

## Workplace Condition as a Moderator between Innovation Investment and Company Performances

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### ABSTRACT

*This study aims at investigating the moderating effect of workplace conditions, namely occupational safety and health, employee development, employee retention, employee diversity and employee relation; on the relationship between innovation investment and company performance. The study was conducted using the annual report for year 2007 and 2008 as the main source of data collection. The finding shows that the workplace conditions are not significantly contributed to the ROE in the interaction effect. However, the employee development was noted to have negative significant contribution to the ROE in the direct effect model which may be due to the short period of observation. It is concluded that workforce conditions is not necessarily producing positive input to ensure that innovation investment undertaken by the firm would improve company performance in a short run.*

**Keywords:** Working conditions, innovation, performance

### 1. INTRODUCTION

Workplace is a place where people work such as office and factory; that has an establishment or facility at a particular location containing one or more work areas (Hornby, 2000). From the Corporate Social Responsibility (CSR) perspective, workplace conditions are focusing on the conditions of work including wages and other forms of compensation, working time, rest periods, holidays, disciplinary and dismissal practices, maternity protection and welfares such as safe drinking water, canteens and access to medical services (ISO 26000). According to the Organization for Economic Co-operation and Development (OECD), 75.7 per cent of the codes of conduct were listed under the 'reasonable working environment' in year 2001. This shows that the workplace conditions are very important for an organization (Guentes-Gracia, Nunez-Tabales, & Veroz-Herradon, 2008). This fact was supported by The Future of CSR: 2009 Report, which has listed the labour and human resources as

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the top three CSR issues covering the aspects of appropriate wages levels; discrimination; workplace conditions and child labour (CSR Asia, 2009).

In relation to the importance of workplace conditions to the organizations, the CSR Asia has taken an initiative by developing an indicator entitled CSR Business Barometer and has located the 'Workplace and People' as one of the dimensions with indicators including health policy, health and safety training programme, pre-planned staff training time/budget, lifelong learning policy/programmes, company-wide employee benefits statement/policy, overtime compensation policy, employee satisfaction surveys, disclosure of diversity statistics, diversity policy/initiatives, equal opportunity statement/policy, human rights statement/policy, process for formal complaints and freedom of association policy statement (CSR Asia, 2008). These indicators are closely linked with the guidelines based on the International Labour Organization's (ILO) declaration of business principles and social policy.

Over the years, there are lots of study that has been made concerning the link between corporate social responsibility (CSR) initiatives and organisational performance (Mill, 2006; Rettab, Brik, & Mellahi, 2009; Nelling & Webb, 2009). It also summarized that 27 out of 39 studies on relationship between corporate social responsibility and financial performance had measured to have positive relationship (Rettab et al., 2009). Margolis and Walsh (2003 as quoted in Mill, 2006) said that: "...there is a positive association and certainly very little evidence of a negative association, between a company's social performance and its financial performance". Business for Social Responsibility (BSR) also had reported the CSR activities have intangible effects to the company performance as they showed up in any systematic way on the balance sheet, the profit-loss statement or cash flows. Thus, workplace would possibly have the positive relationship with the financial performance.

Innovation increasingly being recognized and emphasized as an important priority for business organizations throughout the world (Hashim et al., 2003; Fukugawa, 2006). This is because business organizations need innovation to create as well as maintain their competitive advantages (Hashim et al., 2003; Xu & Zhang, 2008). These competitive advantages could include comparative advantages by obtaining access to lower costs production (Klaassen, Miketa, Larsen, & Sundqvist, 2003), as well as the firm's ability to obtain economies of scale in production, marketing or purchasing through high level of export (Huse et al., 2005). In addition, innovation not only lead to new products (Srinivasan, 2003), expansion to new markets segment (Xin et al., 2009) and to commercial but also financial success (Fassin, 2000). Acknowledging the importance of workplace conditions in enhancing firm's financial performance through innovation, this study aims at investigating the moderating effect of workplace conditions on the relationship between innovation investment and company performance.

## **2. LITERATURE REVIEW**

### **2.1 Stakeholder and Corporate Social Responsibility (CSR)**

CSR nowadays is becoming an increasingly prominent issue not only in Europe and North America (Council for Better Corporate Citizenship, 2002) but also in emerging economy such as Malaysia (Yakcob, 2006). It becomes a notable topic in both the business and academic press (Nelling & Webb, 2009). Referring to Social Investment Forum, the total social responsible investment (SRI) in the United States stood at around US\$40 billion in 1984, continued to grow in the 1990s, and reached more than US\$2.3 trillion in 2001 (Council for Better Corporate Citizenship, 2002).

