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Economic research on English in Europe

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guages of Europe that the notion of language planning was invented, and we will return to this in the next chapter.

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5.4 Economic research on English in Europe

This section presents some results of economic research on English in Europe.[1] The economics of languages studies the reciprocal influence between linguistic and economic variables. The range of issues and languages studied is large, and it is not possible to provide an extensive overview here.[2] Because of its worldwide spread, however, English is often an object of study in language economics. Papers can be organised according to two analytical dimensions. The first one, corresponding to the vertical axis in Figure 1, represents two central issues in economic and policy analysis, namely resource allocation and resource distribution (or alternatively, efficiency and fairness). Economics, in essence, is the science of choices under constraints, and more specifically the study of how scarce resources that have alternative uses should be efficiently allocated. The study of resource distribution concerns the evaluation of the impact of either market processes or policy interventions on the distribution of resources among individuals or collective actors "with a standing" (in cost-benefit analysis people "having a standing" are those whose preferences are to be counted). The second dimension, corresponding to the horizontal axis in Figure 5.4.1, represents an ideal continuum in which linguistic processes (or language dynamics) can take place either in a regulated or in an unregulated environment (although the difference is not always clear-cut). Linguistic variables can have an effect on economic variables as a result of explicit language policy and planning (LPP), or, alternatively, in its absence. For example, the influence of language use on economic outcomes can be driven and channelled by market forces. We collect papers into four groups; each group corresponds to one of the four quarters in Figure 5.4.1.

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2 For an overview, see Gazzola, Grin and Wickström (2016 in press) and Grin (2016 in press).

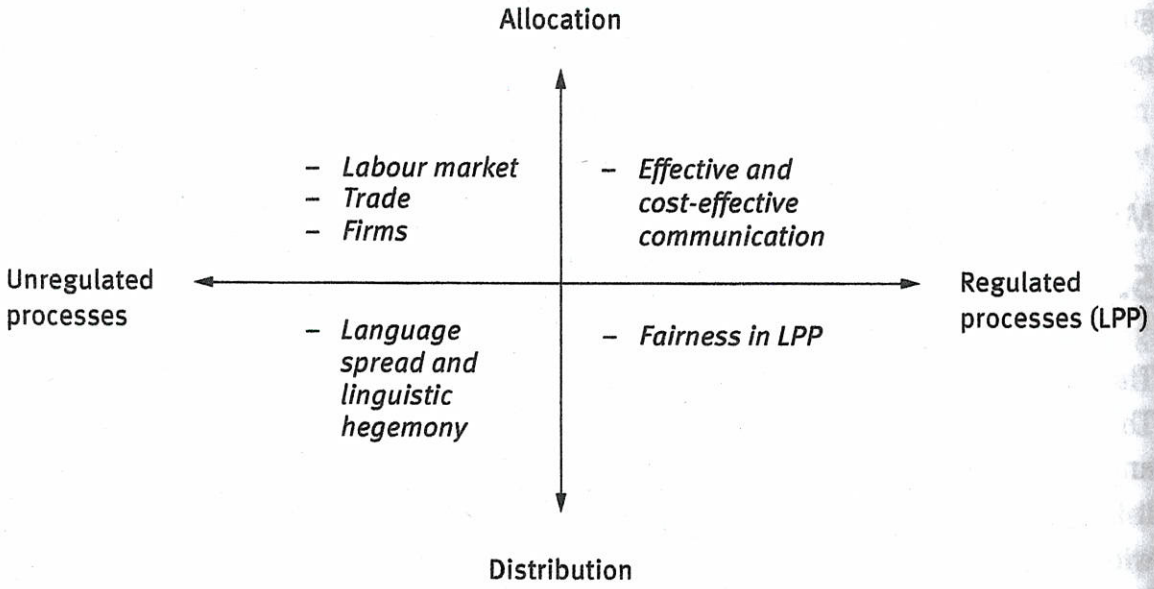

Figure 5.4.1: A typology of papers on the economics of English in Europe

5.4.1 English in the economy: the labour market, added value and trade

This first set of contributions deals with the impact of linguistic variables on economic efficiency in unregulated linguistic processes (top-left quarter in Figure 5.4.1), for example, the effect of language skills on income, added value or trade.

