



# Does Audit Firm Tenure Enhance Firm Value? Closing the Expectation's Gap through CSR

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# Motivations

- **Recent audit failures** (e.g., Enron, Worldcom, Lehman Brothers, and Parmalat) and **audit deficiencies revealed in the PCAOB inspections** (Doty 2011) challenge the external auditor's **governance role** (Simunic 1980; Dye 1993).
- However, an **alternative explanation** for the **anecdotes** is that, despite auditors' due diligence, the **increasing engagement risk** associated with clients with management of self-serving bias and rent extraction behavior over time is the ultimate cause for the **corporate failures**.
- **The House of Representatives** passed **Bill H.R. 1564 on July 8, 2013** that would require the GAO to conduct a **cost-benefit analysis** on requiring mandatory auditor rotation.
  - ✓ In contrast to the **European Parliament's** unanimous vote on **April 25, 2013** for a **15-year** mandated rotation (could be **extended to 25 years** with certain safeguards in place)
- To facilitate this analysis, it is important to understand the **driver** (e.g., engagement risk) and **economic consequence** (e.g., firm value) for auditor-client retention decisions.
- Rather than debating on **"two evils, which evil is worse"**, this study takes a different approach and considers the external auditor as a **rational agent who trades-off the costs and benefits** of failing to fulfill its professional responsibilities conditional on his/her **assessed engagement risk**, as reflected in **CSR**.

# Research Questions

- Is auditor-client retention associated with engagement risk as proxied by CSR?
- Does the market perceive the value created by auditor-client retention varies across CSR?
  - ✓ CSR is a broad array of **corporate actions and strategies** that a company **develops** to build and improve its relationship with its **key stakeholders** (e.g., **capital suppliers**, **employees**, **customer**, **community residents**, and **the natural environment**). (Waddock 2004)

# CSR Theories

## ➤ Corporate culture/ethical theories of CSR

- ✓ Under corporate culture theory, CSR is a **shared belief within a firm** – the belief about the “**right**” **course of actions** that takes into account **not only economic** but also **social, environmental and other externalized impacts of company actions** (e.g., Kreps 1990)
- ✓ Ethical theories suggest that CSR consciousness reflects **better business ethics** (Carroll 1979; Jones 1995)

## ➤ Empirical evidence - Management make more responsible corporate decisions

- ✓ socially responsible firms are **less likely** to engage in **earnings management** (Kim et al. 2012)
- ✓ **good** CSR practices are associated with **lower tax aggressiveness** (Watson 2011 and Lanis and Richardson 2012)
- ✓ firms with **excessive irresponsible CSR activities** have a **higher likelihood of engaging in tax sheltering activities** and **greater discretionary/permanent book-tax differences**. (Hoi et al. 2013 TAR)
- ✓ **better CSR performance** are likely to have **higher internal control quality** (Guo et al. 2012)

# CSR Theories (continued)

## ➤ Opportunistic Perspective of CSR Activities

- ✓ McWilliams et al. (2006) argue that CSR is a **managerial perquisite**, i.e., managers use CSR to **advance their careers** or **fulfill other personal agendas**.
- ✓ Hemingway and MacLagan (2004) assert that managers' personal benefits could be driving CSR.

## ➤ Empirical evidence

- ✓ management may use their **discretionary decisions** to engage in CSR strategically to **meet earnings benchmarks** (Petrovits 2006; Prior, Surroca, and Tribo 2008),
- ✓ to **cover up corporate/management misconduct** (e.g., Hemingway and MacLagan 2004; McWilliams et al. 2006),
- ✓ to **offset corporate social irresponsibility** (Muller and Kraussel 2011; Kotchen and Moon 2011),
  - when firms do **more "harm"**, they also do **more "good"**
- ✓ to **enhance its CSR reputation** – to protect the firm against the risk of adverse political, regulatory, and social sanctions/penalties in the case of negative corporate events (Godfrey 2005; Minor and Morgan 2011).

# Hypotheses Development

- From an auditor's perspective, I argue that auditors are more likely to retain high CSR conscious client firms due to lower perceived engagement risk for three reasons.
  - ✓ **First**, prior literature demonstrates that auditors consider **financial factors** as well as **management integrity** in assessing audit engagement risk (Ethridge et al. 2007; Johnstone and Bedard 2004) and audit firms tend to **resign from risky clients** due to litigation concerns and reputation damage (Dunn and Sikka 1999; Johnson and Bedard 2004; Ethridge et al. 2007; Dunn and Sikka 1999).
  - ✓ **Second**, high CSR conscious firms face **lower pressures to manipulate earnings** due to **higher firm performance and less financial stress**. Under the viewpoint of recent economic theories of CSR (e.g. Mackey et al. 2007), CSR activities, despite their inherent costs, can *actually* increase the present value of a firm's future cash flows.
  - ✓ **Third**, high CSR conscious firms have **less motivations to engage in value destruction behavior** or conduct self-dealings due to **higher management integrity** or **souder corporate culture**.

***H1*: CSR performance is positively associated with auditor-client retention.**

# Hypotheses Development (Continued)

- if CSR exhibits **management's 'ethical concerns'** and **corporate culture** in their strategic decisions and can be considered as a signal for engagement risk, then I would expect a less pronounced impact of audit firm tenure on firm valuation for three reasons.
  - ✓ First, from the **manager's perspective**, if more CSR conscious firms have **less incentives** to manipulate their earnings numbers and engage **in less value destruction behavior** (Kim et al. 2012), then the client firm would start with a **higher level of firm valuation**.
  - ✓ Second, from the **view point of external auditors**, a **lower engagement risk** for high CSR conscious firms would dictate a **higher tolerance rate for risk of material misstatements**, thus leading to a lower supply of audit quality and lower incentives to monitor managers' value destruction behavior.
  - ✓ Third, from **the investors' standpoint**, if investors perceive less information risk and misaligned interest between managers and stakeholders, then investors **would not factor into the auditor's governance role to mitigate agency cost**.
- ***H2: The moderating effect of CSR on the association between auditor-client retention and firm value is less pronounced for high CSR conscious firms than for low CSR conscious firms.***

# Methodology

$$\begin{aligned} TobinsQ_{it} = & \alpha_0 + \alpha_1 T_{it} + \alpha_2 T_{it}^2 + \alpha_3 DumCSR7_{it} + \alpha_4 T_{it} * DumCSR7_{it} + \alpha_5 T_{it}^2 * DumCSR7_{it} + \alpha_6 SIZE_{it} + \alpha_7 LIMtB_{it} \\ & + \alpha_8 AGE_{it} + \alpha_9 NOL_{it} + \alpha_{10} absFI_{it} + \alpha_{11} R\&D_{it} + \alpha_{12} INTANG_{it} + \alpha_{13} PPE_{it} + \alpha_{14} EQINC_{it} + \alpha_{15} CASH_{it} \\ & + \alpha_{16} ROA_{it} + \alpha_{17} LEV_{it} + \alpha_{18} RVOL_{it} + \alpha_{19} IOR_{it} + \alpha_{20} NAnalyst_{it} + \alpha_{21} BigN_{it} + \alpha_{22} OR_{it} + \Sigma YearDum \\ & + \Sigma IndDum + \varepsilon_{it} \end{aligned} \quad (Equation 1)$$

$$\begin{aligned} T_{it} = & \beta_0 + \beta_1 CSR7_{it} + \beta_2 CATA_{it} + \beta_3 Quick_{it} + \beta_4 DE_{it} + \beta_5 ISSUE_{it} + \beta_6 EXCH_{it} + \beta_7 LIT_{it} + \beta_8 TECH_{it} + \beta_9 SIZE_{it} + \beta_{10} ROA_{it} \\ & + \beta_{11} LOSS_{it} + \beta_{12} LEV_{it} + \beta_{13} MandA_{it} + \beta_{14} BigN_{it} + \Sigma YearDum + \Sigma IndDum + \mu_{it} \end{aligned} \quad (Equation 2)$$

# Databases

- **CSR data** - MSCI ESG STATS annual database of environmental, social, and governance ratings of publicly traded companies (formerly known as KLD Research & Analytics, Inc.)
  - ✓ 650 firms in 1991 with annual ratings ( including S&P 500 and Domini 400 Social Index)
  - ✓ 1,100 firms in 2001 and
  - ✓ 3,100 firms in 2003 ( include firms from Russell 1000 and 2000 indexes as well as from certain social indexes)
  - ✓ KLD evaluates a firm's CSR on 7 dimensions: **corporate governance**, **community relations**, **diversity**, **employee relations**, **environment**, **product**, and **human rights**.
- **Return data** – CSRP
- **Financial data** – Compustat
- **Auditor data** – AuditAnalytics
- **Analysts data** – IBES
- **Compensation data** – ExecutiveComp
- **Institutional ownership** – Thomson Reuters' Ownership database