Wherther & Chandler (2006) stated that the entirety of corporate social responsibility (CSR) covers the relationship between corporations (or other large organizations) and the societies with which they interact. Business for Social Responsibility (BSR) defined CSR as achieving commercial success in ways that honour ethical values and respect people, communities, and the natural environment (BSR Staff, 2003). A definition of European Commission in its Green Paper of 2001 is widely accepted in which CSR is “a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis. Being socially responsible means not only fulfilling legal expectations, but also going beyond compliance and investing ‘more’ into human capital, the environment and the relations with stakeholders” (Miraglio, Hunter, Iucci, & Pinoargote, 2007). Supporting on investing ‘more’ into human capital, Bursa Malaysia has split their workplace element from society so that everything that they do with their staff needs to be socially responsible, whether dealing with basic human rights or gender issues. Bursa Malaysia also puts the quality work environment, safety, and health as obvious consideration since numerous study on the relationship between human resource management (HRM) and firm performance within large firm show evidence of a positive impact (Sels, Winne, Delmotte, Faems, & Forrier, 2006).

### **2.2 Workplace and Employee as Main Stakeholder**

Business has a direct stake in putting human needs first. Working conditions that respect the need for human dignity, equality and social protection also bring productive workplaces and competitive business (Somavia, 2000). It is also argued that business depends on access to capital, infrastructure in areas of education, health and environmental safety, institutions for social dialogue, science and technology, communications, transportation and logistics. Same as in the workplace, the interaction between economic efficiency and equity demonstrates a productive factor that brings social efficiency. Well-corroborated

evidence shows, for instance, that safer jobs are more productive; that child labour undermines longer-term economic capacity; that effective policies for gender equality lead to more dynamic business growth; and that a more secure population supports a workforce that is more able and willing to adjust to economic change.

In relation to the importance of workplace conditions to the organizations, the CSR Asia has taken an initiative by developing an indicator entitled CSR Business Barometer and locate the ‘Workplace and People’ as one of the dimensions. Those indicators are closely linked with the guidelines based on the International Labour Organization’s (ILO) declaration of business principles and social policy. For this study, 12 indicators are used and were combined into five groups. The groups and its indicators are tabulated in Table 1.

Table 1: Indicators for Workplace Conditions

Groups	Indicators
1. Occupational Safety and Health (OSH)	<ul style="list-style-type: none"> <li>• Health policy</li> <li>• Safety and Health Training</li> </ul>
2. Employee Development	<ul style="list-style-type: none"> <li>• Staff training</li> <li>• Lifelong learning</li> </ul>
3. Employee Retention	<ul style="list-style-type: none"> <li>• Employee benefits policy/programmes</li> <li>• Overtime compensation policy</li> <li>• Employee satisfaction survey</li> </ul>
4. Diversity	<ul style="list-style-type: none"> <li>• Diversity policy</li> <li>• Equal opportunity statement</li> <li>• Human right statement</li> </ul>
5. Employee Relations	<ul style="list-style-type: none"> <li>• Process for formal complaints</li> <li>Freedom of association policy/statement</li> </ul>

*Source: CSR Asia (2007), CSR Business Barometer*

### 2.3 Innovation Investment

Innovation increasingly being recognized and emphasized as an important priority for business organizations throughout the world (Hashim et al., 2003; Fukugawa, 2006). This is because business organizations need innovation to create as well as maintain their competitive advantages (Hashim et al., 2003; Xu & Zhang, 2008). These competitive advantages can include comparative advantages by obtaining access to lower costs production (Klaassen, Miketa,

Larsen, & Sundqvist, 2003), as well as the firm's ability to obtain economies of scale in production, marketing or purchasing through high level of export (Huse et al., 2005). In addition, innovation not only leads to new products (Srinivasan, 2003), expansion to new markets segment (Xin et al., 2009) and to commercial but also financial success (Fassin, 2000).

In order to be successful in today's dynamic environment, business needs to continuously invest substantial amounts into research and development (R&D) to achieve a competitive advantage firms that are motivated to compete on the basis of innovation, they need a capital structure that could continuously and uninterrupted support R&D investment (Chen, Hsu, & Huang, 2008). Table 2 indicates R&D investment in selected countries. Korea's rapid development drove by very high rates of savings and investments with strong emphasis on education. Over these years, capital equipment investments have been accompanied by an increase in investment in R&D. It documents the fact that Korea has increased its R&D expenditures at a very high rate of almost 16.5 percent each year from 1977 to 2000. This growth rate ranks Korea top in an international comparison with leading industrial economies of the world. This spectacular record has continued after year 2000. The country's annual growth in R&D investment stood at 40 percent in 2004 (Yurtoglu, 2007).

