Supply Chain Risk Management for Macro Risks

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PEARSON CASES IN SUPPLY CHAIN MANAGEMENT AND ANALYTICS

The case is reprinted from The Supply Chain Management Casebook by Chuck Munson

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Introduction

In recent years, international competition has pressured European companies to improve quality and reduce the time and costs of product development and manufacturing. Furthermore, the economic and financial crisis of 2009 led to an increased effort to outsource manufacturing activities and to find suppliers who can ensure production of products with high quality at lower costs (Kumar 2009). European, in particular German, companies outsource their activities to Asian and other Eastern European countries that provide inexpensive but skilled labor and offer enormous cost reductions. Furthermore, rapid technology development, contracting out, global markets, product dynamics, service complexity, reduced supplier bases, and modern inventory practices are all aspects behind the commonplace complex and interlinked business environment (Deleris and Erhun 2005; Glickman and White 2006).

The corporate strategy of utilizing a global supply chain is afflicted with risks such as linguistic and cultural deficits and customs regulations (Cho and Kang 2001; Schniederjans and Zuckweiler 2004), transportation delays, and logistics service differences (Cho and

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Kang 2001). All these types of risks have countermeasures that may increase costs but are typically effective in reducing such risks. On the other hand, *macro risk* factors including (1) natural disasters (floods, earthquakes, hurricanes, fires, and tornadoes), (2) man-made disasters (war and economic crisis), or (3) technical disasters (transport accidents, explosions, fire, gas leaks, and industrial accidents—see Exhibit 1) are significant and random events that are especially challenging to manage.

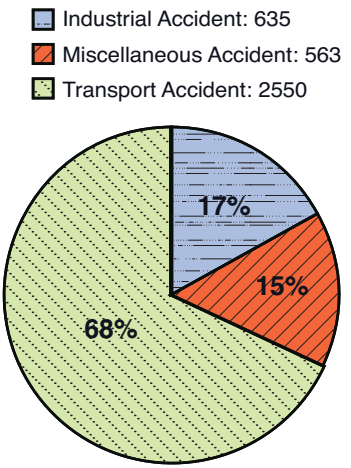

Exhibit 1 Number of disasters worldwide.

Source: Figure generated from data found at EM-Dat (2012)

Dramatic collapse of a supply chain due to macro risks argues to verify the strategic, tactical and operational levels of a supply chain and to address all efforts to manage in an efficient way. The three levels in detail are as follows (Kumar 2009):

- *Strategic level:* Is the supply chain aligned with the risk management objectives?
- *Tactical level:* Are all potential risks due to macro risk events well known? Do the supply chain managers have contingency plans in place, and are they prepared when these disasters occur?