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# MANAGING THE ADVERSE IMPACT OF CRISES AND DISASTERS THROUGH SUSTAINABILITY RISK MANAGEMENT (SRM)

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**ABSTRACT:** Crises and disasters, such as the tsunami in Japan and the September 11 attacks had a dramatic impact on the global environment. The integration of sustainability in enterprise risk management (ERM) to manage risks in a complex risk landscape helps to alleviate huge losses arising from such crises and disasters. Sustainability risk management (SRM) is an extension of ERM concept which manages the broad spectrum of unknown risks arising from sustainability issues with the aim to maximize the economic, environmental and social aspects for the corporate survival, in addition to addressing the potential opportunities for improvement in ERM practices. This paper provides a review of literature relating to the issues of ERM practices and the relationship between sustainability and ERM on corporate survival. This paper also highlights the SRM approach in minimising the immense impact of disasters and crises to the attention of policy makers.

Keywords: Enterprise risk management, sustainability, corporate survival, disasters, crises

### INTRODUCTION

Crises and disasters are recognised being two different events, even though both are interrelated to one other and they arise with little or no warning [1]. Thus, risk preparedness of such events is significant to preserve the survival of an organisation. Quarantelli described crises as organisation-based events while disasters are referred to as non-organisational based events that occur due to natural or man-made calamity [2]. Pearson and Clair [3] defined organisational crisis as "low-probability, high-impact event that threatens the viability of organisation and is characterised by ambiguity of cause, effect, and means of resolution, as well as by a belief that decisions must be made swiftly." Crises and disasters, such as tsunami in Japan and the September 11 attack on the World Trade Centre, are recognised as 'black swan' events [4]. The Japan earthquake and tsunami that occurred in 2011 led to a significant macroeconomic impact on the country with a huge loss on human and physical capital. Many people were killed, the financial markets in Japan and United States became more volatile than usual, and there was a significant interruption in the trade and supply chain [5]. Nafday [6] indicated that "the black swans are singular events, where the absence of event and likelihood information renders risk management methods futile, since in this world, even knowledge is of no use because experts do not really know what they do not know" (p. 109). 'Black swan' events are extremely challenging circumstances especially in terms of managing risks due to the failure in risk assessment. In most cases, risks of events are implausible and have never been encountered before. A risk management approach needs to be developed, inclusive of crises preparedness, quick detection, and early warning response in taking a precautionary approach towards these risks [7]. The steps are crucial to ensure viability of an organisation during the low-probability and high-impact events [8]. A recent study elsewhere [9], showed that risks arising from disasters and crises are difficult to be anticipated using quantitative risk models. This is due to the limited knowledge and tools to identify future risks that have never happened before. The occurrence of crises and disasters bring challenges to enterprise risk management (ERM) practices and could potentially lead to corporate failure [10]. Scholars argue that risk management approach needs transformation, parallel to the changing of exposure to potential risks towards the societies, so that the probabilistic definition of risk is no longer implicit [11,12,13,14,15]. In this case, as ERM alone is insufficient to address any unknown risks, 'black swan' events help to create awareness among the board of directors and top level management to accommodate these unanticipated crises and disasters. Companies must take 'black swan' events into consideration, although they are unlikely to occur because they pose long-term risks to companies [16]. This view is supported by one claim made by [17]; "a solid risk management program must consider risk that does not currently exist or are not recognised, but that might emerge following changes in the environment". Since risks assessment could not fully address the extreme events, risk management improvement is important. Quantitative risk assessment is relatively more desirable compared to judgemental risk assessment [18]. Risk quantification assessment implies that risk managers manage risks by the use of numbers [19]. This is ideally called 'calculative idealism' as inferred by [20]; "to induce correct economic behaviour in the light of the risk measures" (p. 14). In other words, risk managers often address risks that are measurable whilst the non-quantifiable risks were ignored. This paper thus discusses the potential shortcomings in ERM practices and proposes the integration of sustainability into ERM practices to better manage the adverse impact of crises and disasters, ensuring a long-term corporate survival.