Table 2: *Growth of the industrial R&D expenditures across countries*

Country	R&D Expenditures in 1977 <sup>a</sup>	R&D Expenditures in 2000 <sup>a</sup>	Trend Growth Rate
USA	62,891	118,135	2.64
Japan	8,414	66,966	9.52
Australia	643	1,728	5.90
Canada	1,325	5,581	5.71
Denmark	298	1,196	6.66
Finland	286	2,461	8.78
France	9,870	16,322	2.30
Germany	8,484	32,688	5.09
Ireland	824	292	-4.10
Italy	8,282	5,315	-1.43
Netherlands	1,248	3,513	4.28
Norway	308	586	3.06
Spain	1,083	2,669	4.74
Sweden	199	5,127	6.54
UK	12,331	12,840	-0.55
India	607	4,828	7.82
South Korea	360	9,781	16.51

**Notes:** <sup>a</sup> Million PPP\$ at 1995 prices

**Sources:** OECD (2002) adapted from Yurtoglu, 2007.

The increase in R&D spending is evident by the Gross Expenditure of Research and Development (GERD) per capita and the GERD/GDP ratio. As reported by

IMD World Competitiveness Yearbook 2007 and World Development Indicators, in year 2007 Malaysia's GERD per capita in the amount of RM137.1 was ranked 41st in the world. Malaysia's private expenditure on Research and Development (R&D) is RM3.1 billion and put Malaysia in ranked 29 (MASTIC, 2008).

Also reported that even though R&D activities decreased from 2004-2006, for the 10 year period of 1996 to 2006, R&D activities in Malaysia have shown a significant positive trend. In nominal terms, the GERD increased 6.5 times, and in real terms, it increased 4.7 times. Furthermore, the GERD over GDP ratio for the ten-year period has been growing faster than the growth of the real GDP; the real GDP increased by about 50 percent, and the GERD over GDP ratio increased by about 190 percent; from 0.22 in 1996 to 0.64 in 2006.

This upward trend is also evident for the number of R&D personnel, researcher FTE, and FTE per researcher. These trends mean that Malaysia is making steady progress in its R&D activities. However, even though Malaysia's R&D activities for the 10 year period have shown a positive trend, they are still relatively small compared to many developed countries and the East Asian Newly Industrialized Economies. This places Malaysia in the same group as the lower middle-income countries, similar to its GDP per capita. However, Malaysia spent more on R&D activities compared to the South and South East Asian countries, and the OIC member countries (MASTIC, 2008).

#### **2.4 Innovation (R&D) Investment and Company Performance**

An analysis based on a representative portfolio of 304 EU top R&D investing companies over a four year-time (2003-2006) explained that R&D is an important strategic element for a firm (Audretsch and Vivarelli, 1996; Hsueh and Tu, 2004). It is evidenced that R&D activity plays an important role in generating innovation output for large firms than for small and medium-sized firms which reflected in the company's performance (Audretsch & Vivarelli, 1996). Based on these findings, the following hypothesis is proposed in this study:

*H1: There is a positive relationship between innovation investment and company performance.*

#### **2.5. Innovation (R&D) Investment and Occupational Safety and Health (OSH) on Company Performance**

Previous study investigated the influenced of innovation on the relationship between corporate strategy and social issues and found strong evidence that the firm's innovatory activity generates a reduction in environmental impacts or improvements in health and safety (Pavelin & Porter, 2008) and also contributes to a positive internal and external corporate image, as well as to service quality (Schmauder & Hoffmann, 2009). Besides, DeJoy, et al. (2009) had studied the

relationship between management support and worksite health promotion program effectiveness, which resulting positive effects associated with increased management support. In addition, this result indicates that the employees are likely to reciprocate by expending more on their effort to help the organization to reach goals once they feel appreciated by the company (Schmauder & Hoffmann, 2009). A study by Towers Perrin (2010) demonstrated that a focus on safety could improve on organizational performance in multiple areas. Based on these findings, the following hypothesis is proposed in this study:

*H2: The positive association between innovation investments on company performance is stronger for firms with good Occupational Safety and Health (OSH) practices*