**Table 1 Descriptive Statistics**

<i>Variables (N=12,166)</i>	<i>MEAN</i>	<i>STD</i>	<i>Q1</i>	<i>MEDIAN</i>	<i>Q3</i>
<i>TobinsQ</i>	1.880	0.996	1.221	1.568	2.198
<i>T</i>	1.364	0.965	0.600	1.000	1.900
<i>CSR7</i>	-0.586	2.239	-2.000	-1.000	0.000
<i>DumCSR7</i>	0.237	0.425	0.000	0.000	0.000
<i>NOL</i>	0.657	0.475	0.000	1.000	1.000
<i>Growth</i>	0.116	0.224	0.013	0.091	0.190
<i>INTANG</i>	0.216	0.221	0.028	0.146	0.344
<i>PPE</i>	0.288	0.241	0.098	0.205	0.422
<i>EQINC</i>	0.001	0.003	0.000	0.000	0.000
<i>CASH</i>	0.173	0.186	0.033	0.104	0.250
<i>absFI</i>	0.022	0.036	0.000	0.002	0.031
<i>R&amp;D</i>	0.056	0.222	0.000	0.000	0.040
<i>LEV</i>	0.194	0.169	0.020	0.179	0.311
<i>ROA</i>	0.049	0.082	0.026	0.053	0.087
<i>RVOL</i>	0.099	0.060	0.062	0.092	0.128
<i>IOR</i>	0.565	0.365	0.219	0.691	0.862
<i>Nanalyst</i>	8.551	6.395	4.000	7.000	12.000
<i>BigN</i>	0.914	0.280	1.000	1.000	1.000
<i>OR</i>	0.066	0.165	0.000	0.000	0.000
<i>absTA</i>	0.065	0.054	0.029	0.053	0.087
<i>L1Size</i>	7.034	1.524	5.900	6.901	8.017
<i>Age</i>	2.985	0.737	2.485	2.944	3.664
<i>L1MtB</i>	2.866	2.468	1.515	2.216	3.428

**Table 2 Correlation Matrix**

<i>Variable</i>	<i>TobinsQ</i>	<i>T</i>	<i>CSR7</i>	<i>DumCSR7</i>	<i>NOL</i>	<i>Growth</i>	<i>INTANG</i>	<i>PPE</i>	<i>EQINC</i>	<i>CASH</i>	<i>absFI</i>	<i>R&amp;D</i>
	1	2	3	4	5	6	7	8	9	10	11	12
<i>Q</i>	1	-0.053	0.117	0.077	0.069	0.281	0.029	-0.209	-0.077	0.399	0.134	0.314
<i>T</i>	2	-0.096	0.078	0.105	-0.014	-0.137	0.027	0.030	0.039	-0.092	0.132	0.022
<i>CSR7</i>	3	0.095	0.120	0.746	0.012	-0.057	0.022	-0.047	-0.030	0.063	0.065	0.095
<i>DumCSR7</i>	4	0.065	0.111	0.734	-0.002	-0.061	0.017	-0.009	0.010	0.031	0.085	0.062
<i>NOL</i>	5	0.032	-0.005	0.008	-0.002	0.036	0.057	-0.100	-0.023	0.074	0.049	0.025
<i>Growth</i>	6	0.231	-0.132	-0.042	-0.047	0.023	0.081	-0.047	-0.003	0.095	0.032	0.077
<i>INTANG</i>	7	-0.043	-0.013	0.020	0.013	0.052	0.095	-0.432	0.010	-0.147	0.209	0.133
<i>PPE</i>	8	-0.208	-0.008	-0.058	-0.022	-0.109	-0.005	-0.418	0.111	-0.422	-0.242	-0.424
<i>EQINC</i>	9	-0.041	0.039	-0.014	0.017	-0.017	-0.008	-0.023	0.071	-0.140	0.075	-0.099
<i>CASH</i>	10	0.436	-0.149	0.051	0.021	0.028	0.112	-0.219	-0.392	-0.115	0.202	0.486
<i>absFI</i>	11	0.149	0.106	0.117	0.096	0.026	0.049	0.035	-0.172	0.067	0.111	0.377
<i>R&amp;D</i>	12	0.192	-0.069	0.027	0.009	0.004	0.033	-0.048	-0.169	-0.072	0.387	0.008
<i>LEV</i>	13	-0.339	0.060	-0.041	0.001	-0.078	-0.058	0.171	0.340	0.068	-0.445	-0.112
<i>ROA</i>	14	0.266	0.058	0.060	0.044	0.052	0.133	0.046	-0.027	0.066	-0.054	0.180
<i>RVOL</i>	15	-0.054	-0.165	-0.153	-0.112	0.052	0.035	-0.117	-0.066	-0.066	0.164	-0.034
<i>IOR</i>	16	0.023	-0.068	-0.117	-0.073	-0.028	0.057	0.119	-0.053	0.017	0.003	0.062
<i>NAnalyst</i>	17	0.185	0.098	0.162	0.168	-0.038	0.041	0.076	0.038	0.021	0.019	0.179
<i>BigN</i>	18	-0.017	0.182	0.056	0.074	-0.056	-0.028	0.049	0.024	0.038	-0.065	0.043
<i>OR</i>	19	0.167	-0.009	0.028	0.021	0.003	0.073	0.021	-0.052	0.010	0.045	0.022
<i>absTA</i>	20	0.064	-0.118	-0.039	-0.046	0.013	-0.023	-0.160	0.149	-0.066	0.102	-0.082
<i>L1Size</i>	21	-0.278	0.304	0.118	0.174	-0.123	-0.149	0.096	0.214	0.158	-0.398	0.159
<i>Age</i>	22	-0.195	0.567	0.081	0.097	-0.101	-0.179	-0.082	0.145	0.118	-0.288	0.103
<i>L1MtB</i>	23	0.575	-0.027	0.092	0.084	0.008	0.131	0.012	-0.115	-0.002	0.208	0.141

