

# Language and development: A general introduction and a few (critical) considerations

*By Professor François Grin<sup>1</sup>*

## Introductory remarks

It is an honour and a pleasure for me to take part in the *English Policy Forum* organised by the British Council in Santiago, and I would like to express my heartfelt thanks to the organisers for inviting me to take part in this event.

My contribution (both the lecture delivered on 28 November and the present paper, which sums up its main points) pursues three aims. First, I shall attempt to provide a general introduction to the study of the manifold connections between “language” and “development”, using the specialisation known as “language economics” (or, equivalently, “the economics of language”). Second, I shall illustrate this introduction, which emphasises conceptual and methodological points, with numerical examples that mostly refer to the case of English. Third, I shall propose a broadening of emphasis from the notion of “English for prosperity” to that of “multilingualism for prosperity”.

My reasons for suggesting this broader perspective on the links between language and the creation of value in an economic sense rest on the general observation that our views on complex social, political and economic questions are often constrained by inadequately informed perceptions. What is more, in the case of language, we often cling to these beliefs with considerable obstinacy. This problem is eloquently captured in a quotation from a North American political scientist, Professor Jonathan Pool, with whom I have had the privilege to work in the 1990s. He once noted that “language is a subject about which experts and lay people alike seem to hold extraordinarily stubborn beliefs”. We all harbour such beliefs, and I include myself in this “we”. One of the key roles of the researcher on “language-in-society” (using, with hyphens, a notion proposed by the sociolinguist Joshua Fishman), then, is to provide some of the analytical tools needed to spot and question these stubborn beliefs, in ourselves and others. A basic familiarity with such tools should be, in addition to some familiarity with the basics of language economics, one of the “take-aways” from this paper.

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<sup>1</sup> *Professor of Economics, Faculty of Translation and Interpreting, University of Geneva. The author thanks Prof. François Vaillancourt, Prof. Thomas Ricento, Prof. Robert Phillipson, Prof. Joseph Lo Bianco and Dr. Michele Gazzola for useful discussions and remarks on a draft version of this paper. The usual disclaimer applies. Comments welcome at francois.grin@unige.ch.*

## About language economics

Language economics is a relatively marginal a field of specialisation that attracts few participants, and has yielded a small but growing body of knowledge. It has developed on the edges of the discipline of economics, and has progressively been gaining some recognition since the first contributions of economists to the study of language issues in the 1960s. What used to be, at the outset, a relatively disconnected collection of papers, each with a specific focus, has matured into a more integrated perspective on the mutual influences between economic and linguistic processes.

The fact that language economics remains on the fringes of the discipline may be due to its strong, necessarily interdisciplinary orientation: it is well-known that the professional culture of economics is not particularly open to interdisciplinarity. It is of course possible to formulate some propositions about language (for example regarding language-based earnings differentials) without engaging in deep considerations about the nature of language. But for some other topics in language economics, particularly when language use is treated as a dependent variable that might be influenced by economic processes, one needs not only a solid anchoring in economics, but also a solid grasp of what language is about. Moreover, since these mutual influences operate in a context that is strongly embedded in social, political and cultural realities, language economics can flourish only in regular interaction with other disciplines in the social sciences and humanities, including not just linguistics and its many specialities, but also the education sciences, sociology, political science, psychology, international relations, history and law.

What has made language economics what it is today is, first of all, its use of the fundamentals of the economics discipline, namely, an emphasis on the basics of *resource allocation*. Contrary to a widespread belief, economics is not only about the supply and demand of goods and services and their exchange on a market; putting it differently, it is not just about material or financial matters. Economics is about how we, as individuals and societies, use scarce resources in order to achieve certain goals. But there are no limitations to the range of resources used or the range of goals aimed at. What matters is the scarcity of resources in relation with the goals pursued, and “symbolic” resources and goals (which we may also call “non-market” or “non-material”) are perfectly relevant components of an economic analysis. Economics, therefore, *includes* what is conventionally referred to as “the economy” (as encapsulated in concepts such as production, consumption, exchange, market, prices, or GDP) but extends well beyond “the economy”—this is what has allowed the development of research areas such as the economics of health, of education, or of the environment, to take just a few examples.

