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Planning Beyond Infrastructures: The Third Sector In Douro And Alto Trás-Os-Montes

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PLANNING BEYOND INFRASTRUCTURES: THE THIRD SECTOR IN DOURO

AND ALTO TRÁS-OS-MONTES

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**ABSTRACT** 

This paper begins with a conceptual approach to the third sector, followed by a review of the

relationship between investment and growth.

The empirical component focuses on Portuguese NUT III Douro and Alto Trás-os-Montes

regions, which are said to be less developed, and have been the recipients of a significant

amount of investment incentives in the context of the European regional development policy.

Its aim is to study the impact of these investments on development.

Results reveal there is a higher impact of public investment particularly on infrastructures,

compared to productive private investment, and highlight the importance of non-profit private

investment on the third sector.

Therefore the support to the third sector stands out as an important driver in development

policies, since the impact of public investment did not bring about a dynamics of

internationally tradable goods which might help the region become independent of public

financial support.

KEYWORDS: Low Density Regions, Regional European Policy, Subsidies and Investment

JEL: R58; R11; R10

1 - THIRD SECTOR, INVESTMENT AND GROWTH

1.1 – The third sector

Although the "third sector" does exist since the 19th century, as a result of the various

workers' associations and solidarity movements, it was only after Delors' and Gaudin's works

(1979) have been published that the subject has become relevant for the scientific community.

In fact Delors and Gaudin (op.cit.) mentioned the importance of what they called "un

troisième secteur", thus referring to an heterogeneous set of entities, such as associations,

cooperatives, mutualist entities and others, of a public or private nature, but which had a

distinct social position as well as different objectives from those which generally constitute

the lucrative private sector and the public sector. Drucker (1997) clearly distinguished these

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institutions, he referred to as non-profit, from the rest, explaining that they do not supply goods or services or produce effective regulation; their product is a "modified human being", in other words, "agents of human evolution" (Drucker, 1997: 10).

This subject has increasingly attracted the attention of various quadrants and has been much debated; so much so that in 1998 the French government ordered Lipietz a study in which the author declares himself in favour of a third sector in the economy, defined on its "utilité écologique et sociale" (Lipietz, 2000: 4)

In Lipietz's words (2001), this third sector corresponded to the interception of social economy with solidarity economy, thus involving three different concepts. Thus, social economy represents all the activities developed by the associations, the cooperatives and mutuaries, all of them linked by the principles of democratic management (one person one vote); undistributed profits and their non-profit nature. It is a sector that is strictly linked to the Welfare State and which has paralyzed from the eighties onwards, due to a setback of this kind of state policies. This brought about what came to be known as the solidarity economy, an alternative economy aiming at combining economic and social aspects in such a way that it ensures that one's place in society can be supported by alternative ways to employment. According to Laville (1994), this solidarity economy helps putting in perspective the importance of the economic sphere as regards other activity areas, while considering the monetary economy in its context.

When compared to social economy, this new approach introduces the spirit as its main innovation against some conservative views as regards legal form. The new spirit revealed itself in the agents' motivation since they started using the ecology, local development and social utility banners along with new ways of doing things. Therefore, according to Liptiez (2001:2), what truly defines solidarity economy, unlike social economy, is how it can come up with answers to the question "on behalf of what it is done" rather than "how it is done".

In this context, the third sector appears as a solidarity economy concept but bearing the *status* of social economy and highlighting its double funding, either by selling services or by benefiting from public subventions and/or tax exemption.

Also Evers (2000:567) shares the vision of the third sector as an intermediate space between State, market and informal sector intercession, whose main feature is diversity "...des modes d'hybridation mis en œuvre par les associations qui le constituent". <sup>2</sup> Besides the denominations that have already been looked into, other authors use the expression "new

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<sup>&</sup>lt;sup>1</sup> Ecological and social usefulness

<sup>&</sup>lt;sup>2</sup> Ways of hybridization put into practice by the associations it is composed of.

social economy" (Defourny *et al*, 1999; Bidet, 2000). However, more important than how one calls it, it is the difference between the new approaches and the one favoured in the eighties as noted by Bidet (*op.cit.*); contrary to Delors' third sector, in which full employment was indeed possible, the new social economy, just like the solidarity economy or Liptiez's third sector, focus on the notion of activity rather than on employment, thus underlining the importance of voluntary work. Consequently, the new approaches no longer seek an alternative solution to the market, like Delors' and Gaudin's (1979); instead, they target the capitalist mode of production.

Authors like Defourny and Develtere (1999); Laville, (1999); and Nyssens (2000) point out the difference in approach between the French and the Anglo-American School, identifying the former with the problematic of the social and solidarity economy and the latter with the non-profit or voluntary organizations sector<sup>3</sup>. When approaching the third sector, the Anglo-American school has emphasised the role of non-profit or voluntary organizations and the sector's functional component, neglecting the normative perspective based on social aims.

Finally, as claimed by Lallement and Laville (2000:523) «C'est d'ailleurs cette appellation de tiers système ou de tiers secteur qui domine au niveau international » <sup>4</sup>. Also, when confronted with the question of who deals with social issues in a knowledge-based society, Drucker (2006:438-439) argues that the answer is neither the government nor the firms but rather "a new, independent social sector". Furthermore, "if the twentieth century was one of social changes, the twenty-first century must bring about social and political innovation"; therefore, society must be made pluralistic, with several centres of power, making room for organizations other than the government to do multiple tasks in the name of common good and social cohesion.

The third sector has undoubtedly become an essential actor as far as development goes.

# 1.2 – Brief analysis of the role of investment according to the main economic growth theories

The growth of economies has been of particular interest for economic analysis originating different theoretical explanations which differ not only as regards identifying the characteristics of any growth process, but also in choosing and stressing out the factors which influence that growth the most. When one focus on the problematic of capital accumulation,

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<sup>&</sup>lt;sup>3</sup> Anheier and Salamon (2006) stressed this difference and, besides the French notion of social economy, they also refer the Italian notion of associativism, the German tradition of the subsidiarity principle and the British tradition of charity and purpose and determination..

<sup>&</sup>lt;sup>4</sup> Besides the designation third system or third sector prevails at an international level.

one notices that it represents a growth factor often mentioned in most theories and their subsequent models.

Adam Smith himself (1776) admitted as an assumption that capital accumulation was a key element to the growth process and so did the first post-Keynesian authors (like Harrod, 1939 and Domar, 1946). With the neoclassics (Solow, 1956), there is a shift of emphasis which is now set on both exogenous technical progress and the ability to stimulate growth with investment playing second fiddle.

Romer (1986; 1990), Lucas (1988), Barro (1990) and Rebelo (1991) provide other explanations within the so-called endogenous theory which account for the *per capita* variables growth through factors and mechanisms deriving from the economy itself. They posit that when knowledge is considered exogenous, it becomes possible to reverse the diminishing returns associated with capital accumulation; knowledge becomes, then, the growth engine, a process supported by capital accumulation, and investment recovers some of the importance it had in post-Keynesian models.

# 1.3 – Growth accounting, public and private investment

Several studies have tried to analyse the economic growth process by looking into the relative contribution of factors. As far as capital and work are considered, the works of Christensen *et al* (1980), Elias (1990), Young (1995) and Jorgenson and Yip (2001) are worth mentioning. These authors have shown that, in most of the growth processes studied, contribution of capital has largely outdone the contribution of work.

Other research studies have tried to be a little more specific, and it is possible to identify aspects such as the infra-structures (Aschauer, 1989a; Barro, 1990), the incentives to innovation (Romer, 1990), human capital (Lucas, 1988; Barro and Lee, 2001), constant returns to scale (Rebelo, 1991) the spreading of technology (Barro and Sala-i-Martin, 1997), as well as others such as institutional framework and macroeconomic stability (De Haan and Sturm, 2000; Easterly, 2001).