According to Gazzola, Grin and Wickström (2016 in press), roughly 30 % of the literature published in language economics deals with the relationship between language skills and individuals' income, and more precisely with earning differentials accruing to people who are endowed with skills in more than one language. This is indisputably the most important topic in language economics in terms of the number of papers published. There are two sub-areas of research. The first one deals with individuals who speak second or foreign languages that are not dominant in the country where they reside (for example, English in Germany). Language skills are viewed here as a form of human capital generating benefits for individuals. Papers in the second group examine the impact of immigrants' language skills on their income, and they usually focus on the consequences of a lack of proficiency in local dominant language (e.g. English for Pakistani residents in the UK). In this case, language skills are viewed both as human capital and as a trait of ethnic belongingness that may be a source of discrimination. For reasons of space, this section considers only contributions from the first group.

Estimates reported below are the result of econometric analysis in which the effect of knowledge of foreign languages on individuals' income is evaluated con-

trolling for other relevant socio-economic variables such as work experience, the educational level achieved and the respondents' marital status. Ginsburgh and Prieto (2011), for example, study the benefits of knowing foreign languages in terms of additional income accruing to non-native speakers of such languages in Austria, Denmark, Finland, France, Germany, Greece, Italy, Portugal, and Spain. They show that in all these nine countries the effect of English knowledge (and its use in the workplace) on earnings is positive, spanning from 11 % additional income in Austria to 39 % in Spain. In France, Italy, Portugal and Spain, knowledge of other foreign languages provides higher income returns than English (in France, for example, the returns to knowledge of German and English are 49 % and 29 %, respectively; in Italy, the returns to knowledge of French, German and English are 21 %, 28 % and 18 %, respectively). Di Paolo and Tansel (2015) show that in Turkey proficiency in English and Russian is associated with a higher income, and wage differentials increase with the level of competence. Knowledge of French and German is also positively rewarded in the Turkish labour market, but to a lesser extent. Grin (1999) studies language-based earning differentials in Switzerland, showing that in the German-speaking part of the country, both proficiency in English and French are highly rewarded (18.1 % and 14.1 %, respectively). In the French-speaking part of Switzerland, proficiency in German and English bring about substantial income premium for native speakers of French (13.8 % and 10.2 %, respectively). German and French are associated with high earning differentials in the Italian-speaking part of the country (17.2 % and 16.9 %, respectively). Klein (2007) shows that in Luxembourg a very good level of English, and to a lesser extent French, brings about return to language competences in the labour market. Williams' (2011) results reveal that the use of a second language in the workplace (as opposed to simple knowledge) raises earnings by 3 to 5 percent in several Western European countries. The language most widely rewarded across countries is English; however, the use of other languages such as German, French and Italian is rewarded in some countries. Stöhr (2015) shows that very good skills in English in Germany bring about an average return of about 12 % of hourly wages if workers choose occupations in which such skills are used, whereas returns to occupational use of other foreign languages tend to be restricted to a few specialized occupations.

There is a quite large variation between the estimates reported. Sometimes skills in a given foreign language in a given country are associated with high returns; sometimes estimates are more conservative. Such differences can be due to the empirical strategy followed by the authors, the model specification adopted, the countries considered, the quality and comprehensiveness of data used, and the object of study (i.e. language knowledge rather than language use). Nevertheless, all studies quoted in this chapter converge on similar conclusions: English has an undisputed economic usefulness and relevance in the European

labour market, but it is not the only linguistic asset bringing income benefits to individuals. Recent studies on the impact of foreign languages skills on employability (rather than income) in Europe also derive similar conclusions (Araújo et al. 2015). It is worth noting that the distribution of language skills in the population is influenced by language policy, in particular language education policy. This affects the supply of language skills within the economy, and therefore the economic benefits deriving from such skills.