Another important feature of language economics, which logically follows from its fundamental concern with scarcity and how to best use limited resources, is its growing connection with (and use in) the selection, design and evaluation of language policies. Ultimately, the usefulness of economics is in assessing the pros and cons of competing scenarios, including language policy ones.

Language economics first emerged as a response to actual socioeconomic questions, particularly in Canada, where it was used to identify the source of earnings (labour income) differentials between native speakers of English and native speakers of French in the province of Québec (whose population is over 80% francophone). This work showed that such differentials were related to persons' first language (L1) and persisted even after standardising for education, second language (L2) skills, and work experience. A person's education, experience, and human capital are regarded as socially acceptable sources of differences in earnings, but a person's L1 is not. These early findings, therefore, established the relevance of public policies aimed at correcting the under-performance of the majority language of an economy embedded in a L2 environment. Since then, these differences have largely vanished and earnings are now primarily the result of determinants considered as socially legitimate in democratic-meritocratic societies. Similar tools have been used to assess the role of language in explaining socioeconomic disadvantage among non-English-speaking immigrants to the United States—a country in which English is the dominant language. In that case, low levels of competence in English as an L2 were shown to be a prime cause of earnings differentials, thereby supporting the (unsurprising) notion that investment in learning English was crucial to immigrants' socioeconomic advancement.

Similar techniques have been used later, primarily in European contexts, to estimate the value of investing in *foreign* language skills (that is, languages *other* than the locally dominant or official language(s)); we shall return to these developments below.

For now, let us note that the studies of language-based earnings differentials all have one thing in common: their chief concern is to explain an economic outcome, where language is merely one explanatory factor among many possible ones. Another line of research, which has gained momentum from the early 1990s, focuses on the reverse type of causation. It seeks to explain a linguistic outcome (such as patterns of language spread or decline) as a result of the complex interplay of various factors, including economic ones; alternatively, it may use economics as a way to unravel the workings of this complex interplay itself, without necessarily giving standard economic factors a particularly prominent role in the explanation. Such developments have had a strong influence on language policy development, because they are directly applicable to the evaluation of the effectiveness, cost-effectiveness and fairness of competing language policy scenarios.

Language economics is currently moving into a new phase (which one might consider the third in its development) of increasing and more structured interaction with other disciplines, along with the more explicit inclusion, in economic modelling or econometric work, of sociolinguistic realities.

### **Language and value**

“Value” is a central question in economics, and this also holds for language economics. Value creation is what generates “prosperity”. Language economists are therefore often asked questions about value, such as “how much is a small (minority) language worth?”, “how much does an economy gain by operating in

one language or another?”, “how much should we invest in teaching and learning foreign languages?”, “how much does bilingualism cost?”, etc. These questions are not always clearly identified and distinguished from one another by those who ask them, which is why a little parsing exercise can be useful.

As a first step, let us make a distinction between “market” and “non-market” value. Market values are those that can be “read off” data such as observed market prices: they capture the material or financial value of something (from tomatoes to cars and, using somewhat more elaborate techniques than simple price observations, language or computer skills). However, as we have seen before, non-market values are no less relevant to the economist. They include, for example, the direct enjoyment one may derive from something. Examples from the environment abound: an important component of non-market environmental value is the enjoyment one may derive from unspoilt landscapes and clean streams. In the realm of foreign language skills, non-market value may proceed from the enjoyment of direct access to foreign cultures and to the people with whom direct communication becomes possible. This first distinction corresponds to the two rows in Table 1 below.

