

ESG /
2013

2021 n

ESG n

ESG

ESG
Shakil 2021
n

ESG

ESG

Wong 2021

2019

H3

1									
ESG	BC	/	/						
	ESG	ESG		1~9					
	AC								
	Big4	ń			Ŧ	/	/		
		ń	Ŧ	0 n	Big4	ń	Ŧ	1	
Size			In						
Firmage	In		-	+1					
Roa									
Tobinq									
Mortgage									
Cashflow									
Board			In						
Indep									
Top1									
Balance									
SOE				1	0				

$$\begin{aligned}
 BC_{it} &= \alpha_0 + \alpha_1 ESG_{it} + \sum \alpha_i Controls_{it} + \varepsilon_{1i\ t} & 1 \\
 AC_{it} &= \beta_0 + \beta_1 ESG_{it} + \sum \beta_i Controls_{it} + \varepsilon_{2i\ t} & 2 \\
 BC_{it} &= \gamma_0 + \gamma_1 ESG_{it} + \gamma_2 AC_{it} + \sum \gamma_i Controls_{it} + \varepsilon_{3i\ t} & 3 \\
 BC_{it} &= \delta_0 + \delta_1 ESG_{it} + \delta_2 ESG_{it} * Big4_{it} + \sum \delta_i Controls_{it} + \varepsilon_{4i\ t} & 4
 \end{aligned}$$

2	ESG	6.505	1.065
6	ESG	BBB~A	0.171
0.117	0.009	0.143	0.545
	ESG	2021	2018
	ESG	ESG	ESG
ESG	0.174	3	ESG
ESG	0.149	5%	n

2

BC	20,050	0.171	0.117	0.143	0.009	0.545
ESG	20,050	6.505	1.065	6	1	9
AC	20,050	0.088	0.063	0.074	0.009	0.361
Big4	20,050	0.051	0.221	0	0	1
Size	20,050	22.17	1.289	21.984	19.95	26.21
Firmage	20,050	2.790	0.379	2.833	1.386	3.466
Roa	20,050	0.045	0.054	0.040	-0.159	0.206
Tobinq	20,050	1.956	1.162	1.573	0.873	7.644
Mortgage	20,050	0.218	0.159	0.185	0.003	0.698
Cashflow	20,050	0.043	0.068	0.043	-0.159	0.227
Board	20,050	2.141	0.195	2.197	1.609	2.708
Indep	20,050	0.373	0.053	0.333	0.333	0.571
Top1	20,050	0.351	0.149	0.333	0.089	0.745
Balance	20,050	0.709	0.604	0.537	0.026	2.785
SOE	20,050	0.360	0.480	0	0	1
				BC	100	n

3

ESG	6	ESG	6
0.171		0.174	0.003
0.142		0.149	5.574**
18058		1992	

*** / * / 1% / 5% / 10% n

4 n BC ESG ESG
1 BC
n VIF
VIF 5 n

	1	2	3	4	5
	BC	BC	AC	BC	BC
ESG*Big4					0.920***
					3.19
Size	1.680***	1.767***	-0.012***	1.154***	1.856***
	22.26	22.54	-31.67	14.72	22.74
Firmage	0.478**	0.489**	-0.006***	0.197	0.505**
	2.21	2.26	-4.74	0.96	2.33
Roa	-26.613***	-25.925***	-0.198***	-36.369***	-25.848***
	-17.03	-16.54	-19.72	-23.43	-16.47
Tobinq	-0.272***	-0.262***	0.010***	0.244***	-0.244***
	-3.70	-3.56	17.75	3.41	-3.32
Mortgage	-12.533***	-12.540***	-0.004	-12.763***	-12.480***
	-20.44	-20.48	-1.25	-21.33	-20.39
Cashflow	15.291***	15.402***	0.004	15.638***	15.632***
	11.58	11.66	0.67	12.18	11.83
Board	-0.542	-0.501	0.003	-0.319	-0.512
	-1.18	-1.10	1.50	-0.72	-1.12
Indep	-8.171***	-8.046***	0.040***	-5.943***	-7.967***
	-5.40	-5.31	5.14	-4.03	-5.26
Top1	2.567***	2.562***	-0.014***	1.805***	2.877***
	3.58	3.58	-3.94	2.61	3.99
Balance	-0.579***	-0.573***	0.003***	-0.425***	-0.521***
	-3.55	-3.52	3.10	-2.74	-3.17
SOE	3.060***	3.150***	-0.005***	2.911***	3.156***
	16.09	16.51	-4.89	15.84	16.55
Constant	-18.681***	-19.016***	0.318***	-2.293	-20.868***
	-8.04	-8.16	28.58	-0.98	-8.69
	20,050	20,050	20,050	20,050	20,050
R ²	0.3306	0.3312	0.3821	0.3799	0.3323

