

Sufficiency Economy Philosophy and Firm Risks

Pattanaporn Chatjuthamard,
Vacin Lawatanatrakul,
Nick Pisalyaput,
and Vasu Srivibha

**Sasin Graduate Institute of Business Administration of
Chulalongkorn University**

Overview and Objective

- Working Paper -

- His Majesty King Bhumibol Adulyadej
 - Middle path (Buddhism)
 - For all, from individuals to enterprises
 - Safe and sound in a changing world
- For a public company
 - Management mindset -> Corporate practices -> Business outcomes
 - Asian Financial Crisis 1997 (Tom Yum Goong)
- Empirical research showing quantitative results.

Our Empirical Research Showing Quantitative Results

- Working Paper -

- 1st quantitative study of Sufficiency Economy Philosophy (SEP).
- We construct an SEP Measure.
- We find that SEP practices help reduce Firm Risks.
- We find no relationship between SEP measure and other performance measures (No anti-development principle).
- SEP practices are aligned with investors' interests.

Sufficiency leads to Sustainability

- Working Paper -

Sustainability Management:

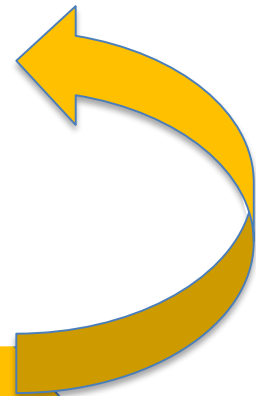
meet the needs today while protecting the future

- Long-term than short-term
- stakeholders than stockholders
- stable growth than rapid expansion

Sufficiency Economy Philosophy:

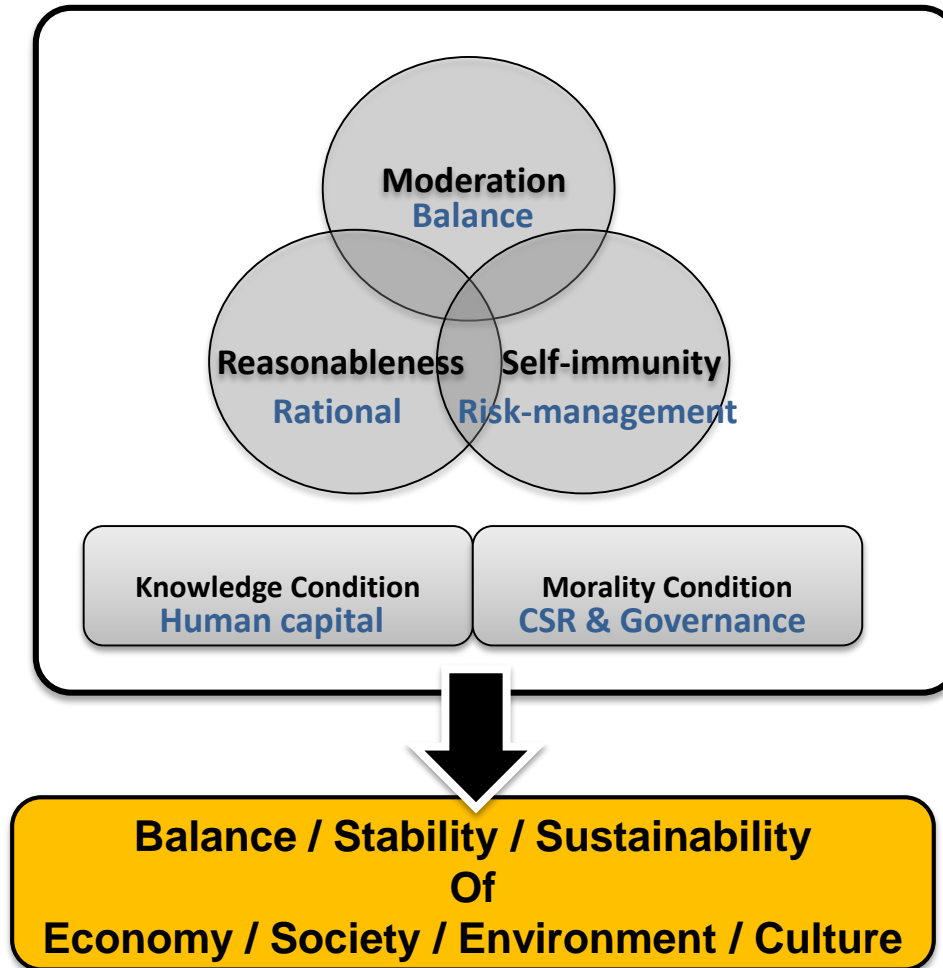
A Buddhist-inspired mindset

- Asian wisdom
- His Majesty King Bhumibol Adulyadej
- 1997 Asian Financial Crisis