*(To Be Continued)*

**Table 3 Audit Firm Tenure, CSR, and Firm Value**

<i>N</i> =12,155	Model 1		Model 2		Model 3	
<i>Panel A: Equ. (1) Dep. Var. = TobinsQ</i>	Estimate	Z-Statistics	Estimates	Z-Statistics	Estimates	Z-Statistics
<i>OT<sup>Low</sup></i>					19.8202 [19.56,20.08]	(147.42)***
<i>OT<sup>High</sup></i>					24.7330 [22.36,27.11]	(20.43)***
<i>OT<sup>Diff</sup></i>					4.9128 [2.75, 7.07]	(4.46)***
<i>T</i>	-0.1810	(-1.61)	-0.2343	(-1.85)*	6.1405	(4.68)***
<i>DumCSR7</i>	0.0403	(2.93)***	-0.1261	(-1.00)	3.2500	(4.56)***
<i>T_DumCSR7</i>			0.1204	(1.27)	-5.1168	(-4.56)***
<i>T<sup>2</sup></i>					-1.5491	(-4.55)***
<i>T<sup>2</sup>_DumCSR7</i>					1.3421	(4.57)***
<i>Chi2 Test of (T+T_DumCSR)=0</i>					1.0237	(25.61)***
<i>Chi2 Test of (T<sup>2</sup>+T<sup>2</sup>_DumCSR)=0</i>					-0.2070	(16.96)***
<i>Panel B: Equ. (2) Dep. Var.=T CSR7</i>	0.0254	(6.82)***	0.0263	(7.01)***	0.0263	(7.04)***

