

## THE KNOWLEDGE-BASED ECONOMY AND ECONOMIC GROWTH: EVIDENCE FROM THE EUROPEAN UNION

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### **Abstract:**

During the past decades the concept of knowledge-based economy (KBE) has gained in popularity. A focus on the KBE results from a recognition of the role of knowledge and technology in economic growth. The relationship between knowledge and economic growth can be studied in a conceptual and empirical context by identifying whether KBE factors are related to higher economic growth. In our study, we distinguish three pillars of the KBE: innovation and technological adoption, human capital, and information and communication technologies (ICT). According to the recent economic growth theories, R&D activities and human capital investments have favorable effects on strengthening the economic growth and productivity improvements. An efficient innovation system and educated and appropriately trained employees allow for creating, sharing, and using knowledge. Moreover, ICT infrastructure facilitates the effective communication, dissemination, and processing of information. To find answers to the research questions, we use panel data analysis for the sample of EU countries. Empirical analysis shows that economic growth is explained by the KBE factors.

*Keywords: knowledge-based economy, growth, European Union*