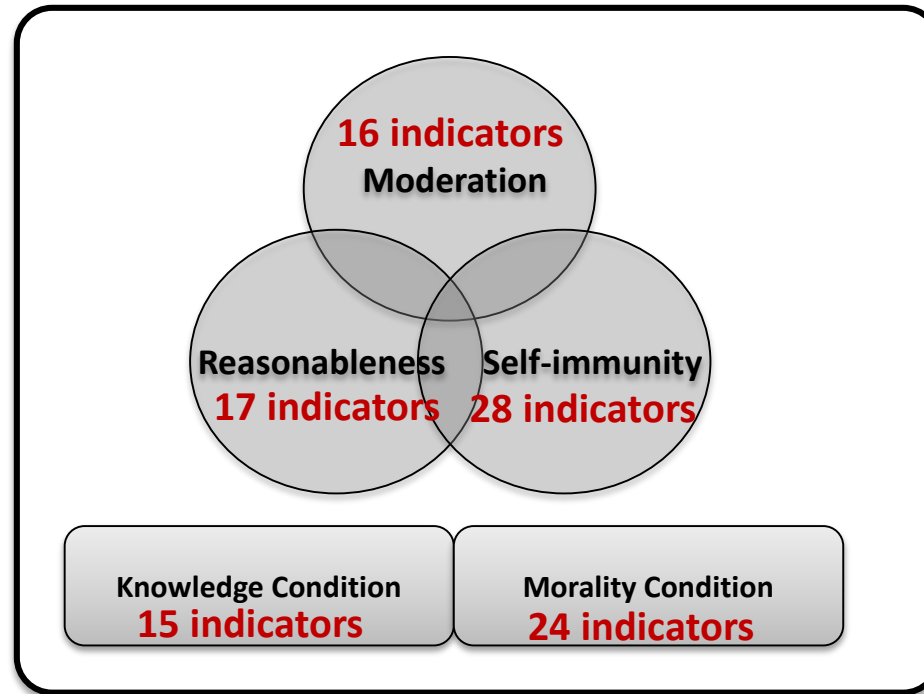
Sufficiency leads to Sustainability

- Working Paper -



63 indicators to measure SEP

- Working Paper -



- Indicators are adapted from previous studies listed as follows
 - Corporate Governance Indicators (2013) by Thai Institute of Director (IOD)
 - Thai Industrial Standard 999
 - Sufficiency Economy Leadership Practices (phase 1)
 - Sufficiency Economy Business Standard

What indicators?...for example...

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- Reasonableness

- Definition : Rationality, causal nexus, logic, reasoning prior to making decision. Sachayansrisakul (2009) Calkins (2006) Pantasen (2006)
- Shareholders have opportunity to ask and give opinion.
- Company created debt moderately and rationally.

What indicators?...for example...

- Working Paper -

- Knowledge

- Appoint directors from their knowledge and experience
- Board diversity.

- Morality

- Indicators about Corporate Social Responsibility and Corporate Governance.

We manually collected data from...