There is also the question of the nature of public or private investment. The former's likely impact on long term growth is particularly appealing to the new endogenous growth theory (Aschauer, 1989b and 2000; Riedel, 1992; Easterly, 1992; Ramirez, 1994). The works that have been looked into show several levels of decomposition of public investment, from investing solely on non-military public investment (Eberts, 1990; Munnell and Cook, 1990; Andrews and Swanson, 1995), to making use of complementary disaggregation, trying other categories such as motorways, water supply, sewage and others (Moomaw *et al*, 1995;

Garcia-Milà *et al*, 1996), besides public investment on education (Moomaw and Williams, 1991; Evans and Karras, 1994). In the particular case of investment on "*core infrastructures*", and inspired by Roseinstein-Rodan (1961) and his *Theory of a Big-Push*, worth mentioning are Aschauer's pioneer studies (1989a and 1989b), in which the author claims that this nucleus of infrastructures may have a differentiated impact on economy, an idea which several later studies do but confirm (Easterly and Rebelo, 1993; Démurger, 2001; Rovolis and Spence, 2002; Nijkamp and Poot, 2004).

As concerns private investment, the emphasis has historically been given to investment on equipment as a source of economic growth; it is not by chance that the period when economies witnessed a strong growth, much because of the development of machinery, was known as the industrial revolution. However, after some studies in the field of growth have been published, namely Solow's (1956) and other of his followers', pointing to capital accumulation being significant in only a small fraction of the countries' productivity growth, the importance of investing on equipment was sidelined. Bradford de Long and Summers (1991), following Kravis *et al.* (1982) and Summers and Heston (1991), have provided quantitative evidence that contradicts this assumption, showing there is a clear, strong and statistically robust relationship between rates of equipment and machinery investment and productivity growth.

The differentiated impact of investments has been the object of much debate, namely the controversial question of knowing whether private and public investment are complementary, independent, or if one can replace the other. According to Pereira and Andraz (2004), evidence currently points to public capital and private production factors being complementary in the short term. As to efficiency, several authors argue private investment is more efficient as well as productive than public investment (Serven and Solimano, 1990; Coutinho and Gallo, 1991; Khan and Kumar, 1997), despite little empirical evidence to the fact.

## 1.4 – Some particularities regarding less favoured regions

According to most of the literature on the topic, the concept of less favoured region applies to an area where there are high levels of poverty, mortality and unemployment, associated with low levels of qualification and basic infrastructures. In the case of EU, the name less favoured region has been used to generically refer a region which, according to EU's economic and social cohesion policy, is considered suitable for the implementation of certain goals, namely the goal of "convergence", which aims at helping less favoured regions recover economically.

Qualifying for most of the funds and support programmes are the regions whose *per capita* GDP is lower than seventy five per cent of EU average. In this context, one may ask what special features may affect the previous growth factors' framework.

First and foremost the answer is population. Although Malthus's pessimistic view of the minimum subsistence (1798) was theoretically contradicted by capital accumulation and technological innovation, the evolution in the primary sector in many of the currently so-called less favoured regions in Europe is, nevertheless, not much different from what Malthus predicted: the low income in agriculture caused by a labour surplus and the low capital intensity led to a rural exodus of people seeking for better paid jobs. As a result, those regions are now confronted with lack of labour, although in the past they had high levels of population growth. Also, in those regions people have low qualifications, which is particularly negative when one considers the emphasis on technological progress and human capital of growth theories.

Also notable is the small size of local markets, either because of their weak purchasing power or due to low population density, which may be an impairment to attracting business. The situation tends to become more complicated when other factors are brought into the equation, such as the inadequacy of communication, energy and transportation infrastructures.

Another important aspect has to do with the fact that most growth models equal investment savings, in which investment translates into productive investment, a notion that is not necessarily true, according to Diniz (2006). The savings of a region do not have to be invested there and there are even examples of depressed regions with high levels of savings which are invested elsewhere.

As to competitiveness, the major problem in less favoured regions is that it depends predominantly on the use of natural and human resources in a competitiveness-cost perspective. Furthermore, the processes involving the use of natural resources are often unsuitable as well as obsolete, labour is little qualified and external economies are weak.

Therefore, when dealing with a less favoured region, one inevitably faces a number of aspects which strongly affect the development process.

# 2 – STUDY CASE: INVESTMENT IMPACT ON THE DEVELOPMENT OF THE INNER NORTH

#### 2.1 – Introduction

Pigou (1920) presented the first theoretical argument in favour of incentives based on the occurrence of externalities. Other arguments can be added, namely return loss compensation,

protection of an incipient industry and regional development (Galenson, 1984; UNCTAD, 1996; Blomström, 2002).

