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**GAELIC AND THE ECONOMY:
SOCIO-ECONOMIC STATUS OF GAELIC SPEAKERS AND
THE COST-EFFECTIVENESS OF LANGUAGE POLICIES**

Jose María Zendoia Sainz

Dpto. de Economía Aplicada I/Ekonomia Aplikatua I Saila
E.U.E. Empresariales/Enpresa Ikasketen U.E.
Universidad del País Vasco/Euskal Herriko Unibertsitatea UPV/EHU
Plaza de Oñati, 1, 20018 Donostia–San Sebastián
jm.zendoia@ehu.es

GAELIC AND THE ECONOMY: SOCIO-ECONOMIC STATUS OF GAELIC SPEAKERS AND THE COST-EFFECTIVENESS OF LANGUAGE POLICIES

ABSTRACT

This article presents two analyses with regard to Gaelic in Scotland in relation to different economic variables. Firstly, there is a review of the research area referred to Minority Languages from the point of view of Economics, with a special section for the case of Gaelic. Then, there are the analyses referred to above. The first of them examines the socio-economic status of Gaelic speakers within Scottish society with the main finding that the classical dichotomy between rural and urban economies is exacerbated for Gaelic speakers, who have on average lower status than English monolinguals in the peripheral Scottish areas but higher standards of living than the non-Gaelic speakers in the big cities. The second analysis goes into a cost-effectiveness study of three key actions in the recovery of Gaelic: book publishing, radio broadcasting and television broadcasting, concluding that the tested person-hour costs are not excessively high and fully justify the adoption of relevant policies by the Scottish authorities.

KEY WORDS:

Minority Languages and the Economy; Gaelic; Sociolinguistics; Language Policy.

J.E.L. Classification Codes: D61, J15, Z10

1 Linguistic diversity, Cultural wealth and Economic development

This article attempts to set out two issues related to the economic dimension of language, regarding the special case of Gaelic in Scotland. As a prelude to the analysis of both issues, the paper presents an overview of the conceptual framework of what has been called Economics of Language, especially with regard to minority languages. First, it makes an approach to the emergence and development of the field of research that attempts to relate minority languages to different economic issues (Section 2), and then goes on to review previous contributions on the Gaelic and the Economy (Section 3).

In regard with the specific themes of this work in relation to Gaelic and the Economy, there are two subjects chosen. Firstly we have attempted to analyze the hypothesis that different linguistic groups – in this case bilingual Gaelic/English speakers on the one hand and monolingual English speakers on the other – have different socio-economic features, which would lead us to remark that linguistic skills have an influence on certain economic variables of the subjects in question (Section 4). Secondly, another problem addressed in Gaelic and its relation to economic variables is relative to the cost incurred by public authorities to promote the language, and the effectiveness of this cost (Section 5).

We frame this research work which relates a minority language to the economy within a broader field of study such as the Economics of Culture. In the specific case of minority languages, we find a society living in two languages/cultures, one of them relegated to the background, often marginal being, with the one being the main language and cultural system. The implications of this juxtaposition of languages in a society are the result of a particular historical, economic and cultural development at the heart of this society over the centuries. This leads to a situation in which cultural diversity is enriched by the existence of more than one linguistic-cultural system, and in turn threatened by the inherent tension between majority-minority conflicts in the area of language. All within an economic framework in which linguistic diversity provides economic intangible value, in which the individual human capital is conditioned by linguistic skills and in which public authorities are involved in the promotion of linguistic wealth, having to allocate part of their limited resources to the promotion of the minority culture.

When Throsby explains the difference between tangible and intangible cultural capital and between stocks and flows of cultural capital, he speaks about language as intangible cultural capital, like stocks of traditions and cultural beliefs, with an immense cultural value but not economic value since they cannot be traded as assets. In this sense, the author notes that "it is the flows of services to which these stocks give rise which yield both the cultural and the economic value of these assets" (Throsby 2000). Thus, we can approximate the economic value of languages, including minority ones, with an undeniable cultural value that can be translated into economic value in the form of the flow of services generated.

Throsby also notes that if the idea of "culture as process is entertained, questions are raised about power relationships between affected and affecting groups". It is in this power relationship in which we frame both the economic situation of bilinguals and the decisions by public representatives to allocate part of the budget to language policies. We cannot forget that the same author then notes that "culture may in these circumstances become a contested phenomenon rather than an area of agreement and harmony". For societies living with a majority and a minority language, this coexistence can be a source of tension in which, among other things, economic and power relationships between different language groups come into play. In this respect we frame the research on the socio-economic status of the Scottish majority – English monolinguals – and minority – Gaelic/English bilinguals – language groups.

As for cultural policies, the UN World Commission on Culture and Development (WCCD) (1992-1995) convened an international conference on cultural policies in Stockholm in April

1998, in which all those countries present adopted a statement on the improvement of cultural policies as a key component of economic development strategy. In one of the points of this statement, it recommends that States should promote cultural and linguistic diversity in and for the information society. It is in relation to this issue where we place the analysis of the cost-effectiveness of language policies implemented by the Scottish Administration to promote Gaelic.

Without being exhaustive on the topic of language policy and public support from the Scottish Administration for the promotion of Gaelic, the dependence of the Gaelic industry on the public sector is a remarkable point. In this sense, Alan Peacock, one of the leading economists in the research about Culture Economics, points out that bureaucrats could be interested in the imperfections of the market when the state is the sole purchaser because of the easiness in negotiating with fewer dominant suppliers (Peacock 1992). However, this lack of bidders seems to indicate at the same time, in the case of the cultural industry in Gaelic, both a weakness and a threat to its own reproduction and survival. In this sense, Peacock (1993) remarks that public cultural bodies such as the Scottish Arts Council or the Arts Council of Great Britain should concentrate much more of their resources on subsidy methods which would alter the preference functions of the public in order for the arts become largely self-supplying. In any case, in the fifth section of this paper, we study the effectiveness of key actions taken by public bodies to promote the Gaelic industry, with the main conclusion drawn that such policies do not seem relatively expensive but quite effective.