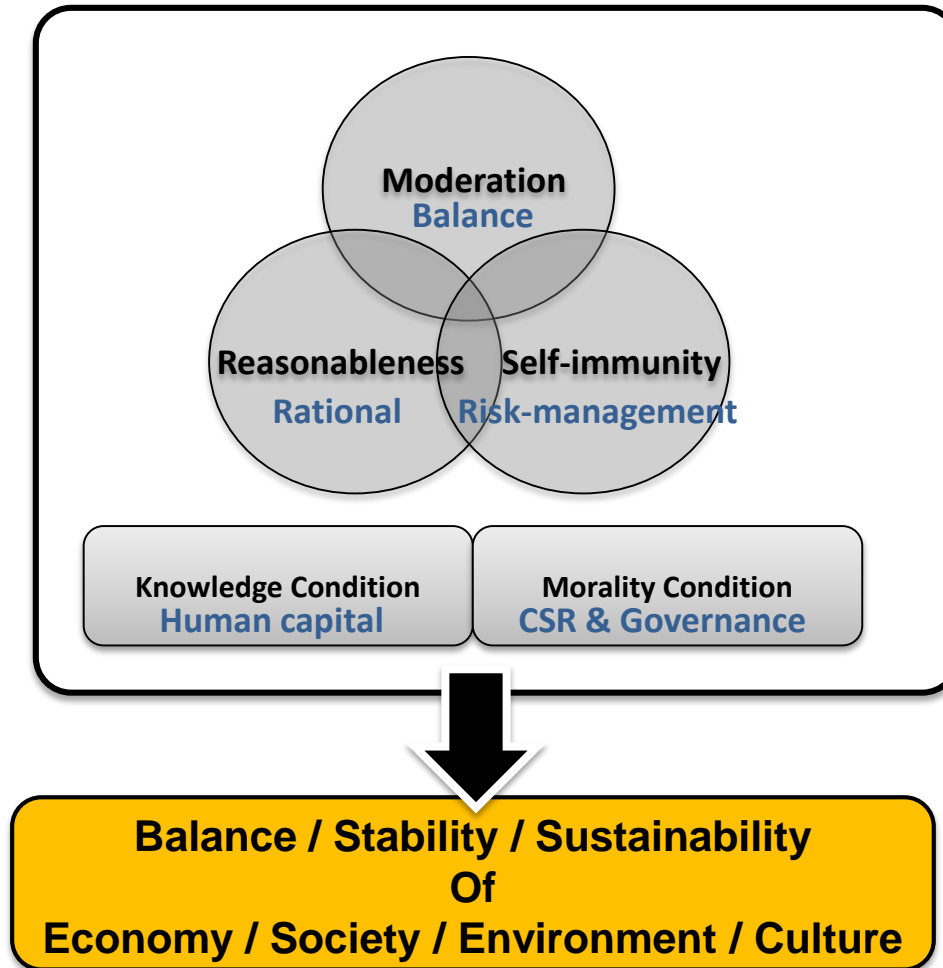
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- Disclosure Data in 2012 of SET50 firms
 - Firms' websites, annual reports
 - Stock Exchange of Thailand (SET)
 - Securities and Exchange Commission Thailand (SEC)
- From 63 indicators, an SEP Score ranging from 0-100

Variables	Mean	Median	STD Dev	Min	Max
SEP	63.01	64.19	8.47	44.58	81

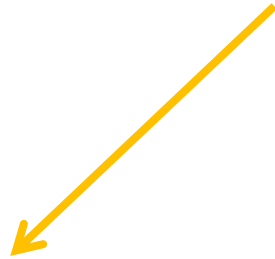
Alignment w SEP should reduce risks.

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Investors face 2 types of risks

Total Risk = Market Risk + Firm-specific Risk



“risk that affects all investments”



“risk that affects specific firms”

Run CAPM to get Risk Measures

Total Risk : STD of stock returns (daily/weekly)

Market Risk: β

Firm-specific Risk: STD of e_{it}


$$r_{it} = \alpha_i + \beta r_{mt} + e_{it}$$

r_{it} = return of stock i in time t (daily/weekly)

r_{mt} = return of market in time t (daily/weekly) (Use SET, SET100, or SET50)

e_{it} = residual from the model

(Jan 2008-Dec2012)

High SEP Alignment, Low risks

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- Correlation between our SEP score and risk measures (weekly data).