## Figure 2 Audit Firm Tenure and Firm Value – CSR versus Non-CSR

Figure 2 Panel A: Audit Firm Tenure and Normal Firm Value - The Impact of CSR

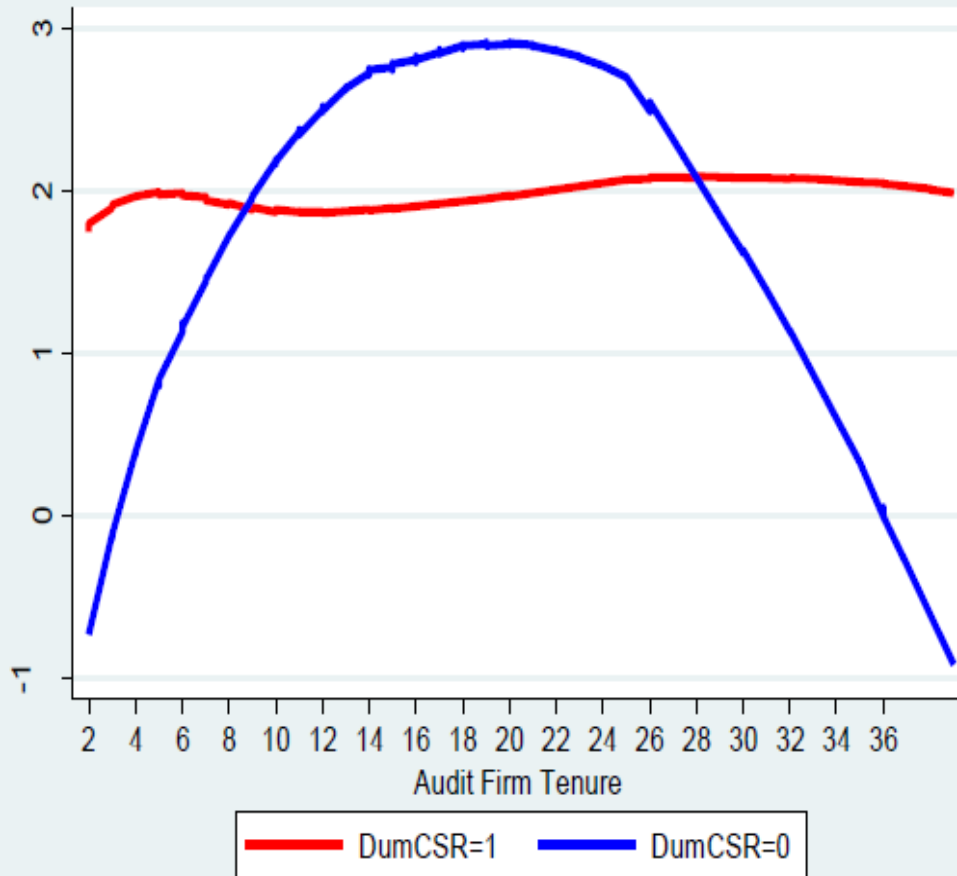
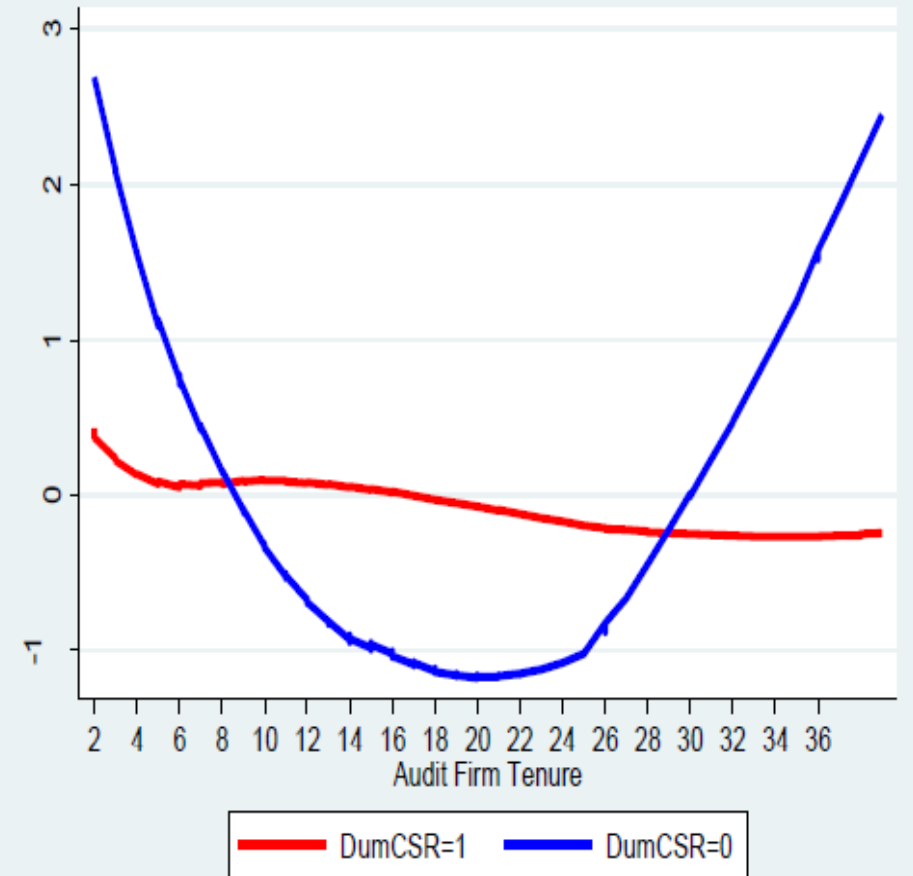


Figure 2 Panel B: Audit Firm Tenure and Abnormal Firm Value - the Impact of CSR



# Additional Analyses and Sensitivity Tests

- Alternative measures of Firm Valuation
- Alternative measures of CSR
- Self-Selection Correction for CSR Activities

$$PR(dumCSR_{it}=1) = \alpha_0 + \alpha_1 ROA_{it} + \alpha_2 IOR_{it} + \alpha_3 NAnalysts_{it} + \alpha_4 OR_{it} + \alpha_5 absTA_{it} + \alpha_6 LIMtB_{it} \\ + \alpha_7 L1Size_{it} + \alpha_8 LSEG_{it} + \alpha_9 absFI_{it} + \alpha_{10} CATA_{it} + \alpha_{11} QUICK_{it} + \alpha_{12} DE_{it} + \alpha_{13} LOSS_{it} \\ + \alpha_{14} Growth_{it} + \beta_j IndDummies + \beta_k YearDummies + \varepsilon \quad (Equation 3)$$

- CSR Dimensions
- Partition by Auditor Industry Specialist
- Other Sensitivity Tests
  - ✓ Piece-wise model (Johnson et al. 2002)
  - ✓ Log transformation of audit firm tenure (logT)
  - ✓ Add back observations with tenure less than five years and first-year audit
  - ✓ Exclude merger and acquisition firms (Ashbaugh et al. 2003)

