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## **ABSTRACT**

### **Understanding the relationship between Technological Change and Economy: from the classics to innovation Policy debate**

This paper aims to analyse the relationships between economic dynamics and technological change and innovation over the last decades; it is a complex framework in which there have been important changes in perspective from the first authors – the "classics", such as Smith or Marx – to the most recent evolutionary approach to technological change and the role of National Innovation Systems. The different analytical perspectives are the source of different approaches to the intervention of the State in supporting the initiative of companies in their effort to invest in technological innovation. Thus, approaches are known that go from rejection to public intervention to different modalities of actuation. So, we arrive to three different models of public action.

The first is based on the recognition that the market does not allow private investment decisions to be allocated in a totally efficient way when faced with phenomena related to the creation and use of knowledge (the "market failures"); Public aid should compensate for possible underinvestment in innovative activities. The second model is based on the expansion of the analysis of innovation through the analytical consideration of the Innovation System in which economic agents operate; the difficulties in innovating would also respond to dysfunctions of the System (failures of the System), so that support policies should incorporate this "systemic" dimension. The third and most recent phase consists of a change of perspective in which public actions must not only compensate for dysfunctions of the system or companies but must also play a transformative role in addressing new social and economic challenges such as sustainability or inclusive development.

**Short CV Prof. Dr. José Molero Zayas**

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