2 The background: Languages and the Economy

Among all the issues that have attracted the attention of research in the two-hundred-year history of the field of economic science, little has been written about the relationship between economy and language. In fact, literature on what might be called the economics of language goes back only as far as the last few decades, although Adam Smith himself did mention the subject, albeit indirectly, in his book 'The Wealth of Nations' (Book I, Chapter II), when he wrote that "Whether this propensity [to truck, barter, and exchange one thing for another] be one of those original principles in human nature, of which no further account can be given; or whether, as seems more probable, it be necessary consequence of the faculties of reason and speech, it belongs not to our present subject to enquire".

Today, the literature on language economics focuses on issues such as the socio-economic status of different linguistic groups, the economic impact of language-related industries (especially what might be termed 'cultural industries'), or the costs associated with linguistic plurality in cases like the European Union, to name just one.

Within the framework of the Economics of Language, the subject addressed in this paper will be the connection between minority languages and the economy, an even newer field of study. While research in this area does not date back many years, it covers a relatively large number of issues. This paper will firstly examine the development of research in the Economics of language, attitudes towards linguistic and cultural plurality and the history of the Gaelic language in Scotland, in order to establish an academic and historical framework for an analysis of current developments in the Gaelic-speaking community and the approaches taken by the Scottish government to the language and its speakers.

The first works related to the Economics of language originated in Quebec, Canada, and were primarily related to income differences between members of the Anglophone and Francophone communities. Later, similar studies were done in the United States with regard to Hispanics in comparison with the Anglophone population.

Subsequent academic contributions in relation to the economic aspects of minority languages diversified, and so articles have been written which are linked to different economic topics and cover different aspects of language:

- From a historical perspective, the relationship between economic development processes in linguistically fluctuating situations
- Socio-economic status of majority and minority language groups
- Economic impact of the activities related to the minority language in terms of jobs and wealth generated
- Minority language use in different jobs, and how this relates to the labour market
- Language policy: economic resources spent; considerations on the economic impact, etc.

This list could be extended by other works that address more specific issues –marketing, migration movements, tourism and so on – but the above list serves as a starting point to clarify ideas. In the same way, the *father* of the Language Economics applied to minority languages, François Grin, almost twenty years after delving into this issue, has outlined all the points raised so far by scholars who have addressed this and has proposed what he calls ‘the four paradigms’, that is to say the four main lines of research that have been addressed up to now through widely dispersed contributions and sometimes without a clear methodological reference. These four paradigms are: (1) the firm, the market and intercultural management; (2) development economics; (3) the language-specific sector and the multiplier effects; and (4) minority languages and welfare (Grin 2009).

It is taken as a foregone conclusion that cultural and linguistic diversity is a social asset. It is true that plural societies may struggle with factors which facilitate social conflict, but the fact that any modern society today is not homogeneous and must necessarily accommodate more than one ethnic, cultural or linguistic group cannot be ignored. In this respect, plurality is considered an advantage rather than a potential source of conflict. This is an essential starting point in all the work, based on arguments backing diversity such as seen in Streeten (2006).

Similarly, this paper argues that theories supporting the need for a single language (either on a state level, supranational or global) are misguided; although some authors argue that monolingualism offers certain theoretical advantages such as reducing transaction costs and easing communication among different communities (Jones 2000), these so-called advantages would undoubtedly result in the homogenization of all societies into one, and the loss of numerous codes of communication, ways of understanding the environment, and forms of social integration, ultimately causing huge cultural impoverishment. In our current ‘information age’, collaborative networks or cultural industries are regarded as the engine of progress and growth, so multilingual societies will benefit if they are able to manage this plurality.

3 Gaelic in Scotland and the Economy

In this respect it can be argued that Gaelic in Scotland is a factor that enriches Scottish society and gives it a distinctive quality, a kind of brand, which can be exploited both by the Gaelic-speaking community itself and by society as a whole, not only as a cultural asset but as an instrument of economic development.

However, economic development has been one of the factors that have historically left Gaelic marginalized in Scottish society itself, even in territories where it was the majority language for centuries. The establishment of a strong kingdom in the Middle Ages and the settlement of

merchants and artisans in the newly created villages weakened the position of Gaelic in the Lowlands. The modernization of later centuries was influenced by the schools of thought coming from south of the border. Likewise, the whole process of forced evictions and clearances as a method of change in the system of land use in order to make it more productive – under which was perpetrated something similar to a linguistic and cultural genocide – and finally, the process of industrialization in large cities, gave the English-speaking community an advantage over those who had retained Gaelic (Devine 1994, Glaser 2007).

After this steady decline of Gaelic, the Gaelic-speaking community has been reduced to just fewer than 60,000 speakers (census 2001) with an uneven distribution throughout Scotland. While in the traditional land of Gaels (Argyll, the Highlands and Islands) the percentage of Gaelic speakers varies from 65% in some areas of the Western Isles to a percentage range between 2% and 20% in the Highlands and Argyll, there are in turn some Gaelic-speaking pockets in large cities. Thus, even excluding the Highlands and Islands, there are about 25,000 Gaelic speakers, mainly in Glasgow and Edinburgh. As we will see in the next part of this work, an analysis of the socio-economic status of the Gaelic community leads to the conclusion that in areas with higher proportions of bilingual Gaelic and English speakers, these people account for, on average, lower socio-economic rates than monolingual English speakers, while in areas where the number of bilingual speakers is very low, those who have some knowledge of Gaelic, on average, enjoy better levels of status than society as a whole.