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#### THE FAILURE OF ENTERPRISE RISK MANAGEMENT (ERM) PRACTICES

ERM is believed to cover all types of risks facing an organisation from theoretical perspectives. However, it fails to achieve the objectives in practical terms. There are a few criticisms towards ERM practices. According to Crouhy, Galai, and Mark [as cited by 21] *"ERM largely exists in name only"*. ERM works as a controlled framework and a set of compliance requirements [22]. [See 23] in their reports stated that almost thirty-one percent of directors notice that ERM is a low value-adding program because ERM merely serves during an organisation's control process. ERM is primarily exercised as a form of compliance to corporate governance

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and for internal auditing purpose, resulting in lower integration in the decision-making process [24-25-26] This claim is supported by [27], stating that ERM is mainly functioned as "an extension of their audit and regulatory compliance process". Empirical evidences examine that ERM's point of failure is to create value. [28] argued that ERM fails to create value. On the other hand, a study done by [29] identified that ERM destroys the value creation ability of a firm. In fact, there is no indication that ERM creates value as mentioned by the proponents of ERM [30-31-32]. Thus far, the value creation ability of ERM is still disputable. Several studies indicate that ERM substantially needs to be improved [32-33-34-35] by expanding the concept to adapt to the emergence of new risks [36]. Companies need to have a quick response process in managing the adverse impact of crises and disasters that might jeopardise the survival of an organisation. Hence, a new form of risk management approach is relevant to improve the ERM [37]. Mikes & Kaplan [see 10] deliberately argued that risk management is unproven and evolving. Although scholars widely recognise that risk management practices would be mature enough with the development of best practices in risk management guidelines and standards, Mikes & Kaplan [see 10] contended that "risk management will be most effective when it matches the inherent nature and controllability of the different types of risk the organisation faces". It is evident that many practitioners barely express dissatisfaction on the proposed normative and regulatory of ERM framework [38-39]. This is supported by Henriksen and Ulhenfeldt [see 40] who identified the "ERM frameworks are not successful in creating an enhanced focus on the identification of new business and growth opportunities". Although ERM approach is acknowledged to be holistic, its practical implementation is still lacking in reality. It is increasingly clear that ERM practices have certain boundaries in managing the 'black swan' events [24-41]. The risk management practices seem to be focused on the mathematical risk management model despite this method is unreliable for corporations due to a complex risk landscape [42]. Non-quantifiable risk produces extraordinary impact compared to the quantifiable risk because no historical data could be assessed to identify this type of risk. The nonquantifiable risk should be emphasised during corporate strategic planning [43]. Rudolph [see 44] supported this idea by stating "ERM requires a balance of mitigation and opportunity and between qualitative and quantitative analysis". With all limitations discussed before, ERM programs need to reach beyond their current condition to better adapt with the complex risk landscape. Today's corporations gradually break out from the silo approach in risk management by leaning more towards portfolio view of risk. They focus on managing qualitative risks, downsizing risks, and seizing opportunities [45]. Therefore, ERM should constantly be improved to meet stakeholders' expectations who are keen of any sustainability issues [46]. It is essential for ERM to integrate sustainability in managing the adverse impact of crises and disasters.

#### DEN: SINTE 8 Sci.Int.(Lahore),28(2),1827-1831,2016 MOVING BEYOND ENTERPRISE RISK MANAGEMENT TO SUSTAINABILITY RISK MANAGEMENT