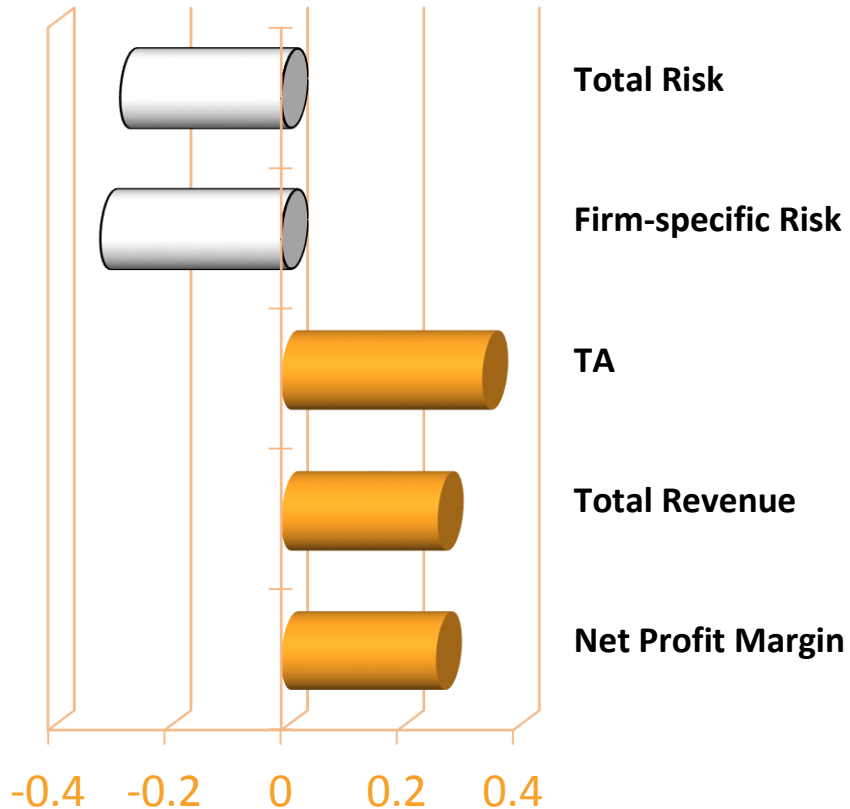
Total Risk (STD of returns)	-0.276 *
	(0.080)
Market Risk (Beta)	0.123
	(0.443)
Firm-specific Risk (STD of Residual)	-0.310 *
	(0.049)

The p-values are in parentheses.

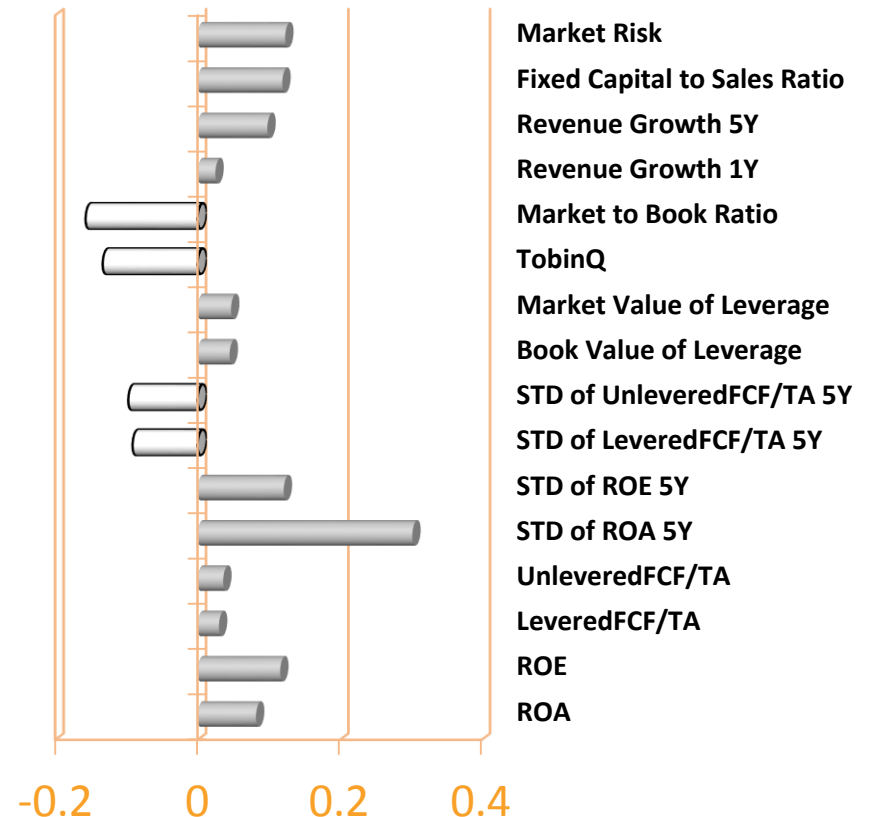
What about other measures?

- Correlation between our SEP score and other measures.

