Sectoral linkages in the knowledge economy, a comparative analysis of Mexico with OECD countries by the database: STAN-IO

Topic: World input-output modeling and databases II

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In the late twentieth century the world economy falls squarely on the knowledge economy, which has been made possible by the development of Electronics and Information and Communications Technology (E&ICT). The push to E&ICT sector has been a task that the countries have followed differently, as it is one of the essential elements to encourage development and economic growth. In this work we can find a comparative analysis of the importance of the sectors: Office, accounting and computing machinery, Post and telecommunications and Computer and related activities among the OECD countries. The methodology used is based on the calculation of sectoral linkages, backward linkages (BL) and forward linkages (FL), and the classification of key industries from Leontief's Input-Output model. Data were drawn from OECD STAN IO Matrix Inverse mid 2000s.

A first approach shows that the electronic sector in Mexico is relatively disconnected for the domestic economy (BL & FL below average), but this industry becomes key when considering the total economy (domestic and imported inputs), with values well above to OECD countries, above Germany, Finland and Canada. This shows the success of the strategy based of maquiladora exports industry.

The telecommunications sector in Mexico is a key industry, with high levels of BL & FL (in domestic and total economy), these linkages are similar to countries like USA, Germany, Finland, Denmark, Chile, Portugal and Spain. This is related to the development of the network of the dominant company Telmex/Telcel in the fixed and mobile telephony.

The computer industry in Mexico is driving (high FL) well above of OECD countries, but lower BL, well below of countries concerned. The computer industry in Mexico is in a similar situation to USA, Germany and Denmark, in Canada and Korea is a driven industry.