Risk management is about managing hazards and serves as a tool towards organisational sustainability. The ability of a company to sustain in the future is subject to the management adeptness in dealing with risks related to crises and disasters [47]. Companies gain lessons from the crises and disasters so that the management could attempt at dismissing any potentially adverse impact of 'black swan' events. The World Summit on Sustainable Development in 2002 [as cited 48] acknowledged that "an integrated, multi hazard, inclusive approach to address vulnerability, risk assessment, and disaster management, including prevention, mitigation, preparedness, response, and recovery, is an essential element of a safer world in the twenty-first century". Meanwhile, Malaysian Codes of Corporate Governance (MCCG) 2012 [as cited 49] gives greatest concern in promoting good governance through the integration of sustainability into corporate strategy. Companies are required by the board to emphasise on the environmental, social, and governance (ESG) elements into their risk management procedure. Adhering to good corporate governance intensifies the companies' potential to sustain while managing risks through the achievement of corporate goals [50-51]. Dyllick & Hockerts [see 52] defined corporate sustainability, as "meeting the needs of a firm's direct and indirect stakeholders [...] without compromising its ability to meet the needs of future stakeholders as well". Corporate sustainability and ERM share similar goals with aim at managing risks and opportunities for long-term corporate survival [53]. The integration of sustainability aspect in ERM is deemed worthwhile for organisations to be able to perceive and evaluate the risks mounting from sustainability issues [41]. Sustainability risk management (SRM) was first articulated in 2005 [54] by Dan R. Anderson, the author who recently published the book 'Corporate Survival: The Critical Importance of Sustainability Risk Management'. Anderson [see 55] defined SRM as "sustainability risk management deals with risks emanating from the environmental and corporate social responsibility areas". SRM integrates the element of 'triple bottom line' which emphasises at sustaining three dimensions of development namely economic, environmental, and social. SRM particularly aims at minimising the adverse impact of crises and disaster within a broader context of sustainable development. SRM approach emphasises on organisations' ability to do well and remain stable through the practice of good corporate governance in coping with greater complexity of risk. The mounting risk of crises and disasters across the globe could be fully addressed by developing a better SRM approach in order to handle any unforeseeable events. This is evidenced through a statement made by [see 56] in that "...large organisations may now have blind spots from, which high-impact risks could emerge to damage or potentially destroy their business". SRM emphasises greatly on those risks arising from internal and external events as well as extreme events with potential disruptions to the companies. As a result, SRM appears to have much practical values in dealing with scientific

Sci.Int.(Lahore),28(2),1827-1831,2016 unknowns - current risk models potentially excludes the 'tail risk' [57-58]. SRM is proposed to focus separately on expected risks as the average variation of financial performance, while the unexpected risks work as a single extreme or tail event of companies' performances [59]. In this sense, SRM approach broadens the concept of current risk management practices by comprising the contingency instead of probability. It profoundly focuses on mitigation, adaptation, and disaster preparedness [60]. Next, SRM prioritises prevention in reducing the adverse impact of crises and disasters by harnessing precautionary principles into risk management strategies. Precautionary principle is defined as "when an activity raises threat of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships have not been fully established scientifically" (p.353) [61]. The application of precautionary principle is emphasised in the sustainable development concept [63]. Some[64], identified that precautionary principle and sustainability share the principle of intergenerational justice, which considers the needs of the future generations. It is important in risk management as an element of control upon any detrimental actions to the environment [64-65]. Others [66], stated that "risk problems that are characterised by high uncertaint, y but low ambiguity require precaution-based management and thereby risk management should foster and enhance precautionary and resilience-building strategies and decrease vulnerabilities in order to avoid irreversible effects" (p. 285). Also, precautionary principle is crucial in strategic management [54] to critically examine the implications of tail risk events. SRM approach is a paradigm shift for companies going through a forward-looking view in adapting severity of impact of contingency events, as well as meeting stakeholders' expectations in achieving better economic, social, and environmental values. Companies have realised the benefits of both ERM and corporate sustainability and put great effort to integrate these elements into their business strategies. However, in practice, companies tend to isolate between ERM and corporate sustainability [53-67]. The integration of ERM and corporate sustainability initiatives done by most companies are lacking in the strategic approach [68-69]. In response to the successful integration of ERM and corporate sustainability, corporate leaders should put greatest effort to integrate ERM and corporate sustainability towards meeting the needs of future generations. This aims at creating balance between economic, environmental, and social elements.

# CONCLUSION

This paper adds to the literature by highlighting the importance of managing the adverse impact of disasters and crises through the integration of ERM and corporate sustainability initiatives towards facing today's global environment. Towards establishing the strategic link between risk management and sustainability, both concepts are mainly not focusing on the mitigation of the sustainability risk issues and act as a medium of precaution approach, but also bring opportunities in accelerating the business growth for gaining competitive advantage [70]. Effective implementation of SRM is vital for long-term corporate survival. Future research is needed to further examine to what extent that the

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SRM implementation had an impact on the corporate survival is ultimately worthwhile.

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