# Chapter 6 Innovation That Drives Unravelling the Link Between R&D&I Investment and Value Creation

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### **ABSTRACT**

This chapter analyses the evolution and current situation of investment in research, development, and innovation in Spain and Europe and its link with value creation. The research is carried out through an exploratory bibliographic analysis based on publications in the Web of Science, as well as numerous databases, projects, and reports issued by European and national entities. Four research questions are presented, related to the creation of value through the link between R&D and innovation. This study shows how these three concepts drive and generate changes in organisations and states that have an impact on their GDP, and the differences that exist between countries at European Union level, and between autonomous communities at regional level in Spain.

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# 1. INTRODUCTION

Research and Development (R&D) is a systematic and creative process aimed at acquiring new knowledge and applying it to develop or enhance products, processes, or services. Research and Development encompass inquiry, experimentation, and the application of new knowledge with the goal of making advancements and contributing to progress in various fields of knowledge and technology (OECD et al., 2022; Oslo Manual, 2018).

Research, Development and Innovation is a concept that encompasses the three interrelated and complementary phases in the process of generating and applying knowledge for scientific, technological and economic advancement (OECD et al., 2022; Oslo Manual, 2018), and which more and more countries are allocating part of their state or regional budgets (Cotec, 2022). The governmental system of each country must be considered to put into context the investment made in Research, Development, and Innovation and any previous or subsequent comparisons.

Research, Development, and Innovation (González-Bravo et al., 2021; Himmelberg & Petersen, 1994). It is therefore relevant to be able to address the main differences at national, European, and international level from a financial system. Policy interventions are key to investment (Perez-Alaniz et al., 2023) although more Research is needed to find out whether the public or private sector predominates in R&D and Innovation investment.

The relationship between R&D&I and value creation in a country is fundamental to its economic, social and environmental Development. Fostering an enabling environment for Innovation can lead to greater competitiveness, economic prosperity and a better quality of life for citizens.

Value creation is a multidimensional concept that goes beyond simply offering products or services. It involves innovating, delivering quality, being efficient and contributing to the overall well-being of society and the environment.

When investing in Research, Development and Innovation (R&D&I), value is created for several actors and stakeholders: customers if the focus is on business, companies gaining a competitive advantage over the rest, employees finding opportunities for professional growth, countries improving the quality of life of their citizens and the environment through new services or processes that manage to reduce the ecological footprint through more sustainable solutions. This work focuses mainly on countries with their different sectors and national economies.

Given the importance and impact that R&D&I generates in the creation of value and, in turn, in society in general, it is important to be able to undertake a study that delves into the existing differences between the levels of R&D&I in Spain and Europe and the relationship that exists between R&D&I and the GPD.

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