What Hedging Tools Should Be Used to Cover Cyber risks?

Wissem Ajili Ben Youssef
ESLSCA Paris Business School, France
ajiliouissem@yahoo.fr

Abstract:

This paper focuses on cyber risks as an emerging threat to global economic stability. Today, the whole risk landscape seems to be undergoing profound changes as a result of digitalization. The main challenge is finding a compromise between the expected benefits of digitalization and the risks inherent to the new business models it imposes. The rise of cyber risks in global risk mapping certainly requires a reflection on the nature of this risk as well as its extent and consequences, but above all else, hedging responses are required. The cyber-insurance market is responding to this new risk category; however, as an emerging industry, the supply of cyber insurance and reinsurance remains well below the actors' expectations. Undoubtedly, the main difficulties faced by risk managers are those of anticipating, measuring, and quantifying cyber risks. First, the author focuses on the concept of cyber risk, its characteristics and scope. Second, the author emphasizes the issues of cyber-risk anticipation, measurement, and quantification. Third, the author describes the progress made in establishing a framework for managing cyber risk. Finally, the author opens a debate on the new lines of thinking for improving cyber-risk hedging through the financial markets and the use of derivatives, mainly insurance-linked securities.

Keywords: Cyber Risk, Risk Mapping, Risk Hedging, Cyber Insurance, Derivatives, Insurance-Linked Securities (ILS).

JEL Codes: G20, G22, G32, M15