

Natural Disasters and Supply Chain Disruption in Southeast Asia

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Abstract. The Association of Southeast Asian Nations is currently at a turning point with greater regional integration with the launch of ASEAN Economic Community in 2015. As a major recipient of foreign direct investment globally, the Southeast Asian region plays host to one of the largest offshore location for global manufacturing and supply chain network. Despite its strategic trade route location connecting the east and the west, Southeast Asia is also one of the world's most disaster-prone region, with increasing numbers of natural disasters affecting economic development and international businesses operating within this region. Natural disasters are a major cause of global supply chain disruption. This article assesses the impact of natural disasters on international businesses in Southeast Asia, traces the development of regional disaster management and highlights the urgency of greater regional cooperation on building disaster resiliency.

Keywords: global supply chain disruption, economic integration, international business, ASEAN, disaster.

1. Introduction

Over the past decade, the world has seen a rise in the numbers of disasters, along with the dramatic impacts and the associated costs. Several large-scale disasters (floods, hurricanes, volcanic eruption and earthquakes) have inflicted many areas, especially in Southeast Asia.¹ Some of these disasters are caused by extreme weather conditions and severe climate changes.² According to the Centre for Research on the Epidemiology of Disasters (CRED), between the years 1994 to 2013, an estimated 218 million people were affected with 1.35 million deaths reported and losses amounting to US\$2,600 billion.³

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Disasters⁴ refer to “situations where an enterprise (or collection of enterprises) is confronted with sudden, unpredictable catastrophic changes over which it has little control.”⁵ Another popular definition of disaster is provided by the United Nations Office for Disaster Risk Reduction (UNISDR), whereby a disaster is “a serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community or society to cope using its own resources”.⁶ According to the United Nations Development Program (UNDP), “every dollar invested into disaster preparedness saves seven dollars” in humanitarian disaster response, without accounting for the loss of human lives.⁷

Studies have shown that many countries are ill-prepared in managing the impacts of natural disasters.⁸ Natural disasters have caused major disruptions to multinational companies (MNCs) operating in host countries, affecting the global production, supply, and logistics network; the revenue obtained; and the future viability of operating offshore in the affected location. For the host country, disasters affect (i) investor confidence and foreign direct investment into the country⁹, (ii) the inter-related tourism sector as a service industry, (iii) the local community’s livelihood whereby rebuilding and recovery posed tremendous challenges both economically and socially, and (iv) economic development of the host country. As such, the impact of disasters on international business is not only contingent on the severity of the disaster itself but the perceived risks¹⁰ and its destination image as an attractive investment location.¹¹

2. The Case of Southeast Asia

Southeast Asia covers a mere 3% of the world’s total land area. However, it is one of the world’s most disaster-prone regions, vulnerable to extreme and frequent

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