	0.594
	(0.271)	(0.279)	(0.391)	(0.383)
logsize	-0.375*	-0.422**	0.209	0.168
	(0.218)	(0.208)	(0.337)	(0.314)
bm	-1.482***	-1.485***	-1.621***	-1.617***
	(0.343)	(0.341)	(0.399)	(0.403)
leverage	-1.356	-1.689	-1.465	-2.071*
	(1.031)	(1.069)	(1.087)	(1.194)
mom	-1.763	-1.880	-10.39	-10.66
	(7.836)	(7.838)	(10.39)	(10.47)
investa	7.333**	7.780**	13.43***	14.59***
	(3.293)	(3.382)	(4.352)	(4.373)
roe	-0.218***	-0.218***	-0.256***	-0.249***
	(0.0564)	(0.0567)	(0.0547)	(0.0543)
logppe	0.358	0.484*	-0.348	0.00228
	(0.237)	(0.259)	(0.393)	(0.407)
beta	0.110	0.0942	0.501	0.551
	(0.265)	(0.267)	(0.530)	(0.553)
volat	0.513	0.526	0.306	0.346
	(0.502)	(0.503)	(0.499)	(0.508)
salesgr	0.355	0.349	0.381	0.311
	(0.367)	(0.369)	(0.313)	(0.306)
epsgr	0.00858	0.00871	0.00849*	0.00888*
	(0.00523)	(0.00531)	(0.00507)	(0.00525)
log_energy_consumption		-0.103		-0.497**
		(0.0908)		(0.241)
Constant	2.888	2.954	5.195	6.305*
	(3.051)	(3.030)	(3.661)	(3.611)
Year/Month FE	yes	yes	yes	yes
Industry FE	no	no	yes	yes
Observations	3356	3356	3356	3356
R2-Adj	0.199	0.199	0.197	0.197

Standard errors in parentheses

Dependent Variable (ret): Monthly Excess Return (x100)

* p < 0.10, ** p < 0.05, *** p < 0.01

Table 5: Carbon Beta and Firm Characteristics: change_scope1 emissions

	(1)	(2)	(3)	(4)
	ret	ret	ret	ret
carbon_beta	0.310	0.311	0.0366	-0.00750
	(0.488)	(0.489)	(0.765)	(0.767)
logsize	-0.407*	-0.405*	0.170	0.157
	(0.217)	(0.221)	(0.372)	(0.377)
bm	-1.471***	-1.475***	-1.747***	-1.777***
	(0.392)	(0.394)	(0.482)	(0.481)
leverage	-1.815*	-1.792	-2.165*	-2.243*
	(1.082)	(1.094)	(1.143)	(1.122)
mom	6.719	6.547	-3.286	-3.915
	(6.912)	(6.897)	(9.867)	(9.925)
investa	6.422*	6.377*	12.52***	12.68***
	(3.533)	(3.539)	(4.562)	(4.589)
roe	-0.208***	-0.207***	-0.253***	-0.254***
	(0.0553)	(0.0554)	(0.0569)	(0.0572)
logppe	0.359	0.345	-0.451	-0.473
	(0.225)	(0.236)	(0.410)	(0.417)
beta	0.0395	0.0618	0.451	0.491
	(0.291)	(0.301)	(0.600)	(0.608)
volat	0.382	0.376	0.134	0.129
	(0.395)	(0.392)	(0.348)	(0.346)
salesgr	0.292	0.296	0.426	0.449
	(0.364)	(0.363)	(0.307)	(0.307)
epsgr	0.00744	0.00741	0.00657	0.00638
	(0.00495)	(0.00496)	(0.00479)	(0.00477)
change_scope1		7.63e-08*		0.000000173***
		(4.46e-08)		(5.21e-08)
Constant	3.696	3.908	8.516**	9.251**
	(3.578)	(3.679)	(4.115)	(4.173)
Year/Month FE	yes	yes	yes	yes
Industry FE	no	no	yes	yes
Observations	2900	2900	2899	2899
R2-Adj	0.187	0.186	0.185	0.186

Standard errors in parentheses

Dependent Variable (ret): Monthly Excess Return (x100)

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 6: Carbon Beta and Firm Characteristics: change_scope2 emissions