*** / ** / *

1% /5% /10%

t

n

2018		2013	
BC	BC2	BC	BC3 ⁿ
6 1	BC2	ESG	-0.790 1%
2	BC3	ESG	-0.969 1%

[illegible]

- 69 -

	1	2	3	4
	BC2	BC3	AT	BC
Cashflow	-6.779**	-1.819	0.654***	0.080***
	-1.97	-0.34	12.05	5.86
Board	-3.188***	-4.548***	0.013	-0.001
	-2.87	-2.62	0.74	-0.30
Indep	-8.144**	-4.075	-0.181***	-0.059***
	-2.24	-0.72	-3.15	-3.98
Top1	-2.857	-3.131	0.125***	0.017**
	-1.62	-1.12	4.83	2.48
Balance	-0.742*	0.136	-0.009	-0.005***
	-1.85	0.21	-1.51	-2.90
SOE	2.012***	0.073	0.066***	0.026***
	4.24	0.10	9.26	13.75
Constant	-22.772***	-26.84***	-0.062	-0.205***
	-4.12	-3.04	-0.77	-8.65
	20,050	20,050	17,975	17,975
R ²	0.405	0.368	0.354	0.442

2.

	7	2
	1	2
	BC	BC
ESG	-0.145*	
	-1.68	
L.ESG		- .397***
		-4.70
Size	1.823***	1.766***
	5.51	19.89
Firmage	2.307*	0.289
	1.93	1.15
Roa	-10.881***	-24.560***
	-6.49	-13.82
Tobinq	0.462***	-0.383***
	5.72	-4.53
Mortgage	-5.412***	-13.401***
	-3.35	-19.34
Cashflow	15.732***	16.560***
	13.99	10.82
Board	1.142	-0.766
	1.17	-1.47
Indep	2.916	-8.970***
	1.16	-5.23
Top1	-2.995	3.037***
	-1.26	3.78
Balance	-0.812**	-0.492***
	-2.45	-2.66
SOE	1.306*	3.282***
	1.80	15.60
Constant	-29.030***	-15.712***
	-3.95	-5.70

		1	2
		BC	BC
		20,050	15,778
R ²		0.068	0.337
ESG	n	2021	ESG
ESG_IV	ESG	n	ESG
ESG	ESG	n	Hausman
0.0192	5%		P
2SLS	n	2SLS	8 1
ESG_IV	0.831	1%	Anderson-Rubin Wald F
17.33	2	ESG	-0.701 1%
n			
		8	3
		1	2
		ESG	BC
ESG			-0.701***
			-4.17
ESG_IV		0.831***	
		65.37	
Size		0.256***	1.879***
		39.86	20.88
Firmage		0.057***	0.505**
		2.99	2.34
Roa		2.002***	-25.036***
		13.83	-15.54
Tobinq		0.030***	-0.248***
		4.64	-3.38

	1	2
	ESG	BC
Mortgage	0.109**	-12.550***
	2.09	-20.56
Cashflow	0.347***	15.546***
	3.32	11.80
Board	0.082**	-0.448
	1.97	-0.98
Indep	0.102	-7.884***
	0.73	-5.21
Top1	-0.089	2.556***
	-1.46	3.58
Balance	-0.006	-0.565***
	-0.38	-3.47
SOE	0.187***	3.267***
	11.45	16.53
Cragg-Donald Wald F		3795.797
		{16.38}
Kleibergen-Paap rk Wald F		4273.404
		{16.38}
Kleibergen-Paap rk LM		1292.578
		0.0000
	20050	20050

p {} Stock-Yogo 10% n

ESG n /

1.

n 2006 Ne TM

n n N

2014 Shi 2020 n 10

/ 100 2021 n

2019 n

Shi 2020 n

Cheng 2017

/

n

2021

ESG

9 1 2

ESG

n

5%

2.

