

The insurance industry and climate change: A story of resilience and collapse

### **Abstract**

The insurance industry's central role in assessing current and future risks faced by, what is commonly referred to as, the modern thermo-industrial civilization makes it a crucial player when discussing one of the major issues faced by humankind: climate change. Accordingly, this thesis proposes an exhaustive analysis of the industry's core resilience when confronted by such dramatic modifications within the Earth's systems. In order to do so, this paper begins by proposing a detailed examination of the industry's business model, its close relationship to global warming, as well as a detailed review of the existing adaptation and mitigation actions undertaken by (re)insurances (Chapter 1). Subsequently, the document deep dives into a theoretical stress test of the sector's resilience toward, what this paper describes as, a credible "catastrophic" scenario. This scenario refers to a situation where the RCP 8.5 path is coupled with a financial/economic crisis resembling the 2007-08 event and demonstrates the insurance sector's difficulties in displaying any type of resilience. In addition, this paper proposes a philosophical analysis of the terminology and tools used by the insurance industry, such as the notion of risk or modeling (e.g., Climate, Financial, etc.), to disclose a certain irrelevance of these tools when discussing the global and profound damages caused by climate change. Further examination of this subject through the eyes of what Pablo Servigne refer to as Collapsology offers an unusual overview of the insurance sector's activities and reactions when facing a civilization collapse. The strong correlation that exists between environmental mismanagement and civilization failure is further highlighted by the study of earlier civilization collapses such as the Maya people and the Anasazi Indians, thus attesting to the possibility of such a drastic fate for any complex civilization. A further case study of our globalized and interconnected thermo-industrial civilization outlines the extreme difficulties encountered by the existing insurance industry's business model in such a collapse process (Chapter 2). Finally, a conclusive chapter contributes to opening a discussion regarding the insurance industry's future societal roles and proposes three main pillars aimed at easing this sector's voyage through a collapsing world (Chapter 3).

**Keywords:** Insurance industry, Climate Change, Societal Collapse.