However, after a century of wandering in the wilderness, the pro-Gaelic activists have managed to implement a series of measures, albeit quite timid but nevertheless trend-changing, which have helped to slow down the decline. These measures were, in the middle of the past century, the beginning of radio broadcasting in Gaelic in 1923, followed by the production of Gaelic language television programmes in 1962, and the creation of Gaelic units in the education system. By the 80s, this type of activity was booming with the setting-up of a specific radio station in Gaelic (BBC Radio nan Gàidheal, launched in 1985), the increase in Gaelic-medium school units, and the establishment of Sabhal Mòr Ostaig College, (nowadays, part of the University of the Highlands and Islands) in 1973. This process has been given a new impetus following the adoption of the Language Act in 2005 and the subsequent implementation of the National Language Plan and several specific plans for public authorities and bodies (Dunbar 2006).

These measures have helped to enrich Scottish society. First, the regeneration of Gaelic offers a series of jobs in the Scottish production network, in radio and television broadcasting, and in the education sector, in addition to work places in which language skills are needed according to the Language Plans. These jobs are mainly in the public sector, but there are also some jobs within the private sector, although their amount is not significant. This contribution to Scottish GDP obviously has a positive effect of Gaelic, beyond its own communicative usefulness and its value in terms of Scottish identity. Although it is difficult to obtain such data, taking into account the previous estimates it appears that the regeneration of Gaelic has resulted in at least 1000 jobs (Sproull & Ashcroft 1993). Given that the sector related to Gaelic is largely supported by public funds, we can state that it utilizes about £25 million every year directly through public aid, a figure that implies a greater overall impact through the multiplier of economic activity and with the addition of private initiatives, may be closer to £50 million in total. Anyway, McLeod (2001) suggests that economic development policies need to take language-planning aspects into consideration, otherwise the language shift will continue.

The labour market associated with Gaelic has been studied in recent years, not only on a quantity level – the number of jobs created in different areas – but also on a qualitative level: motivation, possibility for advancement, personal satisfaction, and attitude of the employer (Milligan 2010). Such studies show some inconsistencies; for example, workers in jobs where Gaelic is essential seem to be more or less loyal to the language according to their job expectations.

It should be noted that the promotion of Gaelic has been linked in recent decades to economic development policy in Gaelic-speaking areas (Chalmers & Danson 2006). In this sense, it can be seen that language policy is essential in the promotion of culture and economy through cultural development. An example of this is the establishment of MG Alba in Stornoway, which has had a very positive effect on the economy of Lewis in terms of employment, income and GVA. Minority language policy can also be associated with new schools of thought in the field of regional economic development. In this sense, it is important to have culturally diverse elements that distinguish our regions from others, but beyond that, diversity is seen as a key factor in encouraging sustainable economic growth, enhanced social awareness and knowledge, and the creation of collaborative networks. This sort of diversity in the Gaelic community within Scottish society might lead to interesting initiatives related to cultural and communication sectors in the Gaelic-speaking areas, and in the whole of Scotland as well. Terms like cross-cultural management form the basis of the most recent approaches to economic growth.

The financial crisis may pose a threat to the promotion of Gaelic; in fact, public support for Gaelic has gone down by around 5% in the financial year 2011-12. However, other factors may have been instrumental in reversing language shift: an adjustment in the production system as a consequence of adjustments to the emerging economic framework and the subsequent change in the skills needed to access the labour market, a possible return to rural areas of local people who migrated to cities and are currently unemployed, or changes in cultural patterns which focus more on alternative ways of life. For instance, it seems that the Gaelic language promotion policy has not been very successful in improving the self-esteem of Gaelic speakers, but in the future the creation of new cultural projects could better satisfy the needs of Gaelic community members, not only as language users but also as consumers of Gaelic products and services. Some examples of this are the promotion of 'cultural hubs' and 'language events' such as poetry recitals, Gaelic writing competitions, ceilidhs, and cultural events on-line, etc. Nevertheless, Gaelic activists may find ways to better satisfy the needs of the Gaelic-speakers, perhaps by evaluating their role as alternative language speakers and consumers of Gaelic products and services, as a mark of distinction amongst the rest of society.

In this point we would like to have in mind the Basque language revitalization (Zendoia 2006). The cases of Basque and Gaelic are not very similar for comparison purposes: the absolute number of speakers, the proportion of bilinguals, the geographic distribution of them, and many other factors like administrative competences or political background mean there are great differences between both cases. Anyway, some of the initiatives recently launched to promote Gaelic are similar to other efforts made some years ago in the Basque Country (mainly Basque-medium education and TV and radio broadcasting) and they are becoming successful some decades after they were set up, so the hope of Gaelic language revitalization is a long term matter, if suitable policies can achieve their aims in a coordinated way.

The proliferation of papers and research works on Gaelic and its survival related to economic topics (e.g. Sproull & Chalmers 2006, MacKay 2009, MacLeod 2009) is a remarkable point, taking in account the relative small size of the Gaelic speaking community, and comparing it with other European minority language communities such as Basque or Catalan. It seems to be a discourse typical to the British Islands, as the close cases of Welsh (Aitchison & Carter 2000) and Irish Gaelic (Walsh 2006) suggests.

4 Socio-economics of language groups in Scotland

As it has been previously mentioned, the Gaelic speaking community has become widely dispersed. There are, however, some areas where the proportion of Gaelic speakers is higher than 20% of the adult population. These are located in the Highlands, and the Eilean Siar or

Outer Hebrides. The remaining Scottish Councils have lower levels of bilinguals, with percentages of nearly 0 in the Central Belt and the Lowlands. In big cities such as Glasgow and Edinburgh, Gaelic speakers make up a small proportion of the adult population, but even these small numbers add up, so they are relevant to the whole Gaelic-speaking community. To sum up, the areas with the highest proportion of people who know Gaelic are located in northwest Scotland, with significant Gaelic-speaking pockets in the big cities.

When calculating the numbers of Gaelic speakers, it should be noted that the official figures refer to a broad scale of Gaelic knowledge. Consequently, some people identified as Gaelic-speakers are in the 'Only understand' category, while others are in the 'Gaelic-speaking, but illiterate' category, and others are in the 'Write, read, speak and understand' category. Consequently, it is not easy to document the number of Gaelic-speaking people. An added difficulty is that Gaelic knowledge figures are based on Civil Parishes, while other statistics such as economic indicators are expressed in Intermediate Geographic Zones.

