

# MENA Countries Face the Challenge of the Knowledge-Based Economy

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## **EXECUTIVE SUMMARY**

*The growing interest in the knowledge economy raises many questions about its effect on economic growth. The study aims to position a set of MENA countries in the context of the knowledge economy compared to developed countries. It also detects theoretically and empirically the knowledge effect on economic growth. To do this, the authors have estimated an endogenous growth model, using the dynamic panel data technique, for a sample of 16 MENA countries over 1995-2014. The results show that, despite the significant improvements that have registered in the knowledge economy pillars, the selected countries are still lagging compared to developed countries. Far from international comparisons, the internal effects of these knowledge pillars (education, innovation, ICT, institutional regime) on growth are positive and highly significant.*

## **INTRODUCTION**

Traditional development mechanisms based on classical factors are no longer effective in a complex global context of increasingly tough competition. This context imposes its imperatives of competitiveness and sustainability on competing markets. As a result, natural and human resources are increasingly insufficient (Andersson and Djeflat, 2013) and even have the opposite effect on economic growth (Sachs and Warner, 1997, 2001), and are losing importance to a renewed dimension that is none other than

knowledge. This phenomenon is supported by the revolution in information and communication technologies (ICTs), which suggests a new direction that specifies the new growth paradigm, characterized by the strengthening of education, innovation, the development of ICTs and learning.

In March 2000, the participants of the Lisbon European Council decided “*to make Europe the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion*”<sup>1</sup> by 2010. This is how knowledge regains its scope in a larger framework. According to Karagiannis (2007), the Lisbon Strategy contains structural reforms for all European economies to ensure Europe’s insertion in the new information context, strengthen innovation and R&D activities, and focus on improving the education system. In general, the aim is to implement favorable policies to boost growth.

As for the Arab world, the attributes of the MENA region determine and subsequently influence the evolution of its level of growth and its possibilities of integration into the knowledge economy. This area has long suffered from a tense geopolitical climate due to successive wars and conflicts and the absence of democracy, the pervasiveness of corruption in all areas and the lack of accountability on the part of the state, social and economic problems including high unemployment, enormous natural wealth without achieving stable growth and many other problems. This begs the question, will these characteristics affect MENA’s economic growth, its integration into the knowledge economy, and its position in relation to other regions of the world?

In the light of the above, the motivations that motivate us to deal with this issue are summarized, first of all, in the growing interest attributed to the emergence of the knowledge economy as the primary source of wealth creation, based on innovation, skills training, use and dissemination of ICT, in an economic and institutional framework suitable for the implementation of these dimensions. Moreover, previous research has been limited to determining the elements of the knowledge economy in relation to growth, such as human capital and growth, ICT and its effects on economic growth, etc., separately. At the same time, we seek to examine the impact of all aspects, taken together, of knowledge on growth. And finally, the position of MENA countries in relation to other countries in this field and the little work devoted to this topic.

The purpose of our reflection is to position MENA countries in the context of the knowledge economy compared to developed countries and detect the effects of knowledge on economic growth in the region. Therefore, we first attempt to present a conceptual approach that summarizes the notion of the knowledge economy, its foundations and characteristics, and the measurement approach adopted (section 1). We then move on to a theoretical description of the implications of the knowledge economy for the level of growth through the study of the different links between each pillar and growth (section 2). And we finish with the descriptive analysis and econometric modeling, which try to answer the questions related to the place of the MENA region in the knowledge context and the relative performance on each dimension and the effects of this new relay on economic growth (section 3).

## **1. THE KNOWLEDGE-BASED ECONOMY, A NEW RELAY: A CONCEPTUAL APPROACH**

The phenomenal potential that governs modern economies is to ask about the new deal that contributes to creating wealth and thus influences economic growth. However, according to the OECD (1995), economics has so far been unable to provide a comprehensive understanding of the forces that influence

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