



Munich Personal RePEc Archive

A model for net migration between the Portuguese regions

Martinho, Vítor João Pereira Domingues

Escola Superior Agrária, Instituto Politécnico de Viseu

2011

Online at <https://mpra.ub.uni-muenchen.de/33717/>

MPRA Paper No. 33717, posted 27 Sep 2011 12:40 UTC

A MODEL FOR NET MIGRATION BETWEEN THE PORTUGUESE REGIONS

Vitor João Pereira Domingues Martinho

Unidade de I&D do Instituto Politécnico de Viseu
Av. Cor. José Maria Vale de Andrade
Campus Politécnico
3504 - 510 Viseu
(PORTUGAL)
e-mail: vdmartinho@esav.ipv.pt

ABSTRACT

We built a model identifying the determinants that affect the mobility of labor. The empirical part of the work will be performed for the NUTS II of Portugal, from 1996 to 2002. As main conclusion it can be said, for the NUTS II (1996-2002), which is confirmed the existence of some labor mobility in Portugal and that regional mobility is mainly influenced positively by the output growth and negatively by the unemployment rates and by the weight of the agricultural sector (1)(Martinho, 2011).

Keyword: net migration; Portuguese regions; panel estimations; linear models.

1. INTRODUCTION

There are many authors who have dedicated themselves to issues of labor mobility, with very different theoretical assumptions, trying to investigate how these issues or do not explain the regional differences. For example, the authors associated with the Neoclassical theory, as (2)Solow (1956), consider that the tendency is, for the labor mobility, to alleviate, in the medium and long term, the regional disparities. This, because these authors consider the mobility of factors as a function of wages and the supply of resources as exogenous. Thus, what determines the mobility factor is their compensation.

On the other hand, the works in line with the Keynesian theory, such as (3)Myrdal (1957) and (4)Kaldor (1966), among others, argue that the trend is for labor mobility accentuate regional differences, these authors argue that because the existence of growth processes with circular and cumulative causes. This comes from assuming the existence of increasing returns to scale, to admit endogenous factors and to consider forces of demand (especially in foreign demand) as the main determinants of the growth process. Thus, factor mobility is a function of the forces of demand and employment moves to where demand is strong.

More recently, authors associated with the New Economic Geography, as (5)Fujita et al. (2000), among others, are also in favor of the labor mobility accentuates regional disparities. This derivative, as well as in the Keynesian theory (although with different assumptions), to assume the existence of growth processes with circular and cumulative causes. The assumptions for the New Economic Geography are microeconomic and have much to do with transportation costs "iceberg" and the existence of perfect competition in some economic sectors (for example, agriculture) and monopolistic competition in others sectors (for example, manufactured industry). These assumptions explain the existence of "backward and forward" linkages that create growth forces centripetal (having underlying monopolistic competition and increasing returns to scale) and centrifuges forces (because there are sectors in perfect competition with constant returns to scale). To verify these forces and linkages there will inevitably mobility of factors, including labor. Generally, the result of these links, forces and labor mobility is the formation of structures central-periphery, with benefits for the richest and prosperous.

Therefore, with this context, it appears that the current trend of various economic theories is to consider that the labor mobility accentuates regional disparities. Even writers in the line of neoclassical theory, as Barro and (6)Sala-i-Martin (1991), associated with endogenous growth theory, now admit that the mobility of labor reacts to processes of convergence and reduce regional disparities, but only if some conditions are met. That is, left to disappear the idea of absolute convergence for the same "steady state" of neoclassical influence, to a perspective of conditional convergence for different "steady states".

2. THE MODEL USED

The model estimated in this study is what is presented below in Box 1. Are represented in the model presented below in Box 1 some new factors, mentioned in the economic theory, such as the effects of congestion, through the availability of housing.

Box 1: Balances migration as a function of economic factors and basic equipment (amenities)

$$(SM / PA)_t = c_0 + c_1(r_I - r_E)_t + c_2(D_I - D_E)_t + c_3(A_I)_t + c_4(s_I - s_E)_t + c_5(f_I - f_E)_t \quad (1)$$

SM/PA = net migration from one country or region with the outside, as a percentage of total active population of the country or region;
 $r_I - r_E$ = difference between the growth rates of real output, with r_I to be the annual growth rate of real output of the originating country or region and r_E being the average growth rates of real GDP in all countries or regions destination;
 $D_I - D_E$ = difference between the internal unemployment rate and the external average;
AI = number of employees in agriculture of the country or region of origin;
 $s_I - s_E$ = difference between the internal growth rate of wage and external average;
 $f_I - f_E$ = difference between the internal growth rate of housing and external average.

3. THE DATA

The statistical information collected in the statistics of the INE (2006) and is relative to the variables of the models presented in Box 1, for the NUTS II (1996-2002).

4. THE LINEAR MODEL

The regional mobility of labor in mainland Portugal is positively affected by growth rates of real output, in other words, greater is the difference between the rate of growth of real output of a region and the average growth rates of other regions most is the migration of workers into the region. On the other hand, it appears that mobility is negatively related to unemployment rates and the relative share of agricultural employment. That is, higher the unemployment rate of a region and greater the weight of the agricultural sector, lower is the labor migration to this region.

The growth rates for wages and growth rates on the housing stock does not have statistical significance and because this they have no influence on national labor mobility. What is not a surprising, given the Portuguese regional context.

5. CONCLUSIONS

After the analysis of migration in Portugal, through the alternative model developed by (7)Soukiazis (1995) and modified by us with the introduction of congestion effects (many of the developments cited in the New Economic Geography), using as "proxy" the housing stock (following procedures of (8)Hanson (1998) and (9)Antolin et al. (1997)), it is concluded that regions with higher unemployment rates and higher employment in agriculture are those that attract less people.

6. REFERENCES

1. V.J.P.D. Martinho. Analysis of net migration between the Portuguese regions. MPRA Paper 32311, University Library of Munich, Germany (2011).
2. R. Solow. A Contribution to the Theory of Economic Growth. Quarterly Journal of Economics (1956).
3. G. Myrdal. Economic Theory and Under-developed Regions. Duckworth, London 1957.
4. N. Kaldor. Causes of the Slow Rate of Economic Growth in the United Kingdom. Cambridge University Press 1966.
5. M. Fujita; P. Krugman; and J.A. Venables. The Spatial Economy: Cities, Regions, and International Trade. MIT Press, Cambridge 2000.
6. R. Barro and X. Sala-i-Martin. Convergence across states and regions. Brooking Papers on Economic Activity, 1, 82-107 (1991).
7. E. Soukiazis. The endogeneity of factor inputs and the importance of Balance of Payments on Growth. An empirical study for the OECD countries with special reference to Greece and Portugal, PhD Dissertation 1995.
8. G. Hanson. Market Potential, Increasing Returns, and Geographic concentration. Working Paper, NBER, Cambridge 1998.
9. P. Antolin and O. Bover. Regional Migration in Spain: The Effect of Personal Characteristics and of Unemployment, Wage and House Price Differentials Using Pooled Cross-Section. Oxford Bulletin of Economics and Statistics, 59, 215-235 (1997).