An examination of the available and comparable data from different sources, primarily from the 2001 census and the General Register Office for Scotland, reveals interesting findings. If we focus on the data from the Gaelic-speaking community in Scotland (58,969 people) we observe a number of significant differences between this group and Scottish society as a whole with regard to a series of socio-economic and demographic indicators.

For example, as for the accommodation type and household facilities, we conclude that for the Gaelic community on average it is less common for them to have a flat or apartment as the main residence, 20% amongst Gaelic speakers [G] and 28% amongst non-Gaelic [NG] speakers, but it is more common for them to have their own house (75% G, 69% NG), and particularly, it is much more common for them to reside in health-care or welfare (3% G, 1.6% NG), figures that we can assume correspond to elderly people. In relation to household size, the houses and apartments of Gaelic speakers are significantly less crowded than those for the Scottish average (2 or more free rooms: 41% G, 31% NG) and more often lack central heating (9% G, 5% NG).

In relation to the type of family, it is less likely for a couple of Gaelic speakers to cohabit without being married (4.8% G, 6.4% NG) and amongst them there are fewer singles (34% G, 38% NG) and more widowed (9.9% G, 6.6% NG). It is also more usual within the Gaelic-speakers group not to live in a family, either sharing with other house mates (6.7% G, 4.1% NG), or alone (19% G, 14% NG). If we analyze the data for health, amongst Gaelic speakers there is a greater proportion of people declaring not to enjoy good general health (11.2% G, 10.1% NG) and to have a limiting long-term illness (24% G, 20% NG).

But besides these data, available for the whole of Scotland, we have at our disposal a number of other socio-economic indicators, not only to analyze them from a global perspective as above, but to observe them broken down into different geographical zones of Scotland, after dividing the whole territory into six different language areas. Based on data from the 2001 census, Scotland [S] is divided into different Gaelic-speaking areas with the following distribution:

Table 1: Gaelic speakers proportion in Scottish areas

| Gaelic Area | % Gaelic speakers |
|--|-------------------|
| Eilean Siar [ES] | 62.3 |
| Skye & Lochalsh [SL] | 35.5 |
| Rest of Highland [H-SL] (excluding Skye & Lochalsh) | 4.9 |
| Argyll & Bute [AB] | 5.2 |
| Other Main Gaelic Areas ¹ [OM] | 3.4 |
| Rest of Scotland [RS] | 0.7 |

Source: 2001 Census, Gaelic Report, GROS

Economic indicators help us obtain an idea of the differences between Gaelic and non-Gaelic speakers in terms of employment and economic activity in these areas. For our study we will use the figures referred to "Economic activity", "Occupation" and "Academic qualifications" obtained from the data available in the 2001 census.

4.1 Economic activity

Regarding economic activity, the figures we have obtained from the census source are summarized and grouped in the following table:

Table 2: People aged 16-64 by Gaelic area, percentage in each category of economic activity

| Gaelic Area | ES | | SL | | H-SL | | AB | | OM | | RS | | S | |
|---------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | G | NG |
| Employee - full time | 42.1 | 42.1 | 37.5 | 37.2 | 42.4 | 44.7 | 37.2 | 43.3 | 35.2 | 40.0 | 42.5 | 45.6 | 41.8 | 45.5 |
| Employee - part time | 15.7 | 14.8 | 14.3 | 14.8 | 14.6 | 14.3 | 14.2 | 13.3 | 13.0 | 13.2 | 9.7 | 12.2 | 12.0 | 12.3 |
| Self employed | 10.6 | 10.6 | 15.5 | 16.7 | 11.0 | 10.5 | 15.4 | 12.4 | 17.3 | 18.4 | 7.4 | 6.8 | 9.4 | 7.1 |
| Unemployed | 5.6 | 5.8 | 5.4 | 5.5 | 4.6 | 4.8 | 5.4 | 4.6 | 4.3 | 3.3 | 5.6 | 4.5 | 5.4 | 4.5 |
| Economically active full time student | 2.0 | 2.1 | 2.4 | 1.7 | 2.6 | 2.1 | 1.5 | 1.9 | 3.8 | 1.8 | 4.4 | 3.5 | 3.4 | 3.4 |
| Economically Inactive | 23.9 | 24.5 | 24.9 | 24.1 | 24.9 | 23.5 | 26.3 | 24.4 | 26.5 | 23.3 | 30.4 | 27.4 | 28.0 | 27.2 |

Personal compilation based on 2001 Census, GROS

¹ Some Parishes in Perth & Kinross, Stirling and North Ayrshire

In the areas with the most Gaelic-speakers, i.e. Eilean Siar [ES] and Skye & Lochalsh [SL], economic activity is not predicted or affected by knowledge of Gaelic. Economic activity is similar between Gaelic-English bilinguals and English monolinguals.

In the whole of Scotland, there are significantly more non-Gaelic speakers than Gaelic speakers employed full-time, and as a counterpart, there are more Gaelic speakers in the self-employed and unemployed categories.

With the exception of Eilean Siar, in all the areas surveyed, there are more inactive than active Gaelic speakers. This is likely to be due to the age distribution of Gaelic speakers: Gaelic speakers are, on average, older and therefore more likely to be economically inactive.

4.2 Occupation: Jobs and Skills

In this case, we have summarized and grouped the figures from the 2001 census in table number 3, in which the occupation categories² have been merged into five groups, from the least prestigious to the most prestigious.