Precisely the latter has led the European Union (EU) to contemplate derogation as regards the EC treaty which conditions those investments likely to compromise competition. Thus, the EU has become a reference as to the use of incentives as a way to promote reduction of regional disparities. Accordingly, our study will focus on how European investment in the form of financial incentives affects the development of two Portuguese regions, Alto Trás-os-Montes and Douro (Silva and Sequeira, 2011).

#### 2.2 – Characteristics of the area studied

The area integrates two NUTS III, Alto Trás-os-Montes and Douro, located in Northern Portugal, with an area of 12,273 km<sup>2</sup>, which represents about thirteen-point-four percent of the total (INE, 2004).

It has been suffering from a strong decline in the resident population, and presently is characterised by low population density, an aged and little qualified population and unemployment rates higher than the national average.

In economic terms, neither the *per capita* GDP not the purchasing power in 2007 reached seventy percent of the national average value (INE, 2009; 2010). The entrepreneurial fabric is weak, consisting mainly of micro firms which generate few jobs and little turnover. The region's contribution to the national Gross Value Added is not relevant, only two-point-nine percent (INE, 2010), and the primary sector takes the lead both in production and employment structure terms. Significant is also the high weight of Civil Service in the general framework of the employed population.

When one compares the country with EU averages, the region's backwardness does stand out even more.

# 2.3 - Aims

Portugal has been a member of the EU since 1986, and has received important financial incentives to its development through the then called Community Support Framework (CSF) and the Community Initiatives Program (CIP).

Back then, the aims of the work were: 1) assess the relative access of the region being examined to community funds 5 and the typology of the supported investment from the

<sup>&</sup>lt;sup>5</sup> The European Social Fund was not considered in the present analysis due to having been impossible to collect data on supported investment at the level of the *concelhos*. Therefore, the investment on human capital variable could not be used.

beginning of the CSF I until the interim evaluation of CSF III; 2) assess the impact of supported investments per incentive on the regions development at the level of the *concelho*<sup>6</sup>.

# 2.4 - Methodology

#### 2.4.1 - Variables

#### 2.4.1.1 – Dependent variable

The *per capita* Purchasing Power Indicator (IpcPC) is "an index number that equals 100 in the country's average and compares *per capita* purchasing power with the national reference value on a daily basis in various *concelhos* and regions" (INE, 2005c: 4). Using (IpcPC) as a development indicator is a result of there being no other development indicators available at the level of the *concelho* for the period in question.

## 2.4.1.2 - Independent variables

One might expect that the positive evolution of purchasing power at the level of the *concelho* meant an income increase and that increase was caused by growth. After having reviewed the relationship between investment and growth, we divided the investment made into three great categories which would later be further divided: public investment; productive private investment; and non-profit private investment. The programmes targeting public investment made it possible to use a classification very similar to the one used by Aschauer (1989); investment on general infrastructures, which are essentially *core infrastructures*, was calculated and then complemented with other categories which appeared to us as being extremely relevant, such as investment on education and health infrastructures, besides a residual category referred to as other public investments.

The inclusion of private investment followed a logic of examining the activity sector in which the investment occurred, departing from the assumption that different economy sectors have substantially different levels of productivity and competitiveness and, as such, different impacts were likely to follow.

As regards non-profit private investment, we have inspired ourselves in Drucker's concept of the "third sector" (1997). The result of our considerations was a nine category investment classification structure of which four refer to public investment (nuclear infrastructures; health infrastructures; education infrastructures; other public investment); three to private investment (on the primary, secondary and tertiary sectors); and two to non-profit private investment (economic and social activity support).

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<sup>&</sup>lt;sup>6</sup> Portuguese territorial-administration unit.

#### **2.4.2 – Time Span**

The time span studied focused on the period elapsed from the beginning of the application of CFS I (1989) until the interim evaluation of CFS III (2002).

## 2.4.3 – Data gathering

Data regarding (IpcPC) were obtained after consultation of previous studies on the purchasing power at the level of the *concelho* for the period in question (INE, 1993; 1995; 1997; 2001; 2002b; 2005c).