	(1)	(2)	(3)	(4)
	ret	ret	ret	ret
carbon_beta	0.310	0.323	0.0366	0.0213
	(0.488)	(0.493)	(0.765)	(0.766)
logsize	-0.407*	-0.410*	0.170	0.192
	(0.217)	(0.215)	(0.372)	(0.371)
bm	-1.471***	-1.460***	-1.747***	-1.738***
	(0.392)	(0.395)	(0.482)	(0.485)
leverage	-1.815*	-1.723	-2.165*	-2.077*
	(1.082)	(1.118)	(1.143)	(1.145)
mom	6.719	6.805	-3.286	-3.422
	(6.912)	(6.817)	(9.867)	(9.716)
investa	6.422*	6.211*	12.52***	12.37**
	(3.533)	(3.571)	(4.562)	(4.642)
roe	-0.208***	-0.207***	-0.253***	-0.255***
	(0.0553)	(0.0561)	(0.0569)	(0.0574)
logppe	0.359	0.376	-0.451	-0.478
	(0.225)	(0.230)	(0.410)	(0.409)
beta	0.0395	0.0480	0.451	0.502
	(0.291)	(0.276)	(0.600)	(0.568)
volat	0.382	0.413	0.134	0.162
	(0.395)	(0.409)	(0.348)	(0.357)
salesgr	0.292	0.303	0.426	0.443
	(0.364)	(0.372)	(0.307)	(0.314)
epsgr	0.00744	0.00745	0.00657	0.00651
	(0.00495)	(0.00492)	(0.00479)	(0.00473)
change_scope2		-0.00000361		-0.00000465
		(0.00000511)		(0.00000588)
Constant	3.696	3.313	8.516**	8.519**
	(3.578)	(3.803)	(4.115)	(4.187)
Year/Month FE	yes	yes	yes	yes
Industry FE	no	no	yes	yes
Observations	2900	2900	2899	2899
R2-Adj	0.187	0.187	0.185	0.185

Standard errors in parentheses

Dependent Variable (ret): Monthly Excess Return (x100)

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 7: Carbon Beta and Firm Characteristics: change_total_emissions emissions

	(1)	(2)	(3)	(4)
	ret	ret	ret	ret
carbon_beta	0.310	0.309	0.0366	0.0393
	(0.488)	(0.489)	(0.765)	(0.763)
logsize	-0.407*	-0.402*	0.170	0.183
	(0.217)	(0.219)	(0.372)	(0.376)
bm	-1.471***	-1.473***	-1.747***	-1.749***
	(0.392)	(0.393)	(0.482)	(0.482)
leverage	-1.815*	-1.819	-2.165*	-2.202*
	(1.082)	(1.088)	(1.143)	(1.131)
mom	6.719	6.895	-3.286	-3.120
	(6.912)	(6.934)	(9.867)	(9.879)
investa	6.422*	6.389*	12.52***	12.53***
	(3.533)	(3.514)	(4.562)	(4.534)
roe	-0.208***	-0.208***	-0.253***	-0.254***
	(0.0553)	(0.0548)	(0.0569)	(0.0565)
logppe	0.359	0.347	-0.451	-0.473
	(0.225)	(0.230)	(0.410)	(0.414)
beta	0.0395	0.0544	0.451	0.469
	(0.291)	(0.297)	(0.600)	(0.606)
volat	0.382	0.341	0.134	0.0894
	(0.395)	(0.388)	(0.348)	(0.340)
salesgr	0.292	0.291	0.426	0.427
	(0.364)	(0.358)	(0.307)	(0.301)
epsgr	0.00744	0.00746	0.00657	0.00660
	(0.00495)	(0.00495)	(0.00479)	(0.00479)
change_total_emissions		2.99e-14***		3.47e-14**
		8 (1.09e-14)		(1.53e-14)
Constant	3.696	3.818	8.516**	8.687**
	(3.578)	(3.601)	(4.115)	(4.103)
Year/Month FE	yes	yes	yes	yes
Industry FE	no	no	yes	yes
Observations	2900	2900	2899	2899
R2-Adj	0.187	0.187	0.185	0.185

Standard errors in parentheses

Dependent Variable (ret): Monthly Excess Return (x100)

* p < 0.10, ** p < 0.05, *** p < 0.01

Table 8: Carbon Beta and Firm Characteristics: change_energy_consumption emissions

	(1)	(2)	(3)	(4)
	ret	ret	ret	ret
carbon_beta	0.312	0.312	0.0363	0.0318
	(0.487)	(0.487)	(0.762)	(0.763)
logsize	-0.406*	-0.406*	0.185	0.180
	(0.217)	(0.217)	(0.374)	(0.376)
bm	-1.468***	-1.468***	-1.751***	-1.758***
	(0.391)	(0.390)	(0.480)	(0.477)
leverage	-1.811*	-1.810*	-2.201*	-2.249**
	(1.082)	(1.072)	(1.137)	(1.121)
mom	6.795	6.795	-3.292	-3.330
	(6.889)	(6.889)	(9.865)	(9.892)
investa	6.395*	6.393*	12.48***	12.54***
	(3.536)	(3.526)	(4.579)	(4.624)
roe	-0.208***	-0.208***	-0.254***	-0.254***
	(0.0553)	(0.0554)	(0.0568)	(0.0567)
logppe	0.357	0.358	-0.477	-0.477
	(0.226)	(0.229)	(0.414)	(0.414)
beta	0.0404	0.0396	0.455	0.462
	(0.291)	(0.295)	(0.602)	(0.602)
volat	0.364	0.364	0.115	0.118
	(0.405)	(0.405)	(0.354)	(0.354)
salesgr	0.291	0.291	0.427	0.430
	(0.364)	(0.364)	(0.306)	(0.304)
epsgr	0.00748	0.00748	0.00658	0.00655
	(0.00496)	(0.00496)	(0.00480)	(0.00480)
change_energy_consumption		-3.40e-10		4.03e-09
	9	(1.16e-08)		(1.50e-08)
Constant	3.697	3.690	8.734**	8.874**
	(3.589)	(3.632)	(4.147)	(4.222)
Year/Month FE	yes	yes	yes	yes
Industry FE	no	no	yes	yes
Observations	2892	2892	2891	2891
R2-Adj	0.187	0.186	0.185	0.185