Table 3: Percentages of people aged 16-74 in employment by occupational group (A-E) and language ability: Gaelic speaker (G), Non-Gaelic speaker (NG)

| Gaelic Area <i>Occupation</i> | Main Gaelic Areas | | Rest of Scotland | | Scotland | |
|----------------------------------|-------------------|------|------------------|------|----------|------|
| | G | NG | G | NG | G | NG |
| A | 23.6 | 22.5 | 17.9 | 24 | 20.5 | 24 |
| B | 24.3 | 21.8 | 16.7 | 19.7 | 20.1 | 20 |
| C | 21.8 | 22.4 | 20.6 | 23.6 | 21.3 | 23.6 |
| D | 12 | 12.2 | 18.3 | 12 | 15.4 | 12.1 |
| E | 18.1 | 21 | 26.8 | 20.3 | 22.8 | 20.5 |

Personal compilation based on 2001 Census, GROS

It is clear that there are quite different patterns in the Main Gaelic Areas and in the Rest of Scotland. Some main conclusions can be drawn from this data. Firstly, in the Main Gaelic areas, a slightly greater proportion of Gaelic speakers are employed in less qualified jobs, while a higher proportion of non-Gaelic speakers are employed in the most prestigious jobs. The

² *Occupations categories* – **A:** Customer Service Occupations, Process; Plant and Machine Operatives, Transport and Mobile Machine Drivers and Operatives, Elementary Trades; Plant and Storage Related Occupations, Elementary Administration and Service Occupations. **B:** Skilled Construction and Building Trades, Textiles; Printing and Other Skilled Trades, Caring Personal Service Occupations, Leisure and Other Personal Service Occupations, Sales Occupations. **C:** Business and Public Service Associate Professionals, Administrative Occupations, Secretarial and Related Occupations, Skilled Agricultural Trades, Skilled Metal and Electrical Trades. **D:** Business and Public Service Professionals, Science and Technology Associate Professionals, Health and Social Welfare Associate Professionals, Protective Service Occupations, Culture; Media and Sports Occupations. **E:** Corporate Managers, Managers and Proprietors in Agriculture and Services, Science and Technology Professionals, Health Professionals, Teaching and Research Professionals

opposite situation is found in the rest of Scotland, in which Gaelic speakers are better placed: in the lowest categories non-Gaelic speakers are a majority, while a higher proportion of Gaelic speakers are in the most qualified jobs.

From an analysis of the 25 occupation categories, it can be seen that there are several notable differences between Gaelic speakers and non-Gaelic speakers³. 15.1% of female Gaelic speakers in the Main Gaelic Areas work in ‘Caring Personal Service Occupations’ (B), while only 11.1% of the whole female population in these areas. For non-Gaelic females the most common occupation in Main Gaelic Areas is ‘Administrative Occupations’, 12.7%, compared to the 11% of Gaelic females. In the case of males, the most common jobs for Gaelic speakers in the Main Gaelic areas are ‘Transport Machine Drivers’, ‘Skilled Agricultural Trades’, and ‘Skilled Construction Trades’, all of which are above 9%, of the employed male population, but for non-Gaelic speakers in the Main Gaelic Areas, the most common jobs are ‘Corporate Manager’ and ‘Skilled Construction Trades’, almost 9% and 8% respectively.

4.3 Qualifications

Finally, we have obtained the figures related to Academic Qualifications in-table number 4, in which the different levels of qualifications are grouped into five groups: No Qualifications and four groups from level one (lowest qualifications) to level four (highest qualifications)⁴.

Table 4: Education Levels among Gaelic (G) and non-Gaelic (NG) speaking people aged 16-74 by area:

| Gaelic Area Qualifications | ES | | SL | | H-SL | | AB | | OM | | RS | | S | |
|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | G | NG |
| No Qualifications | 42.1 | 26.1 | 37.7 | 24.7 | 31.6 | 32.9 | 36.7 | 29.6 | 27.6 | 28.2 | 21.1 | 33.5 | 28.4 | 33.3 |
| Group 1 | 21.5 | 27.0 | 20.7 | 26.0 | 20.2 | 26.7 | 20.9 | 24.3 | 19.9 | 23.6 | 17.2 | 24.7 | 18.8 | 24.8 |
| Group 2 | 14.1 | 15.5 | 16.8 | 17.2 | 15.5 | 15.2 | 16.0 | 17.2 | 17.5 | 16.1 | 18.1 | 15.6 | 16.8 | 15.6 |
| Group 3 | 5.9 | 7.5 | 4.8 | 5.7 | 6.7 | 6.4 | 4.9 | 6.3 | 5.9 | 6.7 | 9.2 | 7.0 | 7.7 | 6.9 |
| Group 4 | 16.4 | 23.8 | 20.0 | 26.3 | 26.1 | 18.8 | 21.6 | 22.6 | 29.1 | 25.3 | 34.4 | 19.2 | 28.3 | 19.3 |

Personal compilation based on 2001 Census, GROS

Nationally [S], the qualification levels also reveal huge differences between Gaelic speakers and non-speakers: 28.3% of the former have the highest level of educational qualification, while only 19.3% of the latter do.

³ See Table n. 24 of the Gaelic Report, GROS

⁴ *Highest level of qualification* is defined as: **Group 1:** 'O' Grade, Standard Grade, Intermediate 1, Intermediate 2, City and Guilds Craft, SVQ Level 1 or 2 or equivalent. **Group 2:** Higher Grade, CSYS, ONC, OND, City and Guilds Advanced Craft, RSA Advanced Diploma, SVQ Level 3 or equivalent. **Group 3:** HND, HNC, RSA Higher Diploma, SVQ Level 4 or 5 or equivalent. **Group 4:** First Degree, Higher Degree, Professional qualifications.

In contrast, 28.4% of Gaelic speakers have no qualifications, compared to 33.3% of non-Gaelic speakers. In the bilingual areas, however, these differences are clearly the opposite, with a very higher proportion of non-qualified people among the Gaelic speakers, and higher proportions of Group 4 level qualifications among non-Gaelic speakers.