As to incentive supported investment, data gathering was done by direct contact with the institutions in charge of managing the supports and lists of regional investment projects regarding the various *concelhos* were obtained. (ADH, 2005; DESTEQUE, 2005; DGDR, 2001; 2002, 2003, 2005, IFADAP, 1990, 1995; 2005; IDRAH, 2005; INGA, 2005).

Data concerning 34,200 projects were individually sorted out and included in the investment categories previously defined. At a later stage, values were deflated (base 1989) and *per capita* investment calculated by category and year for each of the thirty-three *concelhos* composing the area considered in the present study (INE, 2002a, 2003 and 2005b).

Values referring to the population's initial structure, namely qualifications level and activity in 1991, were also used (INE, 1993 and 2005a).

# 2.4.4 - Techniques

In order to assess the region's relative access to Community funds a comparison was made with the national totals by fund and support programme, followed by an investment composition analysis.

Econometric techniques suitable to analysing panel data were used after multiple linear regression tests had been made and clusters built as an exploratory analysis.

### 2.5 - Results

### 2.5.1 – The region's access to Community funds and supported investment

During the period in question, two point sixty-five thousand million Euros were invested in the region, backed by the European Regional Development Fund (ERDF), the European Fund of Agricultural Orientation and Guarantee (FEOGA) and the Cohesion Fund.

As far as the access to funds is concerned, we were able to conclude that:

The ERDF was the fund which contributed the most to financing investment in the region;
investment here corresponded to about three point nine percent of the total of the country.
Bearing in mind that the region represents four point three percent of the total population

- and thirteen point four percent of the national territory (INE, 200), it is possible to conclude that access was relatively limited.
- The percentage of FEOGA supported subsidies absorbed by the region oscillated between fourteen and sixteen percent of the total received by the country. General access was significant, since the region had eleven point nine percent of the usable agricultural area and contributed with eleven point five percent of the sector's Gross Value Added (INE, 2004).
- In terms of the Cohesion Fund, the region absorbed only zero point five percent of the national amount due to only two projects having been presented.

As regards the distribution of supported investment, data show private investment (fifty-two percent) was higher than public investment (forty-four percent), although less subsidised. The heavily subsidised non-profit investment was considerably lower (four percent).

Within each of these categories we have:

- Public Investment investment on nuclear infrastructures predominated (sixty-one percent) followed by the residual other public investments category (twenty-six percent) and investment on education infrastructures (twelve percent); on the contrary, investment on health infrastructures was very low, though (one percent).
- Productive private investment- investment on the primary sector comes in first (fortythree percent), followed closely by investment on the secondary sector (forty percent); investment on the tertiary sector registered significantly lower values (seventeen percent).
- Non-profit private investment the investment on economic activity support prevailed (eighty-eight percent), whereas there was little social support (twelve percent).

# 2.5.2 - Impact of Community Fund-supported investment

## 2.5.2.1 - The Model

After a previous exploratory analysis had been conducted, steps were taken to find out, during the period in question, which types of investment had had an impact on the per capita purchasing power indicator's evolution regarding each concelho. Such variables as initial qualification level and activity in the tertiary sector for the year 1991 were also used<sup>7</sup>.

The regression of purchasing power growth in each *concelho* for n *concelhos* and t time spans was formulated as an error component model, namely a log-log model:

Based on Barro's principles (1991), the variables higher education and activity in the tertiary sector, reporting to the year that is the closest possible to the year chosen as the beginning of our analysis ,were introduced in order to ascertain to what extent the initial characteristics had any influence on the per capita purchasing power indicator.

 $\log \operatorname{ipcpc}_{it} = \log \beta_0 + \log \operatorname{invprisecpr}_{it} + \log \operatorname{inprivsesec}_{it} + \log \operatorname{invpriseter}_{it} +$ 

log ipubinfraestruturas<sub>it</sub> + log outipub<sub>it</sub> + log invnlucrativo<sub>it</sub> +

$$\log \arctan 91_i + \log \operatorname{esuperior} 91_i + u_{it} \tag{1}$$

where:

i=1, 2, ... 33 (concelhos); t=1, 2... 5 (different time periods) and:

ipcpc<sub>it</sub> = *per capita* purchasing power indicator for *concelho* i during the period t;

invprisecpr $_{it}$  = private investment on the primary sector; invprisesec $_{it}$  = private investment on the secondary sector; invpriseter $_{it}$  = private investment on the tertiary sector ; ipubinfraestruturas $_{it}$  = public investment on infrastructures; outipub $_{it}$  = other public investments; invnlucrativo $_{it}$  = non-profit private investment. All of these investment variables refer to thousands of Euros worth of *per capita* accumulated investment<sup>8</sup>, at constant 1989 prices, for the *concelho* i from the period t-4 to t.

