



Regional wage and employment responses to market potential in the EU

Keith Head^a, Thierry Mayer^{b,c,*}

^a *Sauder School of Business, University of British Columbia, Canada*

^b *Université de Paris 1, CEPII, PSE, 48 Bvd. Jourdan, Paris 75014, France*

^c *CEPR, UK*

Available online 7 August 2006

Abstract

In new economic geography models, the spatial distribution of demand is a key determinant of economic outcomes. In one strand, it is argued that higher demand gives rise to a more than proportionate increase in production, a result known as the home market effect. Another strand emphasizes the effects of market sizes on factor prices. We highlight the theoretical connection between these two strands. Using data on 57 European regions, we show how wages and employment respond to differentials in what we call real market potential, a discounted sum of demands derived from the theory.

© 2006 Elsevier B.V. All rights reserved.

JEL classification: F12; F15; R11; R12

Keywords: Home market effects; Wage equation; Gravity equation; New economic geography

1. Introduction

The academic attempt to describe, explain and predict the spatial distribution of economic activity has come to be called, among other things, economic geography. Perhaps, the best inspiration for this field comes from satellite pictures of the earth at night. Instead of the blues, greens and browns of daytime photos, we see only the light generated by human activity. These lights appear to be highly concentrated, leading to the central question of economic geography: What forces cause agglomeration (here defined as the spatial concentration of mobile resources)? Until the 1990s, the field took an eclectic approach, content to allow for a variety of mechanisms.

* Corresponding author. Université de Paris 1, CEPII, PSE, 48 Bvd. Jourdan, Paris 75014, France.

E-mail addresses: keith.head@ubc.ca (K. Head), tmayer@univ-paris1.fr (T. Mayer).

Models incorporated this eclecticism by specifying the agglomeration economy as a multiplicative external effect in the production function depending on some measure of the amount of local activity.

The publication of [Krugman \(1991\)](#) marked a turning point for the economic geography literature. For the next decade, theorists concentrated with near exclusivity on models that moved agglomerative forces out of the production function and into the interaction between transport costs and plant-level scale economies. After the accumulation of a decade of theory, economists have begun to subject Krugman's approach—called new economic geography (NEG)—to empirical scrutiny. While it is too early to be sure, we consider the seminal contributions to the empirical literature to be [Davis and Weinstein \(1999, 2003\)](#), [Hanson \(2005\)](#) and [Redding and Venables \(2004\)](#). These papers statistically link the spatial distribution of production and wages to the spatial distribution of demand.

NEG is not the only framework attempting to explain wage differences across regions. Even considering just the field of regional and urban economics, at least two important alternative hypotheses have been tested to explain spatial inequality. Most notably, models involving technological spillovers and human capital externalities also yield wage equations that link regional wages to some measure of the density of local economic activity. Most related to our work, [Ciccone \(2002\)](#) shows how wages in European regions are positively associated with the population density of the region. [Dekle and Eaton \(1999\)](#) explain a share-weighted index of wages and land rents in Japanese regions with an expression that adds nearby incomes discounted by distance. Both papers view their findings as support for technological spillovers. The main difference between the approaches is that NEG builds on a particular set of market structure assumptions in which scale economies are internal to the firm, whereas the employment density approach can be thought of as an approximation for a variety of spillover processes.

The NEG wage equation we use here is also related to the productivity and trade literature (P&T). Our framework explains wages with market potential, which is an index of the export possibilities of firms located in the country/region, while [Frankel and Romer \(1999\)](#), [Rodrik et al. \(2004\)](#) or [Alcal'a and Ciccone \(2004\)](#) are recent examples of work explaining the level of income per capita or its growth with trade openness, measured as the sum of imports and exports over GDP. Here again the main difference between the two types of literature resides in the structure imposed to the trade term. While the NEG approach emphasizes the structural interpretation of this term, the P&T approach places much more weight on the exogeneity of the trade variable. We adopt the NEG path here, while also following P&T by proposing several instrumenting strategies for market potential.¹

Our theory reveals that a complex construction of access to demands originating from all regions—the real market potential (RMP)—is a central feature of the economic fortunes of a region. We estimate the influence of RMP on wages, following the [Redding and Venables \(2004\)](#) method. That is, we construct RMP as a weighted sum of importer fixed effects estimated in a bilateral trade equation. The structural interpretation of the fixed effects allows for a close connection between theory and empirics. We extend their approach in two respects. First, while they related *per capita* incomes to a cross-section of nation-level market potentials, we incorporate industry,

¹ The additional import term in the P&T approach is not a key difference with NEG. Indeed, with trade in intermediate goods, proximity to important sources of inputs yields lower costs and higher wages to countries. This results in an additional independent variable—called supplier access by [Redding and Venables \(2004\)](#)—that is an index of import possibilities of firms. A much more important difference is again the source of externalities mediated by trade. The P&T literature typically invokes technological spillovers compatible with perfect competition, while in NEG the external effects of trade work through a combination of increasing returns, trade costs and imperfect competition.

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات