Abstract

The main goal of this work was to contribute to an understanding of the role of the knowledge bases in regional innovation systems and to identify whether the sizes of the different subsystems of regional innovation systems differ in relation to their economic and innovation maturity, and the structure of the knowledge bases is relevant. Work has also sought to identify factors limiting the more efficient interconnection of the two sub-systems of regional innovation systems and how these negative factors can be overcome. The analyses carried out have shown that economically and innovatively developed regions follow different trajectories in the composition of knowledge bases than less developed regions. More developed regions have more developed analytical knowledge base and less developer regions are more oriented on synthetic knowledge base. The analyses also revealed that regional innovation systems vary in size and internal structure of each subsystem. Advanced regions have a much more developed subsystem of knowledge exploitation, that is the demand side, while less developed and less innovative regions have more developed the supply side, that is, the knowledge generation subsystem. Trust, information exchange and shared strategic vision have proved to be among the key aspects that can successfully overcome the imperfections of regional innovation systems.

Key words: regional innovation systems, knowledge bases, technology transfer, innovation