If we gather the figures of the Main Gaelic Areas, we obtain as a result the next table (number 5), which is rather significant:

Table 5: Education Levels among Gaelic (G) and non-Gaelic (NG) speaking people aged 16-74 by Main Gaelic Areas and Rest of Scotland:

| Qualifications | Gaelic Area | | Rest of Scotland | | Scotland | |
|-------------------|------------------------|-------|------------------|-------|----------|-------|
| | Main Gaelic Areas G | NG | G | NG | G | NG |
| No Qualifications | 37.32 | 31.25 | 21.15 | 33.46 | 28.40 | 33.33 |
| Group 1 | 20.90 | 25.76 | 17.16 | 24.74 | 18.84 | 24.80 |
| Group 2 | 15.14 | 15.86 | 18.15 | 15.62 | 16.80 | 15.63 |
| Group 3 | 5.87 | 6.45 | 9.17 | 6.97 | 7.69 | 6.94 |
| Group 4 | 20.76 | 20.68 | 34.38 | 19.21 | 28.27 | 19.30 |

Personal compilation based on 2001 Census, GROS

In the Main Gaelic Areas, Gaelic speakers with no qualifications rise to 37%, whilst non-Gaelic speakers with no qualifications are less in proportion: 31%. This gap is compensated by people with qualifications from Group 1: nearly 21% amongst Gaelic speakers as opposed to 25% amongst non-speakers. For the other qualification levels, percentages do not differ significantly.

On the other hand, if we focus on the Rest of Scotland, Gaelic speakers with no qualifications only amount to 21%, as opposed to 33% amongst non-Gaelic speakers. In Group 1 there are 17% of Gaelic-speakers as opposed to 24% of non-speakers, and these two gaps are compensated in terms of qualifications in Group 4: 34% amongst Gaelic speakers as opposed to only 19% of non-speakers. It means that the Gaelic speakers far from the Gaelic traditional territory, that is to say mainly in the cities of the central belt, have a qualification level that is significantly higher than their Gaelic counterparts in the Main Gaelic Areas, and also than their non-Gaelic counterparts in the rest of Scotland.

Thus, taking into account the information concerning economic activity, occupation and education levels, and if we assume that higher education levels and better qualified jobs are a symptom of higher and more prestigious standards of living, the main conclusion is that Gaelic speakers in more bilingual areas (Eilean Siar, Skye and Lochalsh) have lower than average socio-economic status, but for those Gaelic speakers who live in the rest of Scotland, especially in the central belt where they are significant in absolute numbers, the social and economic standard of living seems to be higher than average.

The most plausible explanation is that Gaelic communities in peripheral and rural areas of Scotland are related to more traditional and underdeveloped patterns of society - although those who emigrated to the cities and their descendants have achieved a higher standard of living, perhaps, in part, due to their linguistic skills, amongst others. And in drawing this conclusion we have to remember the influence of broadcasting facilities, primary and secondary Gaelic schools and Gaelic departments at the Universities of Glasgow and Edinburgh, amongst others. Thus, it

seems that the classic dichotomy between rural and peripheral economies on the one hand and urban economies on the other hand is exacerbated in the case of Gaelic speakers.

Studies by Chalmers and Danson (2009), related to the economic impact of Gaelic language and culture in Glasgow, provide similar results. Both authors refer to a “talent index” to explain the gap between Gaelic speakers and non-Gaelic speakers in the city. It can be concluded that there are two main types of Gaelic-speakers in socio-economic terms: those who live in the remote heartland of the language, and those who live in the most urban areas of the Central Belt and Lowlands.

The data from the next 2011 census will be published in autumn 2012, which will enable the current situation and the evolution of these variables during recent years to be analysed.

4.4 References for this section

The data used for the compilation of the tables above comes from these sources:
GROS, General Register Office for Scotland:

- Gaelic Report:

<http://www.gro-scotland.gov.uk/files/1/stats/gaelic-rep-english-tables.pdf>

- T27 Theme table on Gaelic speakers, Scotland:

<http://www.gro-scotland.gov.uk/files/theme24-55.xls>

Interview with John Angus Mackay, Chief Executive of Bòrd na Gàidhlig, 6th of April 2011

5 Cost-effectiveness analyses of language policies

One of the possible approaches related to minority languages and the economy is the evaluation of language policies from an economic point of view. This takes into account the effectiveness of certain actions in support of the language in question, and then analyzes the cost incurred to promote such action.

Thus, there is a way to measure and compare the effectiveness of different policies developed to promote Gaelic. This research uses the Policy-to-Outcome Path⁵, created by François Grin (2003), in order to compare three of the most important schemes within the language policy in Scotland: aid to publish books in Gaelic, subsidy for Radio nan Gàidheal and funding grants to BBC Alba and MG Alba. The following exercise is based upon several hypotheses and suppositions but anyway they could serve to stimulate the thought of those who have to decide which the best measures are in order to achieve the predetermined goals.

Let us assume that the three policies mentioned above have the ultimate aim of giving larger exposure time in Gaelic to people who understand the language. The Gaelic Book Council manages the incentives to publish and distribute Gaelic books, and Gaelic-medium radio and television contribute to broadcasting in Gaelic. Thus, they improve the Gaelic environment for those who read books, listen to the radio or watch television in Gaelic.

