



# THE ECONOMIC IMPACT OF HIGHER EDUCATION INSTITUTIONS ON REGIONAL DEVELOPMENT: THE CASE OF THE POLYTECHNIC INSTITUTE OF BRAGANÇA

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## ABSTRACT

Higher Education Institutions (HEI) are considered, usually, important mechanisms for regional development.

However, due to current economic difficulties and budget cuts it is essential that they can quantify the impact that their activities have in surrounding communities and in regional economic development.

Furthermore, the Portuguese decreasing birth rate and, as a consequence, the lower number of students applying for higher education emphasize the need to determine the impact that higher education institutions have on the regions where they are located.

In Portugal there is limited data about the HEI impact and the *Instituto Politécnico de Bragança* (IPB) is very significant since it is located in a very deprived region of North of Portugal.

As such, the IPB has a potentially significant impact in the region's development and also granting the access to those students that would otherwise not have studied in a HEI far from their homes.

The main purpose of this study was to determine:

**How much do the municipalities of Bragança and Mirandela benefit, economically, from hosting the *Instituto Politécnico de Bragança*?**

To obtain the answer it was necessary to determine which activities and related monetary and non monetary flows arise from the existence of the IPB. To do so, an economic model adjusted to the region under analysis was developed. The approaches followed were based on the demand-side and supply-side.

Other secondary questions were answered during the study, namely, how much does the Government receive, as taxes paid by the graduates during their lifetime for its initial investment, and also, how much each graduate will benefit as a return of their investment in a higher education degree.



On the demand-side, according to the American Council on Education model (Caffrey & Isaacs, 1971), the IPB, on the fiscal year 2007, had an impact on the municipalities of Bragança and Mirandela reaching 54.9 million euros and generated almost 2,400 jobs.

This was a contribution to the municipalities GDP of 8.7% and corresponded to 7.5% of the active population.

According to the simplified structured developed, in the same fiscal year, the IPB had an economic impact of 52.0 million euros and generated 3,380 jobs.

This represented a contribution to the municipalities GDP of 8.2% and represented 10.6% of their active population.

It must be enhanced that the main difference on both models refers to the number of jobs generated, since the economic impact had a slight variation of 5%.

On the supply-side, following the Bluestone's model (1993), the graduates from 2007 that will remain in the municipalities under analysis, Bragança and Mirandela, will pay in the form of taxes during their 43 years of working life over 10 million euros to the Government.

The graduates of the IPB will obtain 30.5 million euros in human capital. According to the Portuguese Central Bank, that states that 50% of the national GDP is based on the salaries and compensations and assuming that the same proportion is true for the municipalities, the GDP generated by the existence of the IPB reaches 61 million euros.

This amount represents 9.7% of Bragança and Mirandela's GDP and 2.7 of Alto Trás-os-Montes' GDP.

In conclusion, the impact of IPB on the region was studied using several models and the methodology to gather the necessary data as well as a model adjusted to the Portuguese reality and available data were developed.

Therefore, the developed model can be applied in other institutions and in other periods of time, allowing a more precise description of the HEI's impact on the corresponding regions.

## REFERENCES

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