At the same time, it is important to consider *at what level, or from whose perspective* value is being examined. Are we concerned with value *for the typical individual* (in which case we would talk of “private” value) or with value *for society as a whole* (opening up the question of “social” value)? The problem matters and is a methodologically difficult one, because owing to some crucial characteristics of language, (social) value is not the mere sum of its (private) components. First, language is not just a tool for communication; it is also a carrier of culture, and it is intimately connected with politically and socially complex matters of individual *and* group identity. It follows that some aspects of language, including some that carry “value”, are only experienced—and identifiable—collectively. Second, language presents many of the characteristics of a network, whose value to any given member of the network changes as a result of entry into and exit from the network by other people. At this time, the problem of *aggregating* private values to estimate social value is, in the case of language, not solved in scientific research. Nonetheless, the distinction between the two levels at which value can be assessed remains valid, and it is reflected in the two columns of TABLE 1.

TABLE 1: FOUR TYPES OF VALUE

	Private	Social
Market	A	C
Non-Market	B	D

In practice, very little is known about the order of magnitude of non-market values. The estimation of market values, however, is straightforward, provided “RAD” data are available, where “RAD” stands for representative, in adequate numbers, and sufficiently detailed. Few countries have such data, and fewer still collect them on a regular basis (the notable exception being Canada, where the data needed for such estimations are collected through censuses).

By way of illustration, let us consider (TABLE 2) the earnings differentials accruing to men living in Switzerland’s three main language regions (respectively French-, German- and Italian-speaking). The original survey includes 2,400 respondents of both genders; it is representative in terms of age, gender and language region. In what follows, we focus on the results for the male subsample, which are typically more robust from a statistical standpoint. These men speak the locally dominant language (French, German and Italian depending on their region of residence), and the table reports on their extra earnings as a result of their competence in French, German or English as a foreign or second language, “controlling for” education, experience, and experience squared. This means, in essence, that the econometric procedure standardises respondents in terms of education and experience, so that the earnings differences that still appear are not the result of education and experience. Therefore, the figures in TABLE 2 can be interpreted as the additional labour income (in percentage terms) accruing to people who have acquired an (approximately) B2 level in the foreign language concerned.

TABLE 2: LANGUAGE-BASED EARNINGS DIFFERENTIALS (%)  
Switzerland, men, 1994/95

L2 → Language region ↓	French	German	English
French-spk. region	--	13.8	10.2
German-spk. region	14.1	--	18.1
Italian-spk. region	17.2	16.9	ns

*Control variables: education (years), experience (years), experience squared. Source: Grin, F., Sfreddo, C. and Vaillancourt, F., 2010: The Economics of the Multilingual Workplace. London/New York: Routledge (p. 68). All reported coefficients significant at the 5% level; ‘ns’: non-significant*

Let us make a few observations. First, language skills are eminently profitable. There are not many investments that result, for a given level of education and work experience, in wage premiums in the 10% to 18% range. Second, these rates of profitability vary. In the two main language regions, they are remarkably symmetrical for Switzerland’s official languages, with a premium of about 14% for French in German-speaking Switzerland as well as for German in French-speaking Switzerland. The case of English is interesting, because it proves much more profitable in the German- than in the French-speaking region of the country, with premiums of 18% and 10% respectively. That said, a 10% premium still amounts to a very attractive investment proposition. What is more, the rates of return for English are

extremely robust in statistical terms, as shown by tests not reported here (see however the reading suggestions at the end of this paper).

The foregoing are examples of “private market value” fitting in cell A of TABLE 1. But we can move from private to social value (cell C in Table 1) by combining the econometric results on wage premiums with data on spending on second/foreign language teaching and learning. Such data are difficult to come by, because education systems typically do not have numbers on spending by school subject, and estimates have to be derived from other school statistics. The resulting rates of return confirm that, in the Swiss case at least (that is, given the amount that the Swiss spend on language teaching and learning), foreign or second language skills constitute a highly profitable investment proposition, as shown by TABLE 3.