**Table 4 Audit Firm Tenure, CSR, and Firm Value - Alternative Measures of Firm Valuation**

<i>Variables</i>	Dep. Var. (MV1) N=12,163	Dep. Var. (MV2) N=12,169	Dep. Var. (MV3) N=12206	Dep. Var. (Q) N=12,166
<i>T</i>	10.5175 (5.66) <sup>***</sup>	12.7869 (5.76) <sup>***</sup>	0.0646 (5.09) <sup>***</sup>	0.5622 (2.64) <sup>***</sup>
<i>DumCSR</i>	5.5685 (5.48) <sup>***</sup>	6.7554 (5.56) <sup>***</sup>	0.0338 (4.88) <sup>***</sup>	0.3119 (2.68) <sup>***</sup>
<i>IMR</i>	0.7052 (3.63) <sup>***</sup>	1.4047 (6.07) <sup>***</sup>	0.0056 (4.33) <sup>***</sup>	0.228 (10.20) <sup>***</sup>
<i>T DumCSR7</i>	-8.7823 (-5.49) <sup>***</sup>	-10.6633 (-5.58) <sup>***</sup>	-0.0535 (-4.90) <sup>***</sup>	-0.4793 (-2.62) <sup>***</sup>
<i>T<sup>2</sup></i>	-2.6525 (-5.50) <sup>***</sup>	-3.2245 (-5.59) <sup>***</sup>	-0.0163 (-4.95) <sup>***</sup>	-0.1398 (-2.53) <sup>**</sup>
<i>T<sup>2</sup>_DumCSR7</i>	2.302 (5.50) <sup>***</sup>	2.7937 (5.58) <sup>***</sup>	0.0142 (4.96) <sup>***</sup>	0.1262 (2.63) <sup>***</sup>
<i>Chi2 Test of (T+T_DumCSR7)=0</i>	1.7352 (39.14) <sup>***</sup>	2.1236 (33.63) <sup>***</sup>	0.0111 (39.14) <sup>***</sup>	0.0829 (6.80) <sup>***</sup>
<i>Chi2 Test of (T<sup>2</sup>+T<sup>2</sup>_DumCSR7)=0</i>	-0.3505 (-26.19) <sup>***</sup>	-0.4308 20.47 <sup>***</sup>	-0.0021 (-20.47) <sup>***</sup>	-0.0136 (-3.01) <sup>***</sup>
<i>OT<sup>LOW</sup></i>	19.8258 (178.50) <sup>***</sup>	19.8277 (180.95) <sup>***</sup>	19.8022 (163.24) <sup>***</sup>	20.1021 (58.48) <sup>***</sup>
<i>OT<sup>High</sup></i>	[19.56, 20.04] 24.755 (25.59) <sup>***</sup>	[19.61, 20.04] 24.6502 (26.73) <sup>***</sup>	[19.56, 20.04] 25.9375 (19.36) <sup>***</sup>	[19.43, 20.78] 30.4127 (5.07) <sup>***</sup>
<i>OT<sup>Diff</sup></i>	[23.31, 28.56] 4.9292 (5.59) <sup>***</sup>	[22.84, 26.46] 4.8225 (5.76) <sup>***</sup>	[23.31, 28.56] 6.1353 (4.94) <sup>***</sup>	[18.65, 42.17] 10.3106 (1.81) <sup>*</sup>
	[3.70, 8.57]	[3.18, 6.46]	[3.70, 8.57]	[-.86, 21.48]
<i>Equ. 2: Dep. Var. = T CSR7</i>	Model 1 0.0254 (6.84) <sup>***</sup>	Model 2 0.0253 (6.84) <sup>***</sup>	Model 3 0.0268 (7.21) <sup>***</sup>	Model 4 0.0256 (6.87) <sup>***</sup>

**Table 5 Audit Firm Tenure, CSR, and Firm Value - Control for Self-Selection of CSR Activities**

<i>N</i> = 12,166	Model 1	Model 2	Model 3
<b>Equ. (1): Dep. Var. = <i>Q</i></b>			
<i>T</i>	0.1243 (-1.07)	-0.146 (-1.11)	6.6611 (5.05) <sup>***</sup>
<i>DumCSR7</i>	0.0203 (-1.46)	-0.0668 (-0.51)	3.5471 (4.92) <sup>***</sup>
<i>IMR</i>	0.9913 (11.34) <sup>***</sup>	0.9842 (10.99) <sup>**</sup>	1.113 (8.06) <sup>***</sup>
<i>T_DumCSR7</i>		0.076 -0.77	-5.5769 (-4.91) <sup>***</sup>
<i>T</i> <sup>2</sup>			-1.6782 (-4.90) <sup>***</sup>
<i>T</i> <sup>2</sup> <i>_DumCSR7</i>			1.4621 (4.92) <sup>***</sup>
<i>Chi2 Test of (T+T_DumCSR7)=0</i>			1.0842 (30.28) <sup>***</sup>
<i>Chi2 Test of (T</i> <sup>2</sup> <i>+T</i> <sup>2</sup> <i>_DumCSR7)=0</i>			-0.2161 (19.74) <sup>***</sup>
<i>OT</i> <sup>Low</sup>			19.8455 (154.75) <sup>**</sup>
<i>OT</i> <sup>High</sup>			[19.59, 20.10] 25.0816 (21.20) <sup>***</sup>
<i>OT</i> <sup>Diff</sup>			[22.76, 27.40] 5.2361 (4.84) <sup>***</sup> [3.12, 7.36]
<b>Equ. (2): Dep. Var. = <i>T</i></b>			
<i>CSR7</i>	0.0252 (6.79) <sup>***</sup>	0.0252 (6.76) <sup>***</sup>	0.0253 (6.82) <sup>***</sup>