Economic research has also addressed more macro-level issues such as the contribution of linguistic skills to the GDP (Gross Domestic Product) or to international trade. Grin, Sfreddo and Vaillancourt (2010) study how language proficiency contributes to the creation of added value through the processes of purchase, production and sales in the Swiss economy. They estimate that foreign or second language skills in English, French and German contribute to some 10 % of the Swiss GDP, with English accounting for half of this percentage. McCormick (2013) reports some allegedly general positive relationships between, on the one hand, countries' GDP and the Human Development Index, and, on the other hand, English proficiency (measured through the *English Proficiency Index* – EPI). McCormick's analysis, however, is unconvincing because it relies on flawed methodology and on indicators that suffer from self-selection bias.[3]

Fidrmuc and Fidrmuc (2015) examine the effect of English proficiency on the size of bilateral trade in Europe, showing that the presence of good skills in English as a foreign language in the population fosters intra-European trade. However, some authors point out that the relationship between the presence of a common language and trade volumes is not linked to a specific language (Egger and Lassmann 2012); English is one of the possible examples of common language between trading partners.

The results presented in this section refer to the market value of languages. Nevertheless, languages and linguistic diversity have also different types of non-market values. Such values should be taken into account in language policy and planning (Grin and Vaillancourt 1999).

5.4.2 Efficiency and English in language policy and planning

Papers belonging to the quarter on the top-right of Figure 5.4.1 above deal with allocation issues in regulated linguistic processes, i.e. language policies. Effectiveness and efficiency (often interpreted as cost-effectiveness) are two central

3 On the relationship between English proficiency and GDP in developing countries see Arcand and Grin (2013).

criteria in the evaluation of language policies. Most of the contributions in this area, at least as regards Europe, focus on the language regime of the European Union (EU), which is based on the formal equality of 24 official and working languages. Different authors have addressed the question of whether an English-only language regime would be a viable alternative to full multilingualism. The main issue at stake here is to strike a balance between the costs of multilingualism, identified as the sum of the costs for language services and a share of overheads, and the effectiveness of the EU language regime, measured through an indicator named *linguistic disenfranchisement rate*. This indicator was introduced by Ginsburgh and Weber (2005), and it is defined as the percentage of citizens or residents who potentially cannot understand official EU documents such as regulations or the plenary meetings of the European Parliament transmitted through the Internet, because they do not master any official language as mother tongue or as a foreign language. The lower the disenfranchisement rate, the higher the effectiveness of a language regime.

Fidrmuc, Ginsburgh and Weber (2010), for example, argue that an optimal language regime should include six official languages (English, French, German, Italian, Polish and Spanish), whereas Ginsburgh and Weber (2005) recommend a trilingual language regime in which the official languages should be English, French and German. Gazzola (2014b) introduces a difference between the *absolute* disenfranchisement rate (DR-A) and the *relative* disenfranchisement rate (DR-R). The DR-A is equivalent to the indicator designed by Ginsburgh and Weber. The DR-R is defined as the percentage of the population who speak at least one official language as mother tongue or as a foreign language *at a very good level.* The relative disenfranchisement rate captures the idea that a basic or intermediate level of language skills in a foreign language is not enough to effectively participate in EU business. If differences in proficiency levels are taken into account, multilingualism is still by far the most effective option at a reasonable cost.

Results of all studies mentioned, however, point out that monolingualism would be a sub-optimal policy because it would entail the exclusion of an excessive percentage of Europeans from EU business. Table 5.4.1 reports the DR-A and DR-R for each European country and for the EU as a whole, using for this purpose three different datasets, that is, the most recent wave of the *Eurobarometer* survey, and two waves of the *Adult Education Survey* (2007 and 2011).[4] Results reveal that almost half of EU citizens do not know English, and almost 80 % of Europeans do not know this language as mother tongue or as a foreign language at a very good level. Hence, empirical evidence does not support the claim that proficiency in

4 Results for the AES-2007 and the AES-2011 are limited to Europeans aged 25–64.

English has become a "basic skill" or a universal endowment of Europeans, not even in the Nordic countries. It is worth noting that the conceptual difference between English and ELF (Formentelli 2012) has little policy relevance because ELF is still English (see Gazzola and Grin (2013) for an in-depth discussion).

