CHANGING WELFARE STATES

Camilla Borgna

# Migrant Penalties in Educational Achievement

Second-generation Immigrants in Western Europe



Amsterdam University Press Migrant Penalties in Educational Achievement

## **Changing Welfare States**

For quite some time, a key finding and theoretical puzzle in comparative welfare state research was welfare states' remarkable stability. In the last decade, however, it has become clear that advanced welfare states were (far) less immovable than they seemed at first. In fact, speaking of *changing welfare states* captures much better the actual reforms that were taking place. This series is about the trajectories of those changes. Have there been path-breaking welfare innovations or are the changes incremental instead? Are welfare states moving in a similar or even convergent direction, or are they embarking on divergent trajectories of change? What new policies have been added, by which kind of political actors, how, and with what consequences for competitiveness, employment, income equality and poverty, gender relations, human capital formation, or fiscal sustainability? What is the role of the European Union in shaping national welfare state reform?

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This book is dedicated to Maura, for her passion in teaching and learning.

### 1 Introduction

# 1.1 Children of migrants in Europe: which equal opportunities?

In the last decades, education has become an increasingly important element of social policy in Europe, as part of the new perspective of 'social investment' (Ferrera 2009; Van Kersbergen and Hemerijck 2012; Nolan 2013). The social investment strategy has been actively supported by international organizations like the Organisation for Economic Co-operation and Development (OECD) since the late 1990s (OECD 1997) and has recently gained a renewed impetus with the adoption of a specific package by the European Commission (European Commission 2013; see also the 'New Skill Agenda for Europe' in European Commission 2016). The underlying idea is that welfare state systems could be recalibrated, giving a greater importance to the life course perspective and focusing on the roots of social problems. Hence, social policies would shift from compensation toward prevention (Ferrera et al. 2000; Room 2002; Allmendinger and Leibfried 2003). In this sense, educational policy - including early child education and care, and support for lifelong learning – has a pivotal role in human capital investment in sustaining the development of individual skills to improve future life prospects and in reducing social risks.

The social investment perspective has a strong focus on inclusion and cohesion. As a consequence, international organizations have repeatedly called for reforms in European educational and training systems fostering quality and equity at the same time (European Commission 2006; OECD 2012). School systems should provide equal learning opportunities to all students, including the more disadvantaged ones. Among the latter, students of immigrant background are particularly worthy of attention. They are often at risk of underachievement and school failure, and are considered one of the most important social groups to monitor in the future (European Commission 2008).

In effect, internal and external migrations are a social phenomenon of growing magnitude in the European continent. Most importantly, the last decades have once and for all destroyed the illusion of the transience of immigration settlement, raising the issue of new risks connected to the lack of integration of long-term immigrants in the host societies. New dividing lines in the stratification patterns of life chances have been uncovered, emerging as a problem of collective relevance to be targeted by public policy (Castles and Miller 2003). In public debates, whether or not secondgeneration immigrants are well integrated in the school system is often pointed out as a crucial issue to be addressed. Indeed, endowing children of migrants with equal chances to succeed in school compared to their native peers could be a major step toward their economic and social integration.

But what kinds of educational systems are more effective in mitigating the educational disadvantage experienced by children of immigrants? Traditionally, research on the role of institutions for the equality of educational opportunity has focused on stratification by social class and socioeconomic resources. Some findings - like the detrimental role of tracking into differentiated curricula for students of lower social strata – are quite consolidated in the literature, to the point that they have inspired policy reforms pursuing a greater equity of the school system (for instance, in Germany, see Freitag and Schlicht 2009). On the contrary, educational inequalities associated with migratory status are a much more recent concern. Research in this field is nevertheless growing and it is attracting scholars from various disciplines, such as educational science, psychology, economics, and the sociology of education (as documented by numerous reviews: EACEA 2004; Christensen and Stanat 2007; NESSE Network 2008; Nusche 2009; OECD 2010, 2015). This increasing interest is also visible in recent international collaborative research projects on the integration of the second-generation in Europe (see, for instance, Crul et al. 2012a; Heath and Brinbaum 2014b, whose findings I discuss at length in Chapters 3 and 4), where the role of national educational systems is often brought forward.

The current book speaks to this debate on the conditions of educational success for second-generation immigrants in Western Europe first of all by providing a theoretical reflection on the dimensions of educational systems specifically relevant for children of immigrants. Moreover, it brings new empirical evidence in by systematically analyzing in which kinds of educational systems, and under which contextual conditions, secondgeneration immigrants tend to severely underperform their native peers.