Standard errors in parentheses

Dependent Variable (ret): Monthly Excess Return (x100)

* p < 0.10, ** p < 0.05, *** p < 0.01

Table 9: Carbon Beta and Firm Characteristics: scope1_int emissions

	(1)	(2)	(3)	(4)
	ret	ret	ret	ret
carbon_beta	0.383	0.471*	0.417	0.469
	(0.271)	(0.275)	(0.391)	(0.410)
logsize	-0.375*	-0.462**	0.209	0.148
	(0.218)	(0.216)	(0.337)	(0.334)
bm	-1.482***	-1.738***	-1.621***	-1.835***
	(0.343)	(0.375)	(0.399)	(0.420)
leverage	-1.356	-1.094	-1.465	-0.731
	(1.031)	(1.053)	(1.087)	(1.359)
mom	-1.763	-2.398	-10.39	-11.00
	(7.836)	(7.970)	(10.39)	(10.42)
investa	7.333**	7.590**	13.43***	13.76***
	(3.293)	(3.238)	(4.352)	(4.165)
roe	-0.218***	-0.209***	-0.256***	-0.245***
	(0.0564)	(0.0527)	(0.0547)	(0.0501)
logppe	0.358	0.370	-0.348	-0.385
	(0.237)	(0.236)	(0.393)	(0.419)
beta	0.110	0.106	0.501	0.357
	(0.265)	(0.264)	(0.530)	(0.536)
volat	0.513	0.598	0.306	0.360
	(0.502)	(0.530)	(0.499)	(0.513)
salesgr	0.355	0.382	0.381	0.413
	(0.367)	(0.364)	(0.313)	(0.313)
epsgr	0.00858	0.00722	0.00849*	0.00743
	(0.00523)	(0.00501)	(0.00507)	(0.00504)
scope1_int		-0.0000314**		-0.0000311
		(0.0000126)		(0.0000193)
Constant	2.888	4.691	5.195	7.452*
	(3.051)	(3.048)	(3.661)	(4.009)
Year/Month FE	yes	yes	yes	yes
Industry FE	no	no	yes	yes
Observations	3356	3356	3356	3356
R2-Adj	0.199	0.199	0.197	0.197

Standard errors in parentheses

Dependent Variable (ret): Monthly Excess Return (x100)

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 10: Carbon Beta and Firm Characteristics: scope2_int emissions

	(1)	(2)	(3)	(4)
	ret	ret	ret	ret
carbon_beta	0.383	0.457	0.417	0.436
	(0.271)	(0.277)	(0.391)	(0.406)
logsize	-0.375*	-0.437**	0.209	0.189
	(0.218)	(0.215)	(0.337)	(0.330)
bm	-1.482***	-1.609***	-1.621***	-1.667***
	(0.343)	(0.348)	(0.399)	(0.410)
leverage	-1.356	-1.258	-1.465	-1.225
	(1.031)	(1.034)	(1.087)	(1.260)
mom	-1.763	-2.054	-10.39	-10.51
	(7.836)	(7.901)	(10.39)	(10.38)
investa	7.333**	7.174**	13.43***	13.41***
	(3.293)	(3.204)	(4.352)	(4.282)
roe	-0.218***	-0.215***	-0.256***	-0.254***
	(0.0564)	(0.0549)	(0.0547)	(0.0535)
logppe	0.358	0.371	-0.348	-0.362
	(0.237)	(0.235)	(0.393)	(0.406)
beta	0.110	0.0908	0.501	0.437
	(0.265)	(0.264)	(0.530)	(0.552)
volat	0.513	0.559	0.306	0.322
	(0.502)	(0.514)	(0.499)	(0.504)
salesgr	0.355	0.372	0.381	0.393
	(0.367)	(0.366)	(0.313)	(0.318)
epsgr	0.00858	0.00782	0.00849*	0.00815
	(0.00523)	(0.00514)	(0.00507)	(0.00518)
scope2_int		-0.000761*		-0.000413
		(0.000420)		(0.000659)
Constant	2.888	4.110	5.195	5.982
	(3.051)	(2.972)	(3.661)	(4.080)
Year/Month FE	yes	yes	yes	yes
Industry FE	no	no	yes	yes
Observations	3356	3356	3356	3356
R2-Adj	0.199	0.199	0.197	0.196