**Table 6 Audit Firm Tenure, CSR, and Firm Valuation - All CSR Dimensions**

	<i>CGOV</i>	<i>EMP</i>	<i>DIV</i>	<i>PRO</i>	<i>COM</i>	<i>ENV</i>	<i>HUM</i>	<i>All Dimensions</i>
								<i>Model 3</i>
<i>T</i>	4.6977***	4.8593***	4.8895***	4.5618***	4.6295***	4.6271***	4.3316***	1.4024***
<i>DumCGOV</i>	2.2135***							0.6796***
<i>DumEMP</i>		2.5662***						0.4222***
<i>DumDIV</i>			2.6425***					0.771***
<i>DumPRO</i>				2.4541***				0.2642*
<i>DumCOM</i>					2.4898***			0.1235
<i>DumENV</i>						2.454***		0.1086
<i>HumHUM</i>							2.065***	-0.3746
<i>T_DumCGOV</i>	-3.5406***							-0.9638***
<i>T_DumEMP</i>		-3.7127***						-0.4400***
<i>T_DumDIV</i>			-4.0846***					-1.0756***
<i>T_DumPRO</i>				-3.5325***				-0.2856***
<i>T_DumCOM</i>					-3.7039***			0.0813
<i>T_DumENV</i>						-3.6684***		-0.1887
<i>T_DumHUM</i>							-3.0691***	0.3124
<i>T<sup>2</sup></i>	-1.1524***	-1.1871***	-1.2129***	-1.1128***	-1.14***	-1.1476***	-1.0512***	-0.3549***
<i>T<sup>2</sup>_DumCGOV</i>	0.926***							0.2369***
<i>T<sup>2</sup>_DumEMP</i>		0.9473***						0.1171***
<i>T<sup>2</sup>_DumDIV</i>			1.0522***					0.2713***
<i>T<sup>2</sup>_DumPRO</i>				0.9034***				0.0719*
<i>T<sup>2</sup>_DumCOM</i>					0.952***			-0.0239
<i>T<sup>2</sup>_DumENV</i>						0.9508***		0.0563*
<i>T<sup>2</sup>_DumHUM</i>							0.7919***	-0.0643

**Table 6 Audit Firm Tenure, CSR, and Firm Valuation - All CSR Dimensions**

	<i>CGOV</i>	<i>EMP</i>	<i>DIV</i>	<i>PRO</i>	<i>COM</i>	<i>ENV</i>	<i>HUM</i>	<i>All Dimensions</i>
<i>Chi2 test of (T+T_dumCGOV)=0</i>	1.1571***							0.4386***
<i>Chi2 test of (T<sup>2</sup>+T<sup>2</sup>_dumCGOV)=0</i>	-0.2264***							-0.118***
<i>Chi2 test of (T+T_dumEMP)=0</i>		1.1466***						0.9624***
<i>Chi2 test of (T<sup>2</sup>+T<sup>2</sup>_dumEMP)=0</i>		-0.2398***						-0.2378***
<i>Chi2 test of (T+T_dumDIV)=0</i>			0.8049***					0.3268***
<i>Chi2 test of (T<sup>2</sup>+T<sup>2</sup>_dumDIV)=0</i>			-0.1607***					-0.0836***
<i>Chi2 test of (T+T_dumPRO)=0</i>				3.449***				1.1168***
<i>Chi2 test of (T<sup>2</sup>+T<sup>2</sup>_dumPRO)=0</i>				-0.2094***				-0.283***
<i>Chi2 test of (T+T_dumCOM)=0</i>					0.9256***			1.5259***
<i>Chi2 test of (T<sup>2</sup>+T<sup>2</sup>_dumCOM)=0</i>					-0.1880***			-0.3788***
<i>Chi2 test of (T+T_dumENV)=0</i>						0.9587****		1.2137***
<i>Chi2 test of (T<sup>2</sup>+T<sup>2</sup>_dumENV)=0</i>						-0.1968****		-0.2986***
<i>Chi2 test of (T+T_dumHUM)=0</i>							1.2625***	1.7148***
<i>Chi2 test of (T<sup>2</sup>+T<sup>2</sup>_dumHUM)=0</i>							-0.2593***	-0.4192***
<i>OT<sup>Low</sup></i>	20.3825*** [20.10, 20.67]	20.4674*** [20.16, 20.78]	20.1561*** [19.84, 20.48]	20.4961*** [20.20, 20.79]	20.3052*** [20.01, 20.60]	20.1589*** [19.86, 20.46]	20.6031*** [20.29, 20.92]	
<i>OT<sup>High</sup></i>	25.5572*** [23.21, 27.91]	23.9107*** [21.79, 26.04]	25.0374*** [22.05, 28.02]	24.5718*** [21.67, 27.47]	24.6154*** [22.06, 27.17]	24.3496*** [22.14, 26.56]	24.3444*** [20.39, 28.29]	
<i>OT<sup>Diff</sup></i>	5.1747*** [3.00, 7.35]	3.4433*** [1.52, 5.36]	4.8814*** [2.15, 7.61]	4.0757*** [1.33, 6.82]	4.3102*** [1.93, 6.69]	4.1907*** [2.18, 6.20]	3.7413*** [-.13, 7.61]	