## **2.6 Innovation (R&D) Investment and Employee Development on Company Performance**

Organizations that invest more in training days and dollars per employee may produce greater revenue per employee than those that invest less in this important human capital process (Williams & Arnett, 2008). It confirms the idea that employee development in the form of training, despite being a direct cost for the company, generally has a positive impact on performance (Valle & Castillo, 2009). Besides training, the learning as another part of employee development program also gives positive impacts towards the company performance. Studies done by Irish Congress of Trade Unions (2005) found that the broad area of education had played a crucial role in raising the growth potential of the Irish economy. But it had to be accompanied by investment in training and other forms of Lifelong Learning. It is because productivity is the key driver to a wealthy, growing, and employment-generating economy; and a key to increase productivity is more and better training. Based on these findings, the following hypothesis is proposed in this study:

*H3: The positive association between innovation investments on company performance is stronger for firms with good Employee Development practices*

## **2.7 Innovation (R&D) Investment and Diversity on Company Performance**

The review of past research on diversity effects on group processes and outcomes found that the cognitive benefits of diversity are generally outweigh by affective and behavioural cost (Hartel, Fujimoto, & Hartel, 2000). In addition, a large majority of respondents agreed that multiple perspectives due to diversity address strategic and operational issues and challenges with greater understanding of and sensitivity towards different customers and market segments. As a result of new ideas and synergy from the combination of different ideas, this will translate into organizational efficiency and corporate profit (European Community Programme

for Employment and Social Solidarity, 2007). This is due to diversity is the driving force behind knowledge spillovers, which comprised of diverse economic agents engaged in knowledge-based economic activity and likely to experience rapid increase in income (Audretsch & Thurik, 2000). Based on these findings, the following hypothesis is proposed in this study:

*H4: The positive association between innovation investments on company performance is stronger for firms with good diversity practices*

## **2.8 Innovation (R&D) Investment and Employee Relation on Company Performance**

A study involving employee relation through union presence by Laroche (2007) revealed that the union presence is not associated with perceptions of performance. In contrast, Addison (2005) studies found that combinations of innovative practices and worker representation could yield substantial productivity gain Bryson, Forth, and Laroche (2009) also found that high union density was associated with poorer financial performance in French, British and Peru workplace (Saavedra & Torero, 2002). Relating the importance of employee relation through worker representation in union, the following hypothesis is proposed in this study:

*H5: The association between innovation investments on company performance is stronger for firms with good employee relation practices*

Based on the above discussions, the following framework as shown in Figure 1 is developed to study the moderating effects of workplace conditions towards the innovation investment and company performances relationship.

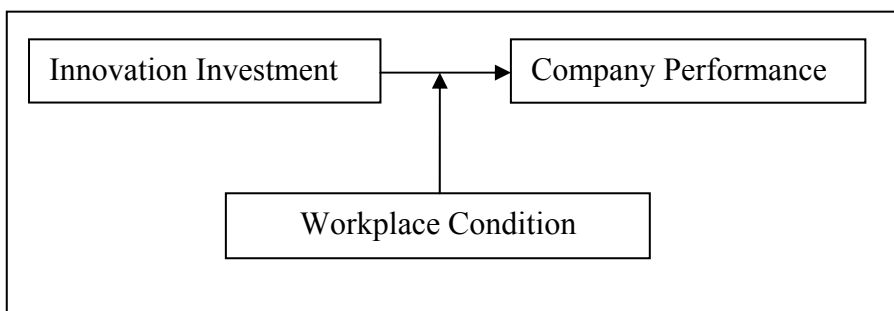


Figure 1: Framework of workplace conditions as a moderating for innovation investment and company performance

Based on stakeholder theory, employee and the workplace is one of the most valuable resources as the employees expected to reciprocate by expending more



effort to help the organization reach its goal (DeJoy, et al., 2009). Hence, the stakeholder theory will be the foundation for exploring the relationship above.

### **3. METHODOLOGY**

#### **3.1 Data Collection and Sample Selection**

This study is analytical in nature whereby the objective is to investigate the moderating impact of workplace condition on the relationship between innovation investment and firm performance. For this study, sampling method used is the purposeful samplings. It is because; the data is purposely selected due to the requirement set in the theoretical framework – companies which have innovation investment figure only. In addition, purposeful samplings also intended to counteract the potential biases in convenience sampling (Kennedy, 2006).

This study will be a cross-sectional research using the secondary data obtained from the annual report of public listed companies in Bursa Malaysia's Main Board whose annual reports are available in year 2007 and 2008. The sampling is limited for these two years because of two main reasons. The first reason is that public listed companies in Malaysia were urged to disclose their CSR practices in the annual report only by September 5, 2006 (Yakcob, 2006). The second reason is the availability of the 2009 annual reports is limited at the point of study. The companies selected mostly from industrial products sector followed by trading and services sector, consumer products sector, technology sector and construction sector. The companies selected from these sectors on the basis that these sectors have spends significant amount of resources in the innovation, which includes the R&D and patents expenditure. All finance related firms, banks, insurance, unit trust; utilities companies are excluded from the sample due to their differences in the regulatory requirements, financial reporting standards and compliance (Mat Nor & Sulong, 2007, pp. 11).