TABLE 3: SOCIAL RATES OF RETURN TO SECOND- OR FOREIGN LANGUAGES (%)  
Switzerland, men, 1994/95

L2 → Language region ↓	French	German	English
French-speaking region	--	6.5	4.7
German-speaking region	10.0	--	12.6
Italian-speaking region	21.5	11.7	ns

*Control variables: education (years), experience (years), experience squared. Source: Grin, F., 1999: Compétences et récompenses. La valeur des langues en Suisse. Fribourg: Éditions Universitaires (p. 124). The private earnings differentials used to as a basis for the calculations of social rates of return are significant at the 5% level for all reported coefficients.*

There again, as for private returns, English does not necessarily guarantee the highest rates of social return; it remains profitable (even the lowest figure in the table, at 4.7%, represents a very attractive return in real terms), but the results draw our attention to the fact that even if we focus on narrowly defined monetary benefits, English is not the only investment worth considering in a non-English speaking country.

Extensions to the foregoing results, as well as estimates of other aspects of economic value, are available in the literature. For example, the macroeconomic counterpart of the above figures (more specifically, the share of Switzerland’s GDP that can be traced back to these second/foreign language skills) is in the region of 9% to 10%; this high rate reflects, among others, the fact that in the Swiss economy, many languages are used, also for domestic trade across internal language boundaries. Similar calculations for Quebec yield estimates in the 3%-4% range.

The literature on various countries also contains results on:

- the impact of foreign language skills on access to employment (they generally improve it);
- the likelihood of keeping one's job when wages go up and firms try to reduce staff costs (bilinguals are about two to three times less likely to lose their job than monolinguals, other things being equal);
- the actual usefulness of skills in given languages for particular occupations (the picture is a highly diverse one, with some sectors and jobs requiring high-level foreign language skills, often in English, and others where other foreign languages matter more, and others still where they are not particularly relevant).

In addition, very recent work shows that for countries having a first or second language in common (as distinct from having second language skills) increases openness to international trade and in this way has a positive impact on a country's GDP, even after controlling for geographical proximity between trading partners.

Overall, these findings tell us a fairly consistent story: that skills in "big" languages, through one or another channel, contribute to prosperity—but that this applies to many "big" languages, not to English only as is frequently assumed. On this count, we often encounter "stubborn beliefs" enshrined in somewhat clichéd phrases. For example, the often-heard pronouncement that "English is the language of business" (emphasis mine), which reflects the correct, if informal, observation that English is over-proportionately used as the default language between trading partners who do not have the same mother tongue is, incorrectly, taken to imply that it is the only foreign language that leads to prosperity. This is simply not the case. Its usefulness and relevance are undisputed, but it is not the only linguistic asset worth investing in.

The dangers of clichés about the language-economics connection may best be exemplified by well-publicised results in the development economics literature, who insist that "linguistic fragmentation" (the negative pendant, as it were, of more positive "linguistic diversity") has a negative impact on GDP per capita in developing economies. This result has received such publicity that it has become quasi-axiomatic in much development economics. However, an econometric investigation can be carried out more or less carefully, and the above result is based on what is, upon closer examination, an insufficiently prudent application of basic methodology. It ignores the fact that both "English" (for example, the presence of English-language skills in the resident population of the country considered) and GDP per capita can be influenced by another, typically unobserved factor (for example, stable political institutions). When this possibility is taken into account using the relevant econometric procedures, "linguistic fragmentation" turns out not to have any statistically significant effect whatsoever; in those cases where it has one, this effect is actually positive. Interestingly, what applies to English applies to former colonial languages as well: there again, English is not the only language whose presence (or absence) generates certain economic effects.

Summing up, the general picture is at variance with commonly held – and often stubborn -- beliefs. Instead of focusing their entire attention on teaching and learning one language, decision-makers would be better advised to think in more plural terms. Even in the narrowest, hardest-nosed approaches to value, prosperity is associated with linguistic diversity, encompassing “big” languages rather than one particular language, whether the latter is English (which is certainly the most influential language internationally at the beginning of the 21st century) or another language.

