Table S1. U and inverted U test.

Variables	Slope at Lower Bound	Slope at Upper Bound	Turning Point [Data Range]	U Test (t-Value)	Result
		Dependent Variable: Return on Assets (ROA)			
MVAIC × MVAIC	0.0165 ***	−0.0076 ***	13.2268 [−2.979 20.707]	10.83 ***	Inverted U
		Dependent Variable: Tobin's Q (TQ)			
MVAIC × MVAIC	0.1845 ***	−0.1134 ***	11.6898 [−2.979 20.707]	09.67 ***	Inverted U

Note: We estimate the slope, turning or extreme point, and t-value using STATA's "utest" command. The symbols *** indicates the p values at 1%. The measurement and description of variables are presented in Appendix A.

Table S2. Simple slope test.

	Linear Relationship				Curvilinear Relationship			
	ROA		TQ		ROA		TQ	
	Slope	t-Stat	Slope	t-Stat	Slope	t-Stat	Slope	t-Stat
Moderation of Group Affiliation								
at Group = 1	0.00473	16.64 ***	0.05136	9.46 ***	0.00827	20.45 ***	0.10996	12.34 ***
at Group = 0	0.00558	17.51 ***	0.03818	7.17 ***	0.00985	23.64 ***	0.08138	11.38 ***
Moderation of BIG4 Auditors								
at BIG4 = 1	0.00720	15.48 ***	0.08344	7.93 ***	0.01276	19.75 ***	0.21194	14.17 ***
at BIG4 = 0	0.00456	18.94 ***	0.03297	8.15 ***	0.00814	25.20 ***	0.06198	10.68 ***
Joint moderating effects								
at Group = 1 and BIG4 =1	0.00751	12.05 ***	0.10395	6.86 ***	0.01242	16.01 ***	0.22026	10.28 ***
at Group = 1 and BIG4 =0	0.00384	12.61 ***	0.03456	6.70 ***	0.00682	15.4 ***	0.07249	8.22 ***
at Group = 0 and BIG4 =1	0.00688	10.49 ***	0.06283	4.52 ***	0.01319	12.91 ***	0.20419	9.76 ***
at Group = 0 and BIG4 =0	0.00521	14.89 ***	0.03115	5.50 ***	0.00909	20.7 ***	0.05432	7.42 ***
Moderated moderation of BIG4 on Group Affiliation								
BIG4 Auditors = 1								
at Group = 1	0.00751	12.05 ***	0.10395	6.86 ***	0.01242	16.01 ***	0.22026	10.28 ***
at Group = 0	0.00688	10.49 ***	0.06283	4.52 ***	0.01319	12.91 ***	0.20419	9.76 ***
BIG4 Auditors = 0								
at Group = 1	0.00384	12.61 ***	0.03456	6.70 ***	0.00682	15.40 ***	0.07249	8.22 ***
at Group = 0	0.00521	14.89 ***	0.03115	5.50 ***	0.00909	20.70 ***	0.05432	7.42 ***

Note: The table reports the slope test for checking the moderating effects. The symbols ***, indicates the statistical significance at 1%. The significance of slope is one of the conditions for moderating effect. The measurement and description of variables are presented in Appendix A.

Table S3. Slope difference test.

	Linear Relationship						Curvilinear Relationship					
	ROA			TQ			ROA			TQ		
	ΔSlope	$SE_{\Delta Slope}$	t-Stat	ΔSlope	$SE_{\Delta Slope}$	t-Stat	ΔSlope	$SE_{\Delta Slope}$	t-Stat	ΔSlope	$SE_{\Delta Slope}$	t-Stat
Moderation of Group Affiliation												
Group = 0 vs. Group = 1	0.00085	0.00040	2.12 **	−0.01318	0.00712	−1.85 *	0.00157	0.00056	2.82 ***	−0.02858	0.01111	−2.57 **
Moderation of BIG4 Auditors												
BIG4 = 0 vs. BIG4 = 1	−0.00263	0.00050	−5.29 ***	−0.05047	0.01090	−4.63 ***	−0.00462	0.00070	−6.62 ***	−0.14996	0.01578	−9.50 ***
Joint moderating effects												
(Group = 1 & BIG4 = 0) vs. (Group = 1 & BIG4 = 1)	−0.00366	0.00067	−5.43 ***	−0.06940	0.01562	−4.44 ***	−0.00559	0.00087	−6.42 ***	−0.14777	0.02283	−6.47 ***
(Group = 0 & BIG4 = 1) vs. (Group = 1 & BIG4 = 1)	−0.00062	0.00088	−0.71	−0.04112	0.02021	−2.04 **	0.00077	0.00126	0.61	−0.01607	0.03000	−0.54
(Group = 0 & BIG4 = 0) vs. (Group = 1 & BIG4 = 1)	−0.00229	0.00070	−3.28 ***	−0.07281	0.01596	−4.56 ***	−0.00333	0.00088	−3.79 ***	−0.16594	0.02245	−7.39 ***
(Group = 0 & BIG4 = 1) vs. (Group = 1 & BIG4 = 0)	0.00304	0.00070	4.31 ***	0.02827	0.01448	1.95 **	0.00636	0.00110	5.79 ***	0.13170	0.02249	5.86 ***
(Group = 0 & BIG4 = 0) vs. (Group = 1 & BIG4 = 0)	0.00137	0.00045	3.08 ***	−0.00341	0.00723	−0.47	0.00227	0.00061	3.73 ***	−0.01817	0.01110	−1.64 *
(Group = 0 & BIG4 = 0) vs. (Group = 0 & BIG4 = 1)	−0.00167	0.00072	−2.32 **	−0.03168	0.01484	−2.13 **	−0.00410	0.00109	−3.75 ***	−0.14987	0.02211	−6.78 ***
Moderated moderation of BIG4 on Group Affiliation												
Group Affiliation = 1												
BIG4 = 1 vs. BIG4 = 0	0.00366	0.00067	5.43 ***	0.06940	0.01562	4.44 ***	0.00559	0.00087	6.42 ***	0.14777	0.02283	6.47 ***
Group Affiliation = 0												
BIG4 = 1 vs. BIG4 = 0	0.00167	0.00072	2.32 **	0.03168	0.01484	2.13 **	0.00410	0.00109	3.75 ***	0.14987	0.02211	6.78 ***

Note: The table reports the slope difference test, the additional condition for moderating effects. The statistical significance of t-stat indicates the moderating effects and is calculated as the ratio of ΔSlope and $SE_{\Delta Slope}$. The symbols ***, **, and * indicate the statistical significance at 1%, 5%, and 10%, respectively. The measurement and description of variables are presented in Appendix A.