5.1 Gaelic Book Council - Comhairle nan Leabhraichean

The Gaelic Book Council (GBC) supports publications in Gaelic under certain conditions available on their website. Every year around 40 new titles are published with a print run of between 500 and 1000 copies per title. If we assume that each book is read by an average 1.4 people as Grin does in his example (Grin 2003) and that there are 10 hours needed to

⁵ Although it is not the same Contingent Valuation Method (CVM) as in Throsby (2001), who describes a cost-effectiveness analysis methodology for cultural heritage projects, anyway some of the features of the model (stock value, option value, legacy value and externalities) could be applied in the case of minority language policies.

completely read a book, we conclude that each year Gaelic readers as a whole read in Gaelic around 420,000 hours. This is the effectiveness of such a language measure:

Table 6: Effectiveness of subsidizing Gaelic books

| | | |
|--------------------------------------|----------------|----------------------------------|
| Titles funded per year | 40 | A |
| Average print run per copy | 750 | B |
| People reading a copy | 1.4 | C |
| Copies read in Gaelic per year | 42,000 | $D=A \times B \times C$ |
| Reading hour per book | 10 | E |
| Gaelic reading hours per year | 420,000 | $F=D \times E$ |

In 2010 GBC was granted £200,000 by Bòrd na Gàidhlig, and £191,000 by Creative Scotland. We assume that both kinds of fund do not share the same goal: Creative Scotland's grants have a more general aim to promote cultural aspects in Scottish society like reading encouragement; the promotion of Gaelic is covered by the grant by Bòrd na Gàidhlig. This yields the next figure which shows the cost-effectiveness of Gaelic written book promotion:

Table 7: Cost-effectiveness of subsidizing Gaelic books

| | | |
|--|-------------|--------------|
| Gaelic reading hours per year | 420,000 | F |
| Funding BnG (£) | 200,000 | G |
| Funding Creative Scotland (£) | 191,000 | H |
| Reading person-hour cost Gaelic promotion (£) | 0.48 | G / F |
| Reading person-hour cost reading promotion (£) | 0.45 | H / F |

Therefore, the cost of one person-hour of reading in Gaelic has a cost of £0.48 related to the promotion of the language (plus £0.45 related to general promotion of reading in Scotland). Obviously, we could change the assumptions we have made and adapt them better to more accurate data. Anyway, we think that the PtOP model gives us a powerful tool to measure the policies implemented and to change, where appropriate), these policies over the next few years.

Incidentally, GBC creates a total of 5 full-time jobs with its activity and other positive effects such the visibility of Gaelic, the improvement of language skills and the creation of a network of writers-readers.

5.2 Radio nan Gàidheal

Now let us move from publishing to broadcasting, starting with radio. Radio nan Gàidheal (RnG) broadcasts radio programmes in Gaelic on a basis of 4,168 hours per year (a schedule of 16 hours from Monday to Friday, and a few less hours at weekends). The listening figures show that the radio broadcast reaches 68.6% of Gaelic speakers each week, although we do not have any more detailed listening figures of each radio programmes, and so we have to make a number of assumptions.

With the data we have we are able to create the next table, in which we understand that an average listener listens to the radio four days per week, and two hours per day. Maybe it is not

very accurate, but anyway it gives an amount of nearly 3,000 people listening to RnG per hour on average, and we think that it is a plausible number⁶.

Then, with a total of 4,168 hours broadcasted per year, we obtain a total of 12,253,920 hours-person listened to RnG. This is the effectiveness of RnG broadcasting in its aim to create a Gaelic environment for Gaelic speakers (to be more accurate, we will have to include those who are able to understand Gaelic although they are not fluent speakers, and so the listened hours-person would be increased).

Table 8: Effectiveness of subsidizing Gaelic radio

| | | |
|---------------------------------------|-------------------|----------------------------------|
| Gaelic speakers | 60,000 | A |
| RnG listening (%) | 68.60 | B |
| Listeners per week | 41,160 | $C=A \times B / 100$ |
| Listeners per day (4 days/week) | 23,520 | $D=(C/7) \times 4$ |
| Hours per day | 16 | E |
| Listeners per hour (2 hours/day) | 2,940 | $F=(D/16) \times 2$ |
| Gaelic hours per year | 4,168 | G |
| Gaelic hours listened per year | 12,253,920 | $H=F \times G$ |

The former figure represents the effectiveness of Gaelic radio broadcasting, measured exposure in terms of person-hours to the language via radio programmes.

The annual budget⁷ of Radio nan Gàidheal was £6 million, thus we can get a measurement of the cost-effectiveness of such a policy:

Table 9: Cost-effectiveness of subsidizing Gaelic radio

| | | |
|---|-------------|---------------------------|
| Gaelic hours listened per year | 12,253,920 | H |
| RnG budget (£) | 6,000,000 | I |
| Gaelic listened person-hour cost (£) | 0.49 | I / H |

Here we have not split the amount related to language promotion and the amount related to normal broadcasting, as it is obvious that a Gaelic person listening to RnG is receiving information or entertainment besides the linguistic medium of it. Therefore, the Gaelic broadcasted hour per listener has a cost lower than half a pound⁸.

Besides in the case of the radio station, we have to add that RnG creates at least 24 full-time jobs, plus the indirect positive effects highlighted above.

5.3 BBC Alba and MG Alba

As we have done previously with RnG, it is possible to measure the cost-effectiveness of the BBC Alba television channel, which operates in partnership with MG Alba (Meadhanan

⁶ For instance, the average hours per listeners and week of the BBC Local Radios is 9.1 (Source: RAJAR website)

⁷ BBC annual budget was £3,560.2 million in 2009-10 (Total UK Public Service Broadcasting Group expenditure), and so the RnG budget is no more than 0.17% of the total.

⁸ To compare, we could choose the case of a local radio like BBC Radio Guernsey, with a total population of 52,000, a schedule of 19 hours per day, and a weekly reach of 40%. It gives a more expensive person-hour cost, without any linguistic added value.

Gàidhlig / Gaelic Media Service). This is the most expensive of all the policies implemented to promote Gaelic.

The viewing figures say that 4.3% of the Scottish population joined this TV channel every week in 2009, that is to say, around 180,000 people⁹. There are no more available figures about specific programmes, and so we have to make some estimation about audiences. In this case we assume that an average viewer watches BBC Alba three days a week, and that each of these days spends 1 hour doing so¹⁰ – the TV channel broadcasts around 6 hours per day. It gives us a figure of 12,857 viewers per hour, a number that seems plausible enough to be real.

With a schedule of 6 hours per day, we obtain a total amount of 2,521 hours broadcasted every year, and so the total number of hours spent watching BBC Alba by Scottish people rises to 32,412,857, taking in account the assumptions we did.