### **A broader view of benefits and costs**

This case for a broader view is further confirmed if we step back a little from the market rates of return (whether private or social) and consider other dimensions that are omitted when focusing on these forms of return. Indeed, a wide range of questions would need to be answered for a full appraisal of the value of a given language (English or any other, large or small) by comparison with another, or of (individual) plurilingualism or (societal) multilingualism by comparison with (individual) monolingualism or (societal) unilingualism. Only a small part of these questions has been studied so far, and the identification of the questions at hand goes well beyond the private/social and market/non-market criteria highlighted above. For example, is “value” to be assessed at the level of the individual person (or household), of a private-sector company, of some aggregation of these companies into what is often called “the economy”, of the state, or of society as whole (for which “the state” is a convenient, but not necessarily fully adequate proxy)? A little exercise in combinatory easily yields over 60 different “types” of value, each of which would, in principle, deserve to be examined.

Of the dimensions that need to be taken into account for a more complete typology of the question of value, two are of particular interest, which I shall call “time” and “scope”.

“Time” is self-explanatory and refers to the time horizon considered: are we interested in value now or in value in the long run? The figures presented above take account of the passage of time only in a limited way (for technical detail, see the reading suggestions at the end of this paper). What they do not (and cannot) tell us, however, is whether private earnings differentials and social rates of return estimated at time  $t$  will still hold  $n$  periods for now, at time  $t+n$ . On this matter, we only have circumstantial evidence, which suggests that as skills in a given language become more widespread, they also get more banal. Consequently, they command an ever-decreasing premium in those sectors of the economy where they were highly profitable (other sectors in which they never were particularly useful remaining unaffected). In other words, even if English is highly useful in many professions (a fact I would be the last to dispute), it is likely that with the passage of time and the banalisation of English, it is additional skills in other languages that will give people, and the economies in which they work, a true edge.

It is tempting to construe this observation as implying that English should be regarded as a “basic” skill, a little like reading and writing: there was indeed a time when the ability to read and write was the preserve of the educated few, commanding, at least to some extent, access to socioeconomic



prestige and privilege. Nowadays, reading and writing are indispensable for all, but these skills are not sufficient. Could the same be said of English? Probably not, because there is an essential difference between the two types of skills: whereas it is almost impossible to identify one job or profession in which the ability to read and write is largely useless (implying that reading and writing are basic skills), a high number of professions, even in advanced, prosperous economies, require very little use, if any at all, of foreign languages. In the case of Switzerland (which was ranked by the World Bank, in 2012, the fifth country in the world in terms of per-capita GDP, at purchasing power parity), and even with the strong internal diversity of the country, “daily or almost daily” use of German (in the French-speaking region), French (in the German-speaking region) or English (in both) is only reported by about a third of respondents (percentages vary from 27,5% to 35,9%, where “use” can be oral or written, productive or receptive). For most people, the use of other languages is an infrequent occurrence, for which they can rely on the help of a colleague. By contrast, use of the written word, for reading or writing, certainly is a daily necessity for well over 90% of people.

Therefore, foreign language skills (skills in languages other than the local majority language) cannot be construed as a “basic skill”. Majority language skills can be considered a necessary basic skill in many cases: in English for Vietnamese- or Spanish-speaking immigrants to the United States; in German for Turkish-speaking immigrants to Germany; and perhaps, in the future, in Putonghua for English-speaking immigrants moving to China. In fact, this may already be the case, according the International Herald Tribune of 23 May 2013 (p. 23), who reports on the difficulties encountered by high-level western professionals seeking employment in the Far East: they may have fluent English, but those who do not have some competence in Chinese see the good jobs pass them by.