A final sample of 104 companies were selected comprising thirty-five companies from industrial products sector, 30 companies from the trading and services sector, 27 companies from the consumer products sector, 11 companies from technology sector and finally 3 companies under the construction sector. Table 3 shows the breakdown of the companies based on the sectors, total population for each sectors and the number of the percentage of companies take into sample.

Table 3: Number of Companies Selected in the Sample based on the Industry Categories

<b>Industry Membership</b>	<b>Total Listed Companies</b>	<b>Sample</b>	<b>Percentage (%)</b>
Industrial Product	269	35	13.01
Consumer Product	133	27	20.30
Technology	25	11	44.00
Construction	50	3	6.00
Trading and Services	182	30	16.48
<b>Total</b>	<b>659</b>	<b>106</b>	<b>16.08</b>

**a. Model Specification**

The following regression equations used as the primary model to test the hypotheses. Each model will contain the interaction term of innovation investment (Inoest) and workplace condition. The general model of this study can be described as follows:

Set 1:  $ROE = \beta_0 + \beta_1 Inoest + \beta_2 Size + \beta_3 OSH + \beta_4 DEV + \beta_5 RET + \beta_6 DIV + \beta_7 REL + \epsilon$

**Model with Interaction term:**

Set 2:  $ROE = \beta_0 + \beta_1 Inoest + \beta_2 Size + \beta_3 OSH + \beta_4 DEV + \beta_5 RET + \beta_6 DIV + \beta_7 REL + \beta_8 Inoest \times OSH + \epsilon$

Set 3:  $ROE = \beta_0 + \beta_1 Inoest + \beta_2 Size + \beta_3 OSH + \beta_4 DEV + \beta_5 RET + \beta_6 DIV + \beta_7 REL + \beta_8 Inoest \times DEV + \epsilon$

Set 4:  $ROE = \beta_0 + \beta_1 Inoest + \beta_2 Size + \beta_3 OSH + \beta_4 DEV + \beta_5 RET + \beta_6 DIV + \beta_7 REL + \beta_8 Inoest \times RET + \epsilon$

Set 5:  $ROE = \beta_0 + \beta_1 Inoest + \beta_2 Size + \beta_3 OSH + \beta_4 DEV + \beta_5 RET + \beta_6 DIV + \beta_7 REL + \beta_8 Inoest \times DIV + \epsilon$

Set 6:  $ROE = \beta_0 + \beta_1 Inoest + \beta_2 Size + \beta_3 OSH + \beta_4 DEV + \beta_5 RET + \beta_6 DIV + \beta_7 REL + \beta_8 Inoest \times REL + \epsilon$

The definitions and measurement of all variables are presented in the following table.

Table 4: Summary of variable measurement

<b>Variables</b>	<b>Acronym</b>	<b>Indicator</b>
Dependent [Company Performance]	ROE	Net income after tax / average common shareholders' equity
Independent [Innovation Investment]	Inovent	Average amount of R&D investment, patent and research grant in Ringgit Malaysia.
Moderating [Workplace Condition]	Workplace: OSH	Dichotomous with 1 if there is any disclosure on OSH and 0 otherwise.
	DEV	Dichotomous with 1 if there is any disclosure on DEV and 0 otherwise.
	RET	Dichotomous with 1 if there is any disclosure on RET if there is any disclosure on RET and 0 otherwise.
	DIV	Dichotomous with 1 if there is any disclosure on DIV and 0 otherwise.
	REL	Dichotomous with 1 if there is any disclosure on REL and 0 otherwise.
Control	Size	Average value of Total Assets

## **b. Data Analysis and Empirical Method**

### **3.3.1 Descriptive Analysis**

Table 5 shows information for each dependent, independent and moderating variables concerning the mean, standard deviation, minimum, maximum value, skewness and also kurtosis. The descriptive statistics indicates the mean value for ROE is 0.070652. The minimum value is -1.748336 and maximum value is 0.5596. This indicates that an existence of outlier, due to extreme maximum value compared to the mean.