Significant (P<10%)



Non-significant (P>10%)

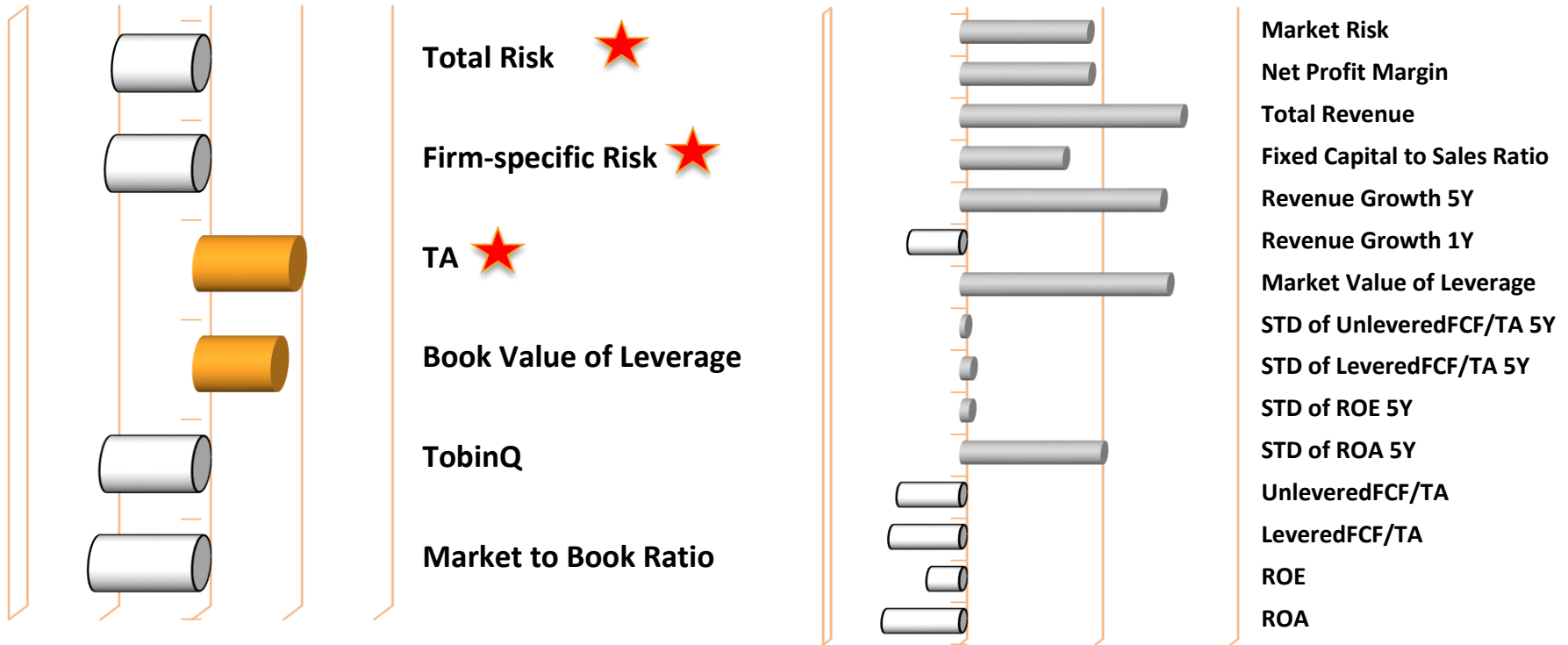


Changing test, still, High SEP, Low Risks.

- 2 groups test. High-SEP group minus Low-SEP group.

Significant (P<10%)

Non-significant (P>10%)