Let us now turn to “scope”, which concerns a very fundamental point in the debate about languages and diversity, albeit one that is often victim of obfuscation. Understanding the issue of “scope” requires making a basic distinction: on the one hand, we can ask ourselves what foreign language investment is worthwhile, given that we live in a multilingual world. This is what I call the “contingent” question, because it makes sense under a given contingency—precisely, the linguistic diversity that characterises the world, and with which we are confronted with increasing frequency as a result of globalisation. So far, my argument in this paper has been framed in this “contingent” case. Against this backdrop, as I have attempted to show, teaching and learning languages, English included, is economically valuable. On the other hand, we may ask ourselves what is the value of having linguistic diversity at all—the implicit counterfactual being, in this case, linguistic uniformity. This is what I call the “absolute” question, because it raises the issue of the value of diversity is in the absolute.

As it happens, proving that diversity is valuable in a contingent perspective does not suffice to prove that it is valuable in the absolute perspective. Yes, mastering several languages is profitable, but after all, on balance, might not humankind be better off if it did not need to deal with diversity? Might not prosperity be greater with one single language? In fact, a few commentators recommend precisely that,

and they usually want this language to be English. They typically remain conveniently vague about the associated implications, and usually stop short of calling for the outright abandonment (or folklorisation) of other languages, but some commentators hardly bother to deny that they would actually be quite content with such an outcome (others recommend Esperanto as the international language, but they never suggest that it should replace others in any function other than an auxiliary one). This question is a momentous one which goes well beyond those raised in this Policy Forum. However, language dynamics do display centripetal tendencies, and advocating the expanded use of a very dominant language is not without consequences. The dominant language, at this time, is English, but the problem would be exactly the same if Spanish, French, Chinese, Quechua or Lingala were in this position. The issue here is not “English” v. any other language; the issue here is uniformity v. diversity.

At this point, we reach the frontiers of language economics. The examination of the value of diversity in the absolute is only incipient. But there again, what circumstantial evidence we have suggests that diversity is a solution far superior to uniformity. Let us leave aside the obvious observation that there is enjoyment to be derived from choice, and choice proceeds from the availability of alternatives—of diversity, as it were. This returns us to the question of non-market values, and the treatment of this question is best handled using the methods of environmental economics. It is highly plausible (much more, at any rate, than the opposite proposition) that through non-market value, diversity generates value—and hence prosperity. However, even if we confine ourselves to a narrower facet of economic value (the “market” value appearing in the top row of Table 1), we are confronted with the question of creativity and innovation. Research into the effect of (individual) plurilingualism or (group) multilingualism on the creativity and capacity for innovation of persons and working teams is only just beginning; available evidence suggests that linguistic diversity is superior to uniformity because it broadens the range of mental tools available for problem solving and control, and for coming up with novel ideas— a crucial condition of prosperity in post-industrial, knowledge-based economies.

### **A provisional conclusion**

When addressing issues as complex and fluid as the link between language and prosperity, any conclusion remains, of necessity, a provisional one. However, our overview of the issue in the perspective of language economics strongly supports the notion that teaching and learning foreign languages is a good idea, but that this should not be confined to the teaching of one language (whether English or another): what is profitable is a portfolio of language skills, and this is likely to become even more so in the future. Moreover, it is not just skills in this or that language that are conducive to prosperity, but, most likely, linguistic diversity per se. If only for all these reasons, decision-makers should avoid stampeding their countries and their citizens into any kind of linguistic monoculture.

Let me point out in closing that I have completely kept away, in this paper, from two types of argument.