Table 5: Summary of Descriptive Analysis

<b>Independent Variable</b>	<b>Mean</b>	<b>Std Dev</b>	<b>Min</b>	<b>Max</b>	<b>Skewness</b>	<b>Kurtosis</b>	<b>K-S Stat</b>	<b>K-S Sig</b>
Innovation Investment Size	6.0762	1.00871	3.30	8.24	-.449	.142	n/a	n/a
<b>Moderating Variable</b>	<b>Mean</b>	<b>Std Dev</b>	<b>Min</b>	<b>Max</b>	<b>Skewness</b>	<b>Kurtosis</b>	<b>K-S Stat</b>	<b>K-S Sig</b>
Occupational Safety and Health	.882	.8063	.0	2.0	.400	-1.365	.865	.000
Employee Development	.558	.6397	.0	2.0	.886	-.194	.837	.000
Employee Retention	.187	.3497	.0	1.5	1.761	2.124	.588	.000
Diversity	.188	.4631	.0	2.0	2.841	7.762	.602	.000
Employee Relation	.135	.3055	.0	1.0	2.122	3.115	.846	.000
<b>Dependent Variable</b>	<b>Mean</b>	<b>Std Dev</b>	<b>Min</b>	<b>Max</b>	<b>Skewness</b>	<b>Kurtosis</b>	<b>K-S Stat</b>	<b>K-S Sig</b>
ROE	.070652	.240989	-	.5596	-4.525	31.490	n/a	n/a
		4	1.748	336				

In connection with the independent variable, the descriptive analysis indicates that the mean value for innovation investment is 6.0762 with the minimum and maximum values of 3.30 and 8.24 respectively. For the size, the mean score is 8.5457 and the maximum is 10.54. Thus, these also indicate that the outlier is presence; as the data is not skewed normally and have an extreme maximum value compared to the mean.

As for the moderating variables, the descriptive analysis indicates that the mean value for occupational safety and health is 0.822 while the maximum value is 2.0. For the employee development, the mean score is 0.558 and the maximum score is 2.0. The employee relation also shows the same trend with the mean value is 0.187 and the maximum value is 1.5. Mean value for the diversity is 0.188 with the maximum value 2.0. The final moderating variable is the employee relation with mean value equal to 0.135. The maximum value is 1.0. The minimum value for each moderating variables are the same which is zero. This indicates that an existence of outliers, as the maximum for almost all moderating variables is at the extreme value compared to mean. It is also likely that the data is skewed.

### 3.3.2 Content Analysis

The annual reports of the companies were downloaded from the Bursa Malaysia web site and company's CSR statement on workplace was scrutinised using content analysis. The results of the content analysis of the company social

disclosure are shown in Table 6, which provide data on the number of companies that provide disclosure for each dimension.

Table 6: Content Analysis on the Various Themes Disclosed

	Keyword	Disclosing Companies (making at least one disclosure)	
		2007	2008
<b><i>Theme</i></b>			
Occupational Safety and Health	Health Policy, Health and Safety Training etc.	44	50
Employee Development	Staff Training, Lifelong Learning Policy/Statement etc.	37	52
Employee Retention	Employee Benefits Statement, Overtime Compensation Policy, Employee Satisfaction Survey etc.	13	22
Diversity	Diversity Policy/Initiatives/ Statement, Equal Opportunity Statement/Policy etc.	13	16
Employee Relation	Process for Formal Relation, Freedom of Association Policy/Statement, Union etc.	10	15

Table 6 indicates that the most common type of theme disclosed by Malaysian companies for year 2007 are Occupational Safety and Health (42.31 per cent), Employee Development (35.68 per cent), Employee Retention and Diversity (12.50 per cent) and Employee Relation (9.62 per cent). For the year 2008, the trend of disclosure is still the same. At the top of the list, the Occupational Safety and Health is still become the most disclosed theme with 48.08 per cent, 5.77 per cent more than the earlier year and followed by employee development (35.58 per cent), employee retention (21.16 per cent), diversity (15.38 per cent) and, employee relation (14.42 per cent). These findings consistent with results report by CSR Asia (2007) which indicates that most Malaysian companies give greater attention and provision on information on health and safety, staff development processes and provision for employee welfare. However, in year 2008 the occupational, safety and health were moved to the third place as the training and benefits become the most theme disclosed in the companies' CSR statement. This could be resulted from the National Dual Training System (NDTS) under the Master Plan of Malaysian Occupational Skills Development and Training 2008 – 2020 which encourage the employers to send their

employees to this programme by giving single tax exemption incentive or refund of levy from the Human Resources Development Fund (HRDF) (Ministry of Human Resource, 2008).