Standard errors in parentheses

Dependent Variable (ret): Monthly Excess Return (x100)

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 11: Carbon Beta and Firm Characteristics: total_emissions_int emissions

	(1)	(2)	(3)	(4)
	ret	ret	ret	ret
carbon_beta	0.383	0.438	0.417	0.524
	(0.271)	(0.283)	(0.391)	(0.417)
logsize	-0.375*	-0.453**	0.209	0.115
	(0.218)	(0.205)	(0.337)	(0.329)
bm	-1.482***	-1.494***	-1.621***	-1.618***
	(0.343)	(0.327)	(0.399)	(0.388)
leverage	-1.356	-1.689	-1.465	-1.906*
	(1.031)	(1.050)	(1.087)	(1.116)
mom	-1.763	-2.758	-10.39	-11.87
	(7.836)	(7.649)	(10.39)	(10.25)
investa	7.333**	8.485**	13.43***	15.05***
	(3.293)	(3.415)	(4.352)	(4.208)
roe	-0.218***	-0.219***	-0.256***	-0.256***
	(0.0564)	(0.0556)	(0.0547)	(0.0530)
logppe	0.358	0.523**	-0.348	-0.230
	(0.237)	(0.233)	(0.393)	(0.386)
beta	0.110	0.0387	0.501	0.379
	(0.265)	(0.273)	(0.530)	(0.543)
volat	0.513	0.740	0.306	0.533
	(0.502)	(0.595)	(0.499)	(0.582)
salesgr	0.355	0.351	0.381	0.363
	(0.367)	(0.370)	(0.313)	(0.313)
epsgr	0.00858	0.00851	0.00849*	0.00814*
	(0.00523)	(0.00513)	(0.00507)	(0.00487)
total_emissions_int		-3.37e-10***		-4.44e-10***
		(6.90e-11)		(6.60e-11)
Constant	2.888	1.458	5.195	5.198
	(3.051)	(2.989)	(3.661)	(3.642)
Year/Month FE	yes	yes	yes	yes
Industry FE	no	no	yes	yes
Observations	3356	3356	3356	3356
R2-Adj	0.199	0.200	0.197	0.198

Standard errors in parentheses

Dependent Variable (ret): Monthly Excess Return (x100)

* p < 0.10, ** p < 0.05, *** p < 0.01

Table 12: Carbon Beta and Firm Characteristics: energy_consumption_int emissions

	(1)	(2)	(3)	(4)
	ret	ret	ret	ret
carbon_beta	0.383	0.404	0.417	0.587
	(0.271)	(0.277)	(0.391)	(0.411)
logsize	-0.375*	-0.418*	0.209	0.00101
	(0.218)	(0.241)	(0.337)	(0.362)
bm	-1.482***	-1.519***	-1.621***	-1.779***
	(0.343)	(0.358)	(0.399)	(0.442)
leverage	-1.356	-1.378	-1.465	-1.766
	(1.031)	(1.034)	(1.087)	(1.080)
mom	-1.763	-1.850	-10.39	-10.80
	(7.836)	(7.801)	(10.39)	(10.38)
investa	7.333**	7.534**	13.43***	14.48***
	(3.293)	(3.312)	(4.352)	(4.503)
roe	-0.218***	-0.215***	-0.256***	-0.239***
	(0.0564)	(0.0562)	(0.0547)	(0.0529)
logppe	0.358	0.396	-0.348	-0.189
	(0.237)	(0.245)	(0.393)	(0.391)
beta	0.110	0.0924	0.501	0.505
	(0.265)	(0.268)	(0.530)	(0.539)
volat	0.513	0.522	0.306	0.322
	(0.502)	(0.500)	(0.499)	(0.496)
salesgr	0.355	0.347	0.381	0.338
	(0.367)	(0.363)	(0.313)	(0.296)
epsgr	0.00858	0.00866	0.00849*	0.00859
	(0.00523)	(0.00536)	(0.00507)	(0.00545)
energy_consumption_int		-0.00000779		-0.0000355
		(0.0000171)		(0.0000284)
Constant	2.888	3.113	5.195	6.787*
	(3.051)	(3.143)	(3.661)	(3.899)
Year/Month FE	yes	yes	yes	yes
Industry FE	no	no	yes	yes
Observations	3356	3356	3356	3356
R2-Adj	0.199	0.199	0.197	0.197

Standard errors in parentheses

Dependent Variable (ret): Monthly Excess Return (x100)

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$