The first, which is still part of an economic assessment, has to do not with the allocation of resources, but with their distribution. When assessing competing policy scenarios, what matters is not only how much aggregate prosperity they create (or, if ill-advised, how much they destroy). What also matters is how this prosperity is distributed among individuals and groups. Putting it differently, public policy is not just about efficiency, it is also about fairness. This raises another range of complex, but inescapable questions which cannot be explored here. Suffice it to say, however, that minus a few dissenting voices, research in language policy analysis overwhelmingly agrees that linguistic hegemony (favouring one particular language), as well as the process of linguistic uniformisation that leads up to it, are socioeconomically regressive and sharpen inequality. These regressive effects appear not only between groups defined in terms of social class or socioeconomic status, but also between groups defined by their linguistic attributes—that is, their L1 and the L2, L3, etc. that they speak. The role of the economist is to identify and, if possible, qualify the (re)distribution of resources that would result from the adoption of one policy or another, make the evidence available for public debate and then let others take over—because at that point, we leave the range of topics on which the economist has specialist knowledge to contribute. The issue then becomes eminently political, and it is with those political aspects that I shall briefly conclude.

Indeed, the second type of argument that I have deliberately left out of this discussion has to do with politics and, more specifically, with the relationship between language and power. It is well-known that language is linked to power, and it follows that no language (save perhaps deliberately constructed languages like Esperanto) can be considered neutral. He who wields language wields power; he who has a better control of the language will find itself in a dominant position, in material or symbolic terms. Let me once more add that this problem has nothing to do with English itself. It has to do with linguistic dominance, irrespective of which language finds itself in a dominant position.

I would therefore argue, by way of conclusion, that we all have a shared responsibility in the stewardship of linguistic diversity, as we do for environmental quality. As an organisation that facilitates access to a financially profitable resource (not to mention its abundant non-market effects, such as access to a wonderfully rich and multi-faceted range of literary creation produced in English) the British Council carries the responsibility to ensure that its efforts to the make English available do not dislodge other languages from certain functions—not just minority languages, but also the majority languages of the countries in which it operates. I would even go further and suggest that the British Council might consider coordinating its action with similar (though smaller) bodies promoting other languages (such as the Goethe Institut, the Alliance française, the Instituto Cervantes or the Società Dante Alighieri) in order to develop a joint strategy for linguistic diversity; in fact, a forum in which such cooperation could be deployed already exists at the European level, in the form of the European Federation of National Institutions for Language (EFNIL)

Turning now to the Latin American countries represented at this Policy Forum, their responsibility, as carriers of two major international languages, Spanish and Portuguese, is to ensure that these languages remain fully, uncompromisingly, full-fledged instruments, not just for the informal business of everyday life (in which their position is obviously not threatened), but also in prestige domains such as international trade, university education, and diplomacy. This should not stop them from investing in foreign language teaching and learning, including for English; what it means is that they should be careful not to throw away what is one of their main tools—namely, their language. In this way, they will not only be working in their own intelligent interest, but also for a more prosperous, linguistically diverse world.

### **Reading suggestions**

The foregoing discussion touches upon a wide range of topics which the specialist literature generally does not address in an integrated fashion, and a full-length bibliography would easily run into hundreds of entries. Some resources, however, can provide an easy access to the key points discussed here, and they contain numerous references to other work.

I have attempted to provide a general overview of language economics in Grin, F., 2003: “Economics and language planning”, *Current Issues in Language Planning*, 4(1), pp. 1-66. For an introduction to the methodology and a survey of results about the value of languages, see Grin, F., Sfreddo, C. and Vaillancourt, F., 2010: *The Economics of the Multilingual Workplace*, New York/London, Routledge (in particular Chapters 3 and 4). For an original exploration of the relative merits of more or less pluralistic language policies for Europe, see Ginsburgh, V. and Weber, S., 2011: *How Many Languages Do We Need? The Economics of Linguistic Diversity*, Princeton/Oxford, Princeton University Press. For a more social-political perspective on linguistic diversity, an invaluable resource is May S., 2012: *Language and Minority Rights. Ethnicity, Nationalism and the Politics of Language* (2nd Edition), New York/London, Routledge (in particular Chapter 6 on “Monolingualism, Mobility and the Pre-eminence of English”).