### 3.3.3 Hypothesis Testing

The data is analyzed using SPSS 16 (Statistical Package for Social Science). The regression analysis is firstly conducted to identify the direct effect of innovation investment and performance. As the violation of the multiple regression assumptions is indicated, the data has been transformed into normal score using the van der Waerden formula. The regressions results are presented as follows:

Table 7: Result of Multiple Regression using Three Types of Data: Untransformed, Rank and Normal Scores

Variable	Untransformed				Rank method				Normal scores (Van der Waerden method)			
	Coeff value	t-stat	Sig-t	VIF	Coeff value	t-stat	Sig-t	VIF	Coeff value	t-stat	Sig-t	VIF
Intercept		-2.485	.015			2.820	.006			-.139	.890	
Inovert	-.006	-.053	.958	1.262	-.026	-.243	.809	1.305	-.002	-.019	.985	1.292
Size	.278	2.741	.007**	1.156	.241	2.306	.023**	1.216	.232	2.243	.027**	1.195
OSH	.017	.135	.893	1.823	.219	1.719	.089*	1.807	.212	1.657	.101	1.826
DEV	-.225	-1.691	.094*	1.978	-.274	-2.014	.047**	2.067	-.294	-2.160	.033**	2.066
RET	.138	1.231	.222	1.420	-.148	-1.307	.194	1.433	-.095	-.833	.407	1.442
DIV	.129	1.232	.221	1.234	.130	1.150	.253	1.425	.139	1.252	.214	1.364
REL	-.091	-.782	.436	1.511	.192	1.658	.100*	1.489	.187	1.593	.114	1.538
R <sup>2</sup>	.144				.138				.138			
F stat	2.316				2.203				2.193			
P	.032				.041				.041			

. \*Significant at the 0.10 level  
 . \*\*Significant at the 0.05 level  
 . \*\*\*Significant at the 0.01 level

The untransformed data has been detected to violate the multiple regression assumption on the normality, linearity and homoscedasticity. The presence of the outliers also detected from the Scatterplots. Based on the Table 7 regression model for ROE, with the normal scores data produced the same R<sup>2</sup> value as for ROE with the rank data. However, the F ratio is slightly lower than the F ratio of the rank transformation data at 0.05 level of significant. Only two variables out of four significant variables from the rank transformation data are significant in this model while only one of the variables noted to have positive relationship. The size has the strongest relationship with coefficient value equal to 0.232 as compared to employee development (coefficient value = -0.294). In overall, size and employee development are significant to all models. The size variable is found to be positively significant to all regression models whereas for the employee development it is vice versa. Further investigation indicates that this outcome may be resulted due to the short observation period. According to Ross, Westerfield, Jaffe, and Jordan (2009) and QFinance (2009), generally the

payback period is at least between two and half years to three years. Thus, this might partly explain the phenomenon.

The main objective of the study is to investigate the moderating effect of workplace conditions on the relationship between innovation investment and corporate performance. The results are presented in the following table.

Table 8: Results of Regressions Examining Innovation Investment, Workplace conditions and Company Performance

RETURN ON EQUITY (ROE)												
Variables	Direct Effect				Interaction Effect							
	Set 1		Set 2		Set 3		Set 4		Set 5		Set 6	
	β	Sig-t	β	Sig-t	β	Sig-t	β	Sig-t	β	Sig-t	β	Sig-t
<b>Ino</b> vest	-.002	.985	.011	.935	.002	.990	-.045	.700	.012	.915	-.006	.957
<b>Size</b>	.232	.027**	.235	.028**	.233	.028**	.239	.023**	.245	.023**	.231	.029**
<b>OSH</b>	.212	.101	.238	.267	.212	.102	.190	.147	.202	.124	.214	.103
<b>DEV</b>	-.294	.033**	-.295	.034**	-.285	.193	-.273	.050**	-.278	.050**	-.296	.034**
<b>RET</b>	-.095	.407	-.095	.409	-.094	.414	.206	.484	-.107	.359	-.097	.407
<b>DIV</b>	.139	.214	.140	.213	.139	.217	.143	.200	.336	.346	.141	.218
<b>REL</b>	.187	.114	.189	.115	.187	.116	.181	.127	.196	.102	.156	.638
<b>Ino</b> vestx <b>OSH</b>			-.037	.878								
<b>Ino</b> vestx <b>DEV</b>					-.012	.958						
<b>Ino</b> vestx <b>RET</b>							-.330	.270				
<b>Ino</b> vestx <b>DIV</b>									-.215	.560		
<b>Ino</b> vestx <b>REL</b>											.035	.921
<b>R<sup>2</sup></b>	.138		.138		.138		.149		.141		.138	
<b>F Stat</b>	2.193		1.903		1.900		2.078		1.949		1.901	
<b>P</b>	.041		.068		.069		.045		.061		.069	