**Table 7 CSR and Firm Valuation - Partition by Auditor Industry Specialist**

	NCIS		NCIS2	
	NCIS=0 (N=11,098)	NCIS=1 (N=1,068)	NCIS2=0 (N=10,961)	NCIS2=1 (N=1,205)
<i>T</i>	4.3103 (3.99) <sup>***</sup>	2.5096 (2.59) <sup>***</sup>	4.1287 (4.07) <sup>***</sup>	1.9625 (2.32) <sup>**</sup>
<i>T</i> <sup>2</sup>	-1.0857 (-3.87) <sup>***</sup>	-0.6401 (-2.55) <sup>**</sup>	-1.0401 (-3.95) <sup>***</sup>	-0.4976 (-2.26) <sup>**</sup>
<i>DumCSR7</i>	2.2839 (3.89) <sup>***</sup>	1.583 (2.84) <sup>***</sup>	2.1908 (3.97) <sup>***</sup>	1.2405 (2.53) <sup>**</sup>
<i>T_DumCSR7</i>	-3.6132 (-3.89) <sup>***</sup>	-2.2057 (-2.72) <sup>***</sup>	-3.4659 (-3.98) <sup>***</sup>	-1.7315 (-2.36) <sup>**</sup>
<i>T</i> <sup>2</sup> <i>DumCSR7</i>	0.9482 (3.90) <sup>***</sup>	0.5833 (2.74) <sup>***</sup>	0.9102 (3.99) <sup>***</sup>	0.4638 (2.40) <sup>**</sup>
<i>Chi2 Test of (T+T_DumCSR7)=0</i>	0.6971 (18.41) <sup>***</sup>	0.3039 (2.03)	0.6628 (18.21) <sup>***</sup>	0.2310 (1.75)
<i>Chi2 Test of (T<sup>2</sup>+T<sup>2</sup>_DumCSR7)=0</i>	-0.1375 (-11.63) <sup>***</sup>	-0.0568 (1.15)	-0.1299 (-11.33) <sup>***</sup>	-0.0338 (-0.61)
<i>OT<sup>Low</sup></i>	19.8502 (120.26) <sup>***</sup>	19.6033 (61.48) <sup>***</sup>	19.8483 (121.88) <sup>***</sup>	19.7198 (47.16) <sup>***</sup>
<i>OT<sup>High</sup></i>	25.3451 (15.39) <sup>***</sup> [22.12,28.57]	- [18.98,20.23]	25.5273 (14.75) <sup>***</sup> [22.14,28.92]	- [18.90, 20.54]
<i>OT<sup>Diff</sup></i>	5.4949 (3.62) <sup>***</sup> [2.52,8.47]	-	5.679 (3.54) <sup>***</sup> [2.54,8.82]	-
<i>Equ. (2): Dep. Var. = T CSR7</i>	0.0255 (6.44) <sup>***</sup>	0.021 (2.01) <sup>**</sup>	0.0264 (6.58) <sup>***</sup>	0.0134 (1.38)

# Contributions

- **First**, this study adds to the large body of literature **on the determinants of audit firm portfolio management decisions**.
- **Second**, the offsetting effect of positive (negative) impact of auditor-client retention on normal (abnormal) firm valuation documented in this study provides new insights in evaluating **the costs and benefits in mandating audit firm rotation**.
- **Third**, it extends auditor tenure literature in **jointly considering managers' and auditors' incentives in examining any economic consequences of auditor-client decisions** (e.g., Myers et al. 2003; Johnston et al. 2002; Ghosh and Moon 2005; Davis et al. 2009; Mansi et al. 2004).

# Any Questions?



*Thank  
you!*