 Robust results

	Model 1 (SET Day)	Model 2 (SET Day)	Model 3 (SET Day)	Model 4 (SET50 Day)	Model 5 (SET100 Day)	Model 6 (SET Week)	Model 7 (SET50 Week)	Model 8 (SET100 Week)
Intercept	0.0341	0.0226	0.0351	0.0356	0.0354	0.0788	0.0801	0.0795
	<(0.01)	<(0.01)	<(0.01)	<(0.01)	<(0.01)	<(0.01)	<(0.01)	<(0.01)
SEP	-0.0002		-0.0002	-0.0002	-0.0002	-0.0005	-0.0005	-0.0005
	(0.04)		(0.08)	(0.08)	(0.08)	(0.07)	(0.07)	(0.07)
TA		-3.75E-09	-3.63E-09	-3.76E-09	-3.70E-09	-7.66E-09	-8.07E-09	-7.91E-09
		(0.03)	(0.03)	(0.03)	(0.03)	(0.05)	(0.04)	(0.04)
ROE		-0.0078	-0.0042	-0.0046	-0.0044	-0.0079	-0.0088	-0.0084
		(0.28)	(0.56)	(0.54)	(0.54)	(0.64)	(0.60)	(0.62)
STD of ROE 5Y		0.0180	0.0200	0.0203	0.0202	0.0538	0.0545	0.0543
		(0.18)	(0.13)	(0.12)	(0.12)	(0.07)	(0.07)	(0.07)
Book Value of Leverage		-0.0066	-0.0065	-0.0066	-0.0066	-0.0152	-0.0157	-0.0156
		(0.36)	(0.35)	(0.35)	(0.34)	(0.34)	(0.33)	(0.33)
Market to Book Ratio		7.28E-05	-0.00012	-0.00012	-0.00012	-0.00041	-0.00041	-0.00041
		(0.85)	(0.76)	(0.76)	(0.76)	(0.64)	(0.65)	(0.65)
R-squared	0.09	0.18	0.24	0.25	0.24	0.23	0.24	0.24
Num. Obs.	41	40	40	40	40	40	40	40

Conclusions

- 1st quantitative study of Sufficiency Economy Philosophy (SEP).
- SEP practices help reduce Firm Risks.
- SEP practices are NOT anti-development.
- SEP practices are aligned with investors' interests.
- Limitation: Small sample size – a pilot version

What about other measures?

- Working Paper -

- Correlation between our SEP score and other measures.

	Correlations	P-Values
TA	0.346 *	2.67%
Total Revenue	0.269 *	8.93%
ROA	0.082	61.03%
ROE	0.116	47.14%
LeveredFCF/TA	0.030	85.33%
UnleveredFCF/TA	0.036	82.08%
STD of ROA 5Y	0.302	15.46%
STD of ROE 5Y	0.121	45.11%
STD of LeveredFCF/TA 5Y	-0.091	57.35%
STD of UnleveredFCF/TA 5Y	-0.097	54.46%
Book Value of Leverage	0.045	78.15%
Market Value of Leverage	0.047	77.47%
TobinQ	-0.133	41.39%
Market to Book Ratio	-0.157	33.18%
Net Profit Margin	0.266 *	9.25%
Revenue Growth 1Y	0.025	87.53%
Revenue Growth 5Y	0.098	54.63%
Fixed Capital to Sales Ratio	0.119	45.73%

Change test, still, High SEP, Low Risks.

- Working Paper -

- 2 groups test.

Variables	Mean of the High SEP Group	Mean of the Low SEP Group	High-Low	t-values	p-values
SEP	69.7508	55.9379	13.8129	9.12	0.0001
Market Risk (Beta)	1.0205	0.9065	0.1141	0.94	0.3508
Firm-specific Risk (STD_Residual)	0.0394	0.0448	-0.00542*	-1.75	0.0876
TA	237463	71830.1	165633*	2.11	0.0471
Total Revenue	285495	71831.5	213664	1.63	0.1192
ROA	0.0995	0.1199	-0.0204	-0.57	0.5734
ROE	0.2241	0.2396	-0.0156	-0.24	0.8125
LeveredFCF/TA	0.0208	0.0402	-0.0194	-0.52	0.6091
UnleveredFCF/TA	0.0295	0.0466	-0.0171	-0.46	0.6494
STD of ROA 5Y	0.0385	0.0298	0.00862	1.04	0.3028
STD of ROE 5Y	0.0808	0.0789	0.00193	0.07	0.9407
STD of LeveredFCF/TA 5Y	0.0793	0.0776	0.00163	0.08	0.9332
STD of UnleveredFCF/TA 5Y	0.0788	0.0781	0.000721	0.04	0.9697
Book Value of Leverage	0.3381	0.2571	0.0809*	1.71	0.0996
Market Value of Leverage	0.2183	0.1547 (N=19)	0.0636	1.53	0.1354
TobinQ	1.9816	3.4367 (N=19)	-1.4551*	-2.02	0.0546
Market to Book Ratio	3.348	6.1414 (N=19)	-2.7933*	-2.27	0.0291
Net Profit Margin	0.1633	0.1261	0.0372	0.95	0.3499
Revenue Growth 1Y	0.1629	0.187	-0.0241	-0.38	0.7063
Revenue Growth 5Y	1.2459	0.6986 (N=19)	0.5473	1.48	0.1498
Fixed Capital to Sales Ratio	0.8052	0.611	0.1942	0.76	0.4494