#### Furthermore:

acterciario $91_{i i}$  = level of employed population in the tertiary sector; esuperior $91_{i}$  = level of population with a college degree in percent of the resident population for the *concelho* i in 1989;

Decision between fixed and random effects was based on the Hausman test and on the Breusch-Pagan test (Greene, 2003 and Hoyos, 2005); the results obtained pointed to a random effects model.

Estimation was done with recourse to the Generalized Least Squares (Arellano, 2003; Greene, 2003 and Hsiao, 2003).

#### 2.5.2.2 – Estimation results

Statistically significant coefficients were obtained ( $\alpha$  = 0,05) and are as follows: private investment on the tertiary sector (logiprivseter) showed the value of 0.0495; investment on infra-structures (logipubinfraestruturas) had the value of 0.0768; other public investments (logoutipub) reached 0.0338; non-profit private investment (loginvnlucrativo) presented a coefficient of 0.0682; and population with a college degree in 1991 had a coefficient of 0.2746 besides the constant 1.5725. In view of the log-log model used, these values must be understood as elasticities.

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<sup>&</sup>lt;sup>8</sup> Since we did not possess any studies on the purchasing power for all the years in question and, on the other hand, we held the previous notion that considering the investment for that very year would not be very meaningful in terms of the purchasing power, we have decided to deal with per capita accumulated investment. Of the various periods examined, the five year period had the best results. Hence the option to relate the purchasing power in a one year period with the per capita accumulated investment in a five year period.

Table 1 - Main results of the estimation of GLS random-effects model

Random-effects GLS regression Group variable (i): concelho		Number of obs	=	165
		Number of groups	=	33
R-sq: within =	0,5387	Obs per group:	min =	5
between =	0,8219		avg =	5,0
overall =	0,7438		max =	5
Random effects u_i ~ Gaussian		Wald chi2(9)	=	66821,28
$corr(u_i, X) =$	0 (assumed)	Prob > chi2	=	0,0000

		Robust					
logipcpc	Coef.	Std. Err. z P> z  [95% Conf. Into		Interval]			
logiprivsecpr	-0,0355	0,0272	-1,31	0,1910	-0,0888	0,0177	
logiprisesec	-0,0104	0,0079	-1,32	0,1880	-0,0259	0,0051	
logiprivseter	0,0495	0,0099	5,01	0,0000	0,0302	0,0689	
logipubinfraestruturas	0,0768	0,0180	4,26	0,0000	0,0415	0,1121	
logoutipub	0,0338	0,0162	2,09	0,0370	0,0020	0,0656	
loginvnlucrativo	0,0682	0,0133	5,11	0,000	0,0420	0,0943	
logacterciário91	0,1383	0,1355	1,02	0,3070	-0,1272	0,4038	
logesuperior91	0,2746	0,0690	3,98	0,0000	0,1394	0,4098	
_cons	1,5725	0,2030	7,75	0,0000	1,1747	1,9703	
sigma_u	0,0384						
sigma_e	0,0488						
rho	0,3819	(fraction of variance due to u_i)					

The main aspects to retain are: in the first year, the population with a college degree significantly determines the evolution of purchasing power; amongst the various investment categories, public investment on infrastructures holds the greatest impact on purchasing power, followed first by non-profit private investment on the tertiary sector and then by other public investments. Worthy of notice is also the fact that there was no statistic significance for private investment on both the primary and secondary sectors.

### 3 - CONCLUSION

The theoretical considerations established at the beginning of this presentation drew the attention to the importance of investment in the growth process, especially when one is dealing with less favoured regions. Despite the numerous difficulties that have been mentioned, investment is likely to have a relatively more significant impact, given the expected externalities.