. \*Significant at the 0.10 level  
 . \*\*Significant at the 0.50 level  
 . \*\*\*Significant at the 0.01 level

Referring to Table 8, the results from the regression analysis indicate that the interaction effect of OSH is not significant. As such, the study failed to support that OSH has moderating impact on the relationship between innovation investment and ROE. Therefore hypothesis 2 is rejected. The regression analysis on the interaction effect of employee development appears insignificant in all models. It concludes that employee development has no moderating impact on the relationship between innovation investment and ROE. Meanwhile, results from the regression analysis signify that the employee retention is also has no interaction effect. Therefore, hypothesis 4 is rejected implying that employee retention has no moderating impact on the relationship between innovation investment and ROE. Further testing of interaction effect of diversity also fails to prove that this variable significantly moderate the relationship between innovation investment and ROE.

#### 4. DISCUSSIONS

The study has shown that all sets across the regression model have the same results. None of the workplace conditions interaction is positively significant with the innovation investment and company performance relationship. Table 8 shows that the employee development was negatively contributed to ROE when it stands alone. In other words, the employee development only gives significant result when it is tested directly with the ROE. However, these results were contrary with the findings of prior studies by Jones et al. (2008) and Valle and Castillo (2009) which confirmed that training is positively and significantly associated with job satisfaction that significantly correlated with the workplace performance on most measures of performance. This phenomenon could be due to the short observation period. Moreover, this result may be due to the training period executing by the company. According to Jones et al. (2008) training which conduct less than two days proved to have no beneficial effect on the financial performance and this reason might partly explain this phenomenon.

Previous study indicates that occupational safety and health do have impact on the job satisfaction and company performance (Bauer, 2004; Buhai et al., 2008; Towers Perrin, 2010). Additionally, Kahya (2007) discovered that employee who worked in unpleasant conditions will demonstrate low job satisfaction simultaneously low company performance too. The insignificant results show that the occupational safety and health neither as a direct effect nor as interaction effect do not significantly contribute to the ROE.

The regression result shows that diversity is not statistically significant both for the direct and interaction effects. These findings were not aligning with the prior studies. The prior studies indicate that majority of respondents agreed that multiple perspectives due to diversity address strategic and operational issues and challenges with greater understanding and sensitivity towards different customers and market segments (Hartel et al., 2000). As the result, the organizational efficiency will transform into corporate profits (European Community Programme for Employment and Social Solidarity, 2007). This finding is different to the study by Audretsch and Thurik (2000) which manage to prove that diversity is the driving force behind knowledge spillovers which likely will increase company income rapidly.

Another variable that is not significant in explaining company performance is the employee retention. Same as the previous variables, the regression results for the employee diversity neither as a direct effect nor the interaction effect, both not significant with the ROE. Earlier study discovered that employee retention had close relationship with organizational commitment and work satisfaction (Curtis & Wright, 2001) which leads to company's performance.



The last variable for the workplace conditions is the employee relation. Employee relation is also found not significant for both sets of regression model. Prior study based on a sample of French establishments, Laroche (2007) proved that employee relations with the existence of union presence are not associated with performance. Bryson et al. (2009) also found that high union density is associated with poorer financial performance.

## 5. CONCLUSION

In summary, this study manages to provide a description of workplace initiatives that practiced by local companies in Malaysia. It is clear to see that the workplace conditions is not necessarily provides positive impact to the company performance. As discussed earlier in the literature review, workplace is one of the focal areas listed under the Bursa Malaysia's CSR Framework. Most of the previous studies found that the increase of CSR activities lead to enhanced financial performance and vice-versa (Waddock & Graves, 1997; Hillman & Keim, 2001; Nelling & Webb, 2009). Even though the previous study proved that CSR does have positive correlation between company financial performances, some unobserved heterogeneity will drive the result oppositely (Moon, 2007). This argument might partly explains this phenomenon. Moreover, the ultimate purpose of practicing CSR purely based on the concept of the CSR is not aiming for the profit but more focussing on serving the stakeholders or sharing the goodness of the company existence with the society and employee is a part of stakeholders and society. The company must fulfill their responsibility towards the society not only by fulfilling legal expectations, but also going beyond compliance especially into the human capital and stakeholder relationship (Miraglio et al., 2007). Employee as the main stakeholder in the workplace does have rights to have working conditions that respect the need for human dignity, equality and social protection, as they are the one that will generate income for the company (Somavia, 2000) and the Stakeholder theory can provide an appropriate underlying reason for this occurrence. The company and the stakeholder worked as a 'virtuous circle' as the stakeholders are always affected by the business organizations. Each activity done by the company which is affecting the employee indirectly impacts the business too.

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