- Board of directors consists of both male and female (KC)
- Directors pursued IOD training or other related training programs (KC)
- A director (or more) pursued a seminar or training program(s) to enhance his/her knowledge in the assessment year (KC)
- Orientation for new directors (KC)
- Board of directors emphasis CG rules and provides a code of conduct for directors (MC)
- Attendance of board members (MC)
- Clear distinction between the roles duties and responsibilities of the board and management (ME) (MC)
- Chairman independence (MC)
- Board meeting frequency (ME) (MC)
- System established to prevent the use of material insider information and inform all employee, managers, and board members (MC)
- Insider trading cases or illegal cases involving directors and/or managers in the past two years. (MC)
- Attendance of board directors in AGM (MC)

- Quality of notice to call shareholders' meeting in appointment of directors (KC)
- Shareholders can elect board members individually (MC)
- Qualifications of proposed Directors (ME) (RE)
- Presentation of board remuneration to the shareholders (ME) (RE)
- Shareholders have opportunity to ask and give opinion (RE) (SE)
- Minority shareholders can propose new members of the board (RE)
- Cumulative voting used to elect board members (RE)
- Comments and opinions for this agenda are recorded (RE) (SE)
- Company has comprehensive analysis for current competitive landscape and discloses the results (KC)
- Company has feasibility study for future investment. (KC)
- Financial performance is provided and comprehensively analyzed for further improvement. (KC) (RE)
- Risks are considered for policy and strategy development. (KC) (SE)

- Company has vision, mission, and long term plan. (ME) (RE)
- Company emphasis on using current resources and core competencies efficiently (ME)
- Company has policies or strategies to efficiently utilize local resources (ME)
- Company policies and strategies are based on the results of situation analysis and explained rationally (RE)
- Company created debt moderately and rationally (ME) (RE)
- Company focuses not only on financial outcomes but also non-financial outcomes such as stakeholder satisfaction, stakeholder relationship, social impact, and environmental preservations, etc. (ME) (SE)
- Company makes plans for development consequently (SE)(ME)
- Company has mechanisms to encourage collaborations from employees to participate in strategy formulations (RE)
- Company has mechanisms to encourage collaborations from shareholders to participate in strategy formulations (RE)
- Company has mechanisms to encourage collaborations from other stakeholders to participate in strategy formulations (RE)
- Company encourages innovation for organizational effectiveness (ME) (KC)
- Company encourages local technology for organizational effectiveness (ME) (KC)

- Company has established a risk management unit. (SE)
- Company has mechanisms or policies to manage, prevent and monitor risks. (SE)
- Company has diversified products. (SE)
- Contents of the company website with up-to-date information (SE)
- Multiple channels were used to provide access to information (SE)
- Company has a unit that is responsible for encouraging and monitoring ethics and morality culture entire the organization (MC)
- Company encouraged employee's ethics and moral behaviors (MC)
- Company has a unit that is responsible for the well-being of internal stakeholders: employee and investors (SE) (MC)
- Company has safety and welfare policy benefits of employees (SE) (MC)
- Company has provident fund/retirement fund provided for its employees (MC)
- Company has policies or strategies for shareholders engagement. (SE) (MC)
- Company has a unit that is responsible for social responsibility activities or the well-being of external stakeholders (SE) (MC)

- Company has policies or strategies for beneficial of local communities (SE) (MC)
- Company has policies or strategies for customers engagement (SE) (MC)
- Company has policies or strategies for suppliers and business partner Engagement (SE) (MC)
- Company has policies or strategies for creditor engagement (SE) (MC)
- Company has policies or strategies for competitors engagement (SE) (MC)
- Company has policy or strategies for communities or other stakeholders engagement (SE) (MC)
- Company has policies or strategies for ecological preservations such as waste management and environmental protection. (SE) (MC)
- Internal Audit Function (SE)
- Audit Committee report in the annual report is contained the following key items; (SE)
...
- Annual board self assessment (SE) (KC)
- The results of self assessment are used for improvement of directors (KC) (ME) (RE)
- Annual performance assessment of CEO/MD/President (SE) (KC)

- Annual performance evaluation system (SE) (KC)
- Bonus and incentives were based on personal evaluation (ME) (RE) (SE) (MC)
- The results of performance appraisal are used for employee improvement (KC) (ME) (RE)