Table 5.4.1: Linguistic disenfranchisement rates in the European Union, English-only language regime, EU citizens

Database	***AES 2011***		***AES 2007***		***Eurobarometer 2012***	
Country	*DR-A*	*DR-R*	*DR-A*	*DR-R*	*DR-A*	*DR-R*
Austria	30	82	29	82	27	85
Belgium	51	87	41	86	48	86
Bulgaria	77	95	79	97	75	93
Cyprus	19	64	16	74	27	69
Croatia	n.a.	n.a.	56	93	n.a.	n.a.
Czech Rep.	64	92	67	95	73	92
Denmark	9	66	14	n.a.	14	62
Estonia	37	87	54	91	50	91
Finland	11	74	19	83	30	82
France	51	93	55	95	61	97
Germany	32	89	41	82	44	91
Greece	47	89	52	91	49	81
Hungry	76	94	85	97	80	96
Ireland	0*	0*	n.a.	n.a.	0*	0*
Italy	54	95	54	97§	66	96
Latvia	51	92	58	94	54	93
Lithuania	63	92	62	97	62	95
Luxembourg	14	84	n.a.	n.a.	44	82
Malta	11	50	n.a.	n.d.	11	54
Netherlands	18	n.a.	n.a.	n.a.	10	72
Poland	68	95	75	96	67	93
Portugal	57	90	63	93	73	98
Romania	n.a.	n.a	81	97	69	93
Slovakia	66	95	70	95	74	93
Slovenia	35	80	39	81	41	83
Spain	68	94	66	94	78	97
Sweden	11	61	8	68	14	66
UK	0*	0*	0	2	0*	0*
EU average	**44**	**79**	**49**	**81**	**50**	**79**

n.a. = not available

* = due to the lack of data, we assume that in the UK and in Ireland residents are either native speakers of English or fluent in it.

§ = in the AES2007 data on the level of proficiency in the second foreign language in Italy are missing.

5.4.3 Linguistic inequalities and redistribution

In recent years, a variety of papers on multilingualism and equity have been published (see Alcalde 2015 for a review). We focus on contributions addressing the question of fairness in regulated or unregulated language processes from an economic perspective (as opposed to a philosophical one).[5]

Let us start with fairness in language policies (bottom-right quarter in Figure 5.4.1 above). Contributions in this area focus on the evaluation of the distributive effects of language regimes and their impact on different groups of people with a standing (e.g. EU citizens or EU companies); such groups are usually defined according to their linguistic attributes. Studies in this area follow a comparative approach. Hence, English is not studied in isolation, but rather in relation to other more or less multilingual alternatives. In other words, language policies supporting English monolingualism are just one of the possible scenarios being compared in the light of the fairness criterion. Gazzola (2014b, 2016 forthcoming), for example, shows that a reduction in the number of the official and working languages of the EU to one language only (e.g. English) would have severe regressive effects among European residents. The disenfranchisement rates associated with a monolingual policy are systemically higher for the group of EU residents with a low level of income or education than for the better-off. Gazzola (2014a, 2015) examines the effects of the trilingual language policy of the European Patent Office on the costs of access to patenting procedures for European applicants, showing that a monolingual solution would exacerbate (rather than reduce) existing inequalities.

We conclude this section by mentioning some contributions on fairness in international communication when we are dealing with unregulated linguistic processes (bottom-left quarter in Figure 5.4.1). Most of the papers dealing with English address the problem of inequalities arising from the dominant position of this language in Europe as a whole (sometime the term "linguistic hegemony" is used). Grin (2005, 2015) and Lukács (2007) identify the channels through which linguistic hegemony is a source of inequality among European countries, and they attempt to quantify the magnitude of the distributive effects taking place. Estimates are in the region of some €10 billion per year in favour of the UK. Other authors focus on possible measures to redistribute resources among European countries in order to offset existing language-related inequalities. Among the possible solutions, we should mention levying a linguistic tax on English-speaking countries or relaxing the enforcement of intellectual property rights on products in English (Van Parijs 2007), and creating a market for linguistic rights in Europe (Portuese 2012).

5 For an introduction to the philosophical approach to fairness in language planning (or "linguistic justice"), see Peled, Ives and Ricento (2015) and De Schutter (2007).