Table 10: Effectiveness of subsidizing Gaelic television

| | | |
|-------------------------------------|-------------------|---------------------------------|
| Scottish people | 5,194,000 | A |
| BBC Alba viewers (%) | 4.3 | B |
| Viewers per week | 180,000 | C |
| Viewers per day (3 days/week) | 77,143 | $D=(C/7)\times 3$ |
| Hours per day | 6 | E |
| Viewers per hour (1 hour/day) | 12,857 | $F=D/E$ |
| Gaelic hours per year | 2,521 | G |
| Gaelic hours viewed per year | 32,412,857 | $H=F\times G$ |

This figure reflects the effectiveness of TV broadcasting in Gaelic, measured in the amount of person-hours exposed to a Gaelic environment through television programmes.

The grants received in 2009/10 raised £18.4 million, £12.4m of this being provided by MG Alba and £6m by BBC Scotland. MG Alba is funded by the Scottish government and regulated by Ofcom, and works in partnership with the BBC. Thus, the Gaelic television watched per hour-person has a cost of £0.57.

Table 11: Cost-effectiveness of subsidizing Gaelic television

| | | |
|---|-------------|--------------|
| Gaelic hours viewed per year | 32,412,857 | H |
| MG ALBA budget (£) | 12,400,000 | I |
| BBC ALBA budget (£) | 4,100,000 | J |
| MG Alba viewed person-hour cost (£) | 0.38 | I / H |
| BBC Alba viewed person-hour cost (£) | 0.13 | J / H |

In this case we cannot either deduce how much of this cost is for the promotion of Gaelic and how much for the television broadcast itself, and so the cost per person-hours to create a Gaelic environment around the viewer is less than £0.51.

⁹ Until January 2010 the Borders region was not included in the Scotland terrestrial analogue region.

¹⁰ This is consistent with the information given by MG Alba, that the core audience watched for almost 6 hours per week and the wider audience watched for an average of just over 1.5 hours per week.

In addition, we must point out that television production through MG Alba creates about 100 full-time jobs, with indirect estimated employment of around 80 full-time jobs and 38 places more as estimated induced employment.

Therefore, we have analyzed the cost-effectiveness of three key policies used to promote Gaelic in terms of the cost of setting up a Gaelic environment per hour-person in three different areas (reading, radio and television) and we believe that we have utilized a useful tool for measuring and comparing linguistic policy measures that are applied by agents who have more detailed and accurate information which could be very useful when making decisions.

We note also that the promotion of books, radio or television in Gaelic has a cost not exclusively set aside for the promotion of the language, but with the same cost is also offering other services such as entertainment and information to the public. It means that all costs associated with such policies are not attributable solely to the promotion of Gaelic; they are also related to the provision of cultural, information and entertainment services, like any other radio station or television, or like any other policy to promote reading, no matter in what language it is carried out.

On the other hand, we cannot forget the positive impact that such measures have beside the aforementioned number of person-hours of exposure to Gaelic. For example, it is likely that people who read books or watch a particular TV programme in Gaelic generate conversations about these books or programmes, probably in Gaelic, and so the number of exposure hours is greater than that recorded in the table. Moreover, such actions help to standardize the language use and disseminate expressions for all domains of language, i.e., they have educational effects on improving language skills. It is also noted that the existence of a television or radio channel in Gaelic allows the minority language communities to acquire a new point of view about the language, since through the waves it is able to leave the fireplace and expand towards the world in all modern linguistic registers.

Finally, it is important to note that these activities generate a considerable number of jobs, since we are talking about 130 FTEs only as direct employment, plus around other 155 FTE through indirect and induced employment.

5.4 References for this section

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BBC, Full financial and governance statements 2009/10, Report
RAJAR (Radio Joint Audience Research) website
BARB (Broadcasters' Audience Research Board) website
Interview with Neil Graham, Head of Operations and Finance, MG Alba, 9th of November 2010
Interview with Rosemary Ward, Director of Comhairle nan Leabhraichean (Gaelic Books Council), 5th of May 2011

6 Conclusions

A weak and dispersed Gaelic-speaking community has survived—sociological and economical evolution throughout history and has become highly vulnerable, but it can be hopeful of its future if a suitable Language Plan is implemented, taking into account the whole framework of regional economic development in peripheral areas. Gaelic speakers could proudly see themselves not only because of their language skill and Gaelic identity, but also because these very skills allow them to reach higher status. Anyway, there are controversial points around the need of a plan for language survival: differences between public discourse, political party practice, mainstream attitude and Gaelic speakers' support for language use.

Related to the socio-economic status of Gaelic-speakers, we have concluded that there are two main types of Gaelic-speakers in socio-economic terms: those who live in the remote heartland of the language –who are in a worse economic position than their monolingual neighbours – and those who live in the most urban areas of the Central Belt and Lowlands, who have a higher standard of living than only English-speakers. Obviously, this finding is based on averages, and so more detailed studies could take nuances into account about this vast classification.

We find it significant that, with the assumptions, the cost of hour-person in the three policies considered are similar, although in absolute terms there are three very different projects involving public funds from £16.5 million (BBC Alba) to £400,000 (Gaelic Books Council). Furthermore, we believe that the person-hour costs tested are not excessively high and fully justify the adoption of relevant policies and the assumption of expenditure by the Scottish authorities. Anyway, the whole amount allocated to Language Policy by the Scottish Government, including the specific grant for the education system, is around £26 million within the total budget of nearly £30,000 million in the financial year 2011-12, which is less than 0.1% of the budget. Therefore, it seems that the current measures in order to promote Gaelic are not very expensive; indeed we could assume that the language authorities are highly efficient in making language policies.

With this brief review of some policies to promote Gaelic in Scotland, a path has been paved for more in-depth research in the future on the measurement of the cost-effectiveness of such policies over time.

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