ESG

n

2016 n

n

/

n

n

2015 n Kollman Prakash 2001

2021 n ESG

n

ESG

ESG

ESG

ESG

n

2022 n

44%

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n

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/

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ESG

No

PI=1

PI=0 n

21

16

n

N

		2015	12			2016-2017		
		n				2016-2017		
				n				
9	3	4	2016-2017		PI=0 /		PI=1	
		ESG		ESG		ESG		
0.499	1%		n	ESG	ESG			
SUR			5%	ESG				
		n						
			9					
		1		2		3		
		BC SOE=0		BC SOE=1		BC PI=0		
						4		
		BC PI=1						
ESG		-0.130	-0.440***	-0.143	-0.499***			
		-1.47	-3.59	-1.33	-4.55			
Size		1.994***	1.039***	0.025***	0.004***			
		20.11	7.83	23.46	3.10			
Firmage		-0.119	1.186**	0.002	0.011***			
		-0.49	2.54	0.81	2.91			
Roa		-23.752***	-23.663***	-0.285***	-0.254***			
		-13.17	-7.88	-13.62	-10.56			
Tobinq		-0.126	-0.984***	-0.002*	-0.001			
		-1.49	-7.03	-1.71	-0.64			
Mortgage		-7.972***	-15.814***	-0.147***	-0.061***			
		-10.60	-15.09	-16.51	-7.14			
Cashflow		12.082***	16.895***	0.188***	0.068***			
		7.77	7.25	11.57	3.47			
Board		-0.946	0.222	-0.012*	0.005			
		-1.61	0.30	-1.84	0.76			
Indep		-6.563***	-7.005***	-0.114***	-0.013			
		-3.43	-2.86	-5.20	-0.54			
Top1		2.456***	3.325***	0.041***	-0.026**			
		2.74	2.71	4.33	-2.34			
Balance		0.005	-1.537***	-0.005**	-0.011***			
		0.03	-4.64	-2.03	-3.90			

	1	2	3	4
	BC SOE=0	BC SOE=1	BC PI=0	BC PI=1
SOE			0.034***	0.016***
			13.38	5.61
Constant	-19.157***	-4.717	-0.310***	0.040
	-5.98	-1.30	-10.84	1.23
	12,833	7,217	11,515	4,927
R ²	0.280	0.436	0.327	0.235
		4.23**		5.65**

[1]			2018 №			TM №	TM	5	172-190 ⁿ		
[2]			2018 №		Л: Л:				TM №	TM	
	11	108-120 ⁿ									
[3]	/	/	/	2014 №					? TM №	TM	10
	139-151 ⁿ										
[4]	/	/	2021 №	Н		TM №	TM	8	141-156 ⁿ		
[5]	/	/	/	2021 № ESG		TM №	TM	11	24-34+72 ⁿ		
[6]	/	/	2021 №			TM №	TM	3	269-281 ⁿ		
[7]	/	/	2012 №	Н	Н		TM №	TM	8	106-114+	
	146 ⁿ										
[8]	/	/	/	2021 №			Л: Л:			TM №	
	TM	5	33-65 ⁿ								
[9]	/	/	2014 №				TM №	TM	6	73-85 ⁿ	
[10]			2021 №			TM №	TM	10	19-49 ⁿ		
[11]	2022 № ESG		Н	Н	Н	TM	Z1	52-56 ⁿ			
[12]	/	/	2015 №			TM №		TM	12	86-96 ⁿ	
[13]	2007 №	/				TM №	TM	1	102-113 ⁿ		
[14]			2011 №			TM №	TM	4	6-14 ⁿ		
[15]	/	/	2015 №			Н	Н	Н	TM №	TM	11
	49-64 ⁿ										
[16]			2019 №		Л: Л:		TM №	TM	2	187-196 ⁿ	
[17] U	U	/	/	2018 №	/		TM №		TM	6	960-2.834668.03154

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Abstract: This paper studies the impact of ESG performance on business credit by taking China's A-share listed companies from 2010 to 2020 as samples. The results show that ESG performance is significantly negatively correlated with business credit. Good ESG performance of enterprises will reduce the willingness of suppliers and clients to supply business credit due to agency problems caused by ESG practice, and then reduce the business credit obtained by enterprises. External supervision plays a negative moderating role in the relationship between ESG performance and business credit; The negative influence of ESG performance on the business credit obtained by state-owned enterprises and enterprises in high-pollution industries is stronger.

Key words: Corporate ESG performance; Business credit; Agency problems