

## **Immunization against Covid-19: Innovation as a Management Strategy for Spanish Companies**

**Coloma Álvarez Santamaría**  
**Universidad de La Rioja, Spain**

**Arkaitz Bañuelos Campo**  
**Universidad de La Rioja, Spain**

### **Abstract**

The pandemic caused by the Covid-19 virus has triggered an unprecedented economic crisis, resulting in a turbulent environment of high uncertainty for the entire economic activity. The spread of the pandemic and the later lockdown of most of the population has paralyzed global markets, production and consumption. As a consequence, the economic flow has been reduced for all types of companies. Even in countries with strong economies such as Spain, there has been an unprecedented drop in the value of firms. In this context, academics and managers alike have wondered whether there is a strategy to immunize companies and mitigate the effect of the pandemic (Ding et al., 2020). One of the most explored aspects in relation to those elements that create value in the company is its innovative activity (Griliches, 1981). Is investment in innovation an optimal strategy to face the ongoing crisis? The aim of this paper is to analyze whether companies from the Spanish continuous market which have a higher innovation investment have suffered a lower impact from Covid-19 across sectors. In order to respond to our research objective, we will carry out a frequency analysis to examine the average innovation investment by sector, as well as the companies' value drop and later recovery. We then carry out a regression analysis to determine the influence of innovation investment in firm value drop during this crisis. Our results show an unprecedented value drop across all sectors, with the consumer goods sector as the least affected by the crisis, due to the importance of pharmaceutical companies. However, others such as the financial services and real estate services sectors, have not only failed to recover, but have seen their value drop deepen. Trying to find a strategy that allows companies to immunize themselves and reduce the impact of the current crisis, we have tested whether a strategy based on innovation can reduce the fall in the value of companies (Simeth & Cincera, 2016). However, and in contrast to the results obtained by previous authors, innovation strategy does not seem to influence the value drop suffered by companies in the ongoing crisis (Rahko, 2014). These results only highlight the magnitude of the current situation and its uncertainty. Future research could explore this strategy with a larger time period. Lastly, analyzing companies from different countries would give us a global view of the possible relationship between innovation strategy and firm value.

**Keywords:** Innovation, Strategy, Management, Firm Value, Covid-19

---

## **Drivers and Challenges to Environmental Management Systems Implementation in Public Organizations: A Review of Empirical Evidence**

**Marie-France Waxin**  
**American University of Sharjah, UAE**

**Aaron Bartholomew**  
**American University of Sharjah, UAE**

**Fang Zhao**  
**Staffordshire Business School, Staffordshire University, UK**

**Areej Makda**  
**American University of Sharjah, UAE**

### **Abstract**

**Purpose:** Our research objectives are 1) to review empirical articles on drivers and challenges of environmental management system (EMS) implementation in public sector organizations (PubSOs), 2) to identify the key themes they addressed, highlighting differences between PubSOs and private sector organizations (PvSOs) and 4) to propose an agenda for future research. **Methodology:** We conducted a systematic literature review of the empirical articles published on the topic, in the Scopus database, between 2000 and 2020. We mapped the available literature, and then used content analysis to examine the themes addressed in the selected articles, and identify knowledge gaps. **Results:** Based on our