The results that have been obtained are consistent with the theoretical review that has been undertaken. And the first aspect to be remembered is the relevance of human capital contribution, revealed by the impact of the variable expressing the initial percentage of the population with a college degree.

As regards investment impact, the fact that public investment on infrastructures comes in first is accounted for both by its indirect effect on the region's business and its ability to attract qualified human resources as well as its direct effect on creating jobs and generating income in the construction business.

Non-profit private investment was dominated by investment on institutions engaged in promoting and supporting economic activities; it is expected that it will have an immediate effect on employment and on the demand for local goods and services, as well as, in the long term, on the activity it seeks to stimulate.

We would like to point out that private investment on the tertiary sector also generates employment and income. It has, however, a weakness, which is the relatively high weight of jobs in the Civil Service in this region, likely to indirectly turn the demand for these goods and services into a strong dependency on the State.

Finally, in the category other public investments, composed of public investment that is not directly related to infrastructures, the weight of the construction business and job creation also accounts for its impact.

Yet, there are other investments which, although not statistically significant, should nevertheless be mentioned. It is the case of the primary sector, which appears as significant in many of the models tested, but with a negative coefficient, that is, reducing purchasing power. The available information on the region's real agricultural situation allows us to understand this result for the farmers' situation is often made worse after investments on reconverting or expanding the activity. As to the secondary sector's negative signal, namely the region's agribusinesses, particularly the wine business, it is understandable given the difficulties the sector has been going through.

In short, productive public investment's impact was weak, felt only in the tertiary sector; as regards public investment, although it had a greater impact, this did not, however, translate into a dynamics of internationally tradable goods likely to endow the region with its own dynamics and to guaranty that it can do without public support.

Additionally, this type of investment can be very important for a region's *take-off*, provided there are certain development conditions, such as investment on infrastructures and on environmental sustainability. This is a necessary condition for competitiveness, but not sufficient, though. Especially now that almost everywhere there is a tendency to homogenise infrastructures, neglecting any competitive advantage thereof ensuing; the same applies to environmental issues.

These results give us motive to worry as regards the future, because once the *Big Push* effect ends or slackens, or Community support to non-profit investment ceases and, on the other hand, employment in the Public Administration continues to decrease, purchasing power in the region will meet with serious difficulties.

In this context, we believe that the region's development strategy will have to be one of valuing specific resources (natural resources, its farming and cattle raising aptitude and tourism potential), as important elements in differentiating regional strategies; of committing itself strongly to overcoming its weaknesses, especially the business sector's vulnerabilities, which have to be approached with professionalism, focus, improvement of technology and commercial networks; and of taking definite steps towards internationalisation.

The policies designed for the region must be reoriented, beginning with including the population's contribution to its formulation and, most importantly, having a different focus, one which looks at the region as a whole and forsakes the traditional fragmental approach based on activity sectors. As far as public support is concerned, we pinpoint the need to continue supporting the productive tissue as well as give incentives to investment on human capital and innovation rather than pursuing an infrastructure investment policy.

Finally, in view of one of the model's most relevant *outputs*, it was possible to conclude that the non-profit private investment, regardless of not being very significant compared to the total amount invested in the region, registered one of the greatest impacts on purchasing power in the various *concelhos*.

Can we say we are back to the *small is beautiful policy*? There is no doubt the supported initiatives included in this category, characterised by a strong local component, either in terms of employment or their connection to the supported productive activity, involve relatively low investment and little resources. Maybe, in the near future, the productive activity those entities promote will in turn back up the supporting structures, helping the region move forward in a self-sustaining perspective.

#### LIST OF PORTUGUESE ACRONYMS USED IN THE TEXT

ADH – Association for the Historical Douro

CETRAD - Centre of Transdisciplinary Studies for Development

DGDR – Directorate General for Regional Development

DESTEQUE – Association for the Development of Terra Quente

IDRAH – Institute of Rural Development and Hydraulics

IFADAP - Institute for Agriculture and Fisheries Finance

INE – National Statistics Institute

INGA – National Agricultural Intervention and Guarantee Institute

NUT -Nomenclature of Territorial Units

QCA – Community Support Framework (CSF)

UTAD - University of Trás-os-Montes and Alto Douro

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