SCRM and Logistic Resilience in the Era Of Logistics 4.0

¹ DAANOUNE Meryem ; ² KHADIR Mohammed ; ³ RHALI Najoua ; ⁴ Rajaa HADRI ; ⁵ TAOUFIK; Wafaa ; ⁶ JAMMOU Omar

- ² Faculté des Sciences Juridiques Economiques et Sociales. Ain Chock Casablanca. <u>Mohammed.khadir@univh2c.ma</u>

 ³ Laboratoire LRPFG; ENCG Casablanca. <u>najouarhali@gmail.com</u>
- ⁴ Laboratoire LRBIGOFE ; Faculté des Sciences Juridiques Economiques et Sociales. Ain Chock Casablanca. rajaahadri1@gmail.com
- ⁵ Laboratoire LRBIGOFE ; Faculté des Sciences Juridiques Economiques et Sociales. Ain Chock Casablanca. wafaaa.taoufik@gmail.com
- ⁶ Laboratoire LRBIGOFE ; Faculté des Sciences Juridiques Economiques et Sociales. Ain Chock Casablanca. omar.jammou@gmail.com

Abstract. Supply chain risk management (SCRM) and logistics resilience are critical in today's volatile environment. Intensive globalization, lean practices and recent crises (e.g., the COVID-19 pandemic) have exposed supply chains to unprecedented vulnerabilities. This paper presents a comprehensive literature review of SCRM and supply chain resilience, with a focus on the emerging context of Logistics 4.0. We discuss integrated risk management approaches,

Typologies of supply chain risks, and the role of dynamic capabilities in building resilience . We then examine new risk patterns introduced by digitalization (Industry/Logistics 4.0 technologies) . Finally, we summarize lessons from the COVID-19 disruptions and derive practical recommendations and directions for future research. The review emphasizes that a balanced strategy – leveraging real-time monitoring and advanced analytics while mitigating cyber/technical risks – is essential for a resilient Logistics 4.0 era.

Keywords. supply chain resilience; vulnerability; dynamic capabilities; Logistics 4.0.

¹Laboratoire LRBIGOFE ; Faculté des Sciences Juridiques Economiques et Sociales. Ain Chock Casablanca. meryemdaanoune1@gmail.com