Productivity, Higher Education and Growth in Mexico: A Bi-Regional Input-Output Model

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For nearly two decades, Mexico has experienced a weak economic growth (in terms of GDP per capita that growth has been virtually zero), combined with a price and exchange rate relative stability. This is a continuing recession where, however, there has been a process of structural change still unfinished. While activities such as agriculture and traditional industries, more integrated into the domestic economy and more labor intensive, have lost ground in absolute terms, modern industry, export-oriented, has failed to lead economic growth. Under these conditions, structural unemployment has been a constant throughout this period. As in countries with low levels of development, a considerable part of the Mexican unemployment is absorbed by various types of informality, ranging from self-employment to criminal activities, whose growth in recent years has been enormous. Thus, the unemployment rate has remained throughout the period below seven percent. However, the proportion of the Mexican population with some form of higher education, while still low, has been exponentially growing in recent years. In this context, there are some worthwhile questions to answer: what is the employment status of these qualified workers? Do they displace those with less formal education activities or do they take refuge in underemployment and low productivity firms? We believe the answer is that it depends on a lot of factors: the professions of those workers, the sectors where they are employed, the region of the country in which they live, the quality of education received, the prestige of educational institutions where they studied, and so on. We present to Jalisco (a state of Mexico with about eight million inhabitants and the fourth for his contribution to national GDP) an exercise that seeks to answer to these questions. In this exercise we take the volume and relevance of the information available. On one hand, our research team built bi-regional input-output tables of Jalisco (Jalisco and Rest of the Country) for the years 2000 and 2010, including an estimate at constant prices. Furthermore, for the same years, the National Institute of Statistics, Geography and Informatics (INEGI) published an extensive survey that is part of the Census of Population and provides extensive information on employment, education, profession and income. Given the diverse backgrounds of these sources of data, it was necessary to harmonize them and reach an acceptable level of consistency. We define a bi-regional input-output model, based on the value added, to calculate rates of productivity growth in those ten years and obtain an estimate of underemployment by productive sector, by career and by each of the two regions (Jalisco and Rest of the Country). These results are part of research funded by the Ministry of Education.