*Part I*: A first order of research questions addressed in this book concerns the magnitude of migrant learning disadvantage in Western Europe: do students of immigrant origin lag behind their native peers everywhere? In which countries do they perform worse? Are cross-country differences merely driven by different demographics? Moving from Coleman (1968), I consider that a key element to understand equality of learning opportunities is given by structural differences in educational outcomes between students belonging to distinct social groups. For this reason, migrant learning disadvantage is here conceptualized as the relative educational achievement of immigrant students, compared to their native peers. In order to be truly comparable, the two groups must have developed their educational careers within the same school system. Accordingly, I restrict the focus to second-generation immigrants strictly defined, i.e., individuals born in the destination country from parents born abroad, who have therefore been fully exposed to the same educational system as their native peers.

Educational outcomes involve two main dimensions: attainment (i.e., the formal progression through the school system) and achievement (i.e., the skills and knowledge actually acquired). Due to the different designs of educational systems, it is hard to compare educational attainment across countries. On the contrary, international assessments on students' performance offer a standardized framework for cross-country comparisons on educational achievement. Therefore, in this book educational outcomes are restrictively conceived in terms of achievement. More specifically, I look at the educational skills achieved by the age of fifteen, therefore during a period corresponding to compulsory schooling.

In order to identify the educational disadvantage actually stemming from the migratory status of students, it is essential to consider other individual characteristics that might influence the educational achievement of both natives and immigrants. Indeed, as documented by previous research, the reasons why children of immigrants tend to underperform natives can be partially ascribed to their lower socioeconomic resources (Kristen and Granato 2007; Van de Werfhorst and Van Tubergen 2007). Still, after controlling for socioeconomic differentials, a residual educational disadvantage of migrants generally persists (Rothon 2007; Heath and Brinbaum 2014b). The focus of interest of the present book lies precisely on this migrant-specific disadvantage, which some scholars labeled 'ethnic penalty' (Heath and Cheung 2007). Accordingly, I propose a measure of migrant penalty in educational achievement revealing the relative position of second-generation immigrants within the achievement distribution of native students sharing the same socioeconomic background.

The scope of this study is limited to Western Europe, which provides the framework for a meaningful comparison of receiving societies. Beyond the societal and institutional similarities, these countries share a history of postwar labor immigration, as opposed to traditional settlement countries like the United States or Australia. Yet, immigrant populations across Western Europe are diverse in terms of origin. In order to deal with this remaining composition issue, I check the robustness of the findings with additional analyses on second-generation immigrants of Turkish origin only, an immigrant group that is often considered as comparable across destination societies (Schneider and Crul 2009).

To sum up, in the first part of this book I analyze individual student achievement near the end of compulsory schooling in seventeen Western European countries, with the aim of quantifying migrant achievement penalties, i.e., the relative disadvantage experienced by second-generation immigrants, specifically in relation to their migratory status. Migrant achievement penalties constitute the *explanandum* of the second part of the book: why do second-generation immigrants experience severe penalties in some Western European educational systems, but not in others?

*Part 2:* The second part of the book contributes to the growing literature on the institutional conditions connected to the (lack of) educational success of children of immigrants (Levels et al. 2008; Schneeweis 2011; Fossati 2011; Cobb-Clark et al. 2012; Dronkers et al. 2012b) by addressing the following research questions: do educational systems play any role in explaining the cross-country variability of migrant achievement penalties in Western Europe? Which structural features are particularly detrimental (and which beneficial) for children of immigrants? How do they combine in the different institutional structures of educational systems? Do these features matter in all the countries considered, or does their relevance depend on contextual elements?

In order to derive the hypotheses on the role of specific institutional features - the explanantes - I draw on the work of Turner (1960) on the manifest functions of educational systems, and on the typologies proposed by Sørensen (1970) and Allmendinger (1989), resting on the key dimensions of school stratification (i.e., the structural differentiation of students within given grades), and standardization (i.e., the homogeneity in the quality of education provided nationwide). While the development of these typologies was meant to address research questions connected to traditional lines of stratification, notably social class and status, when dealing with educational inequalities specifically stemming from migratory status, the theoretical framework needs to be adapted to include the micro-foundations of migrant-specific learning disadvantages. In some Western European countries, second-generation immigrants face the risk of marginalization in low-quality schools, which might be harmful to their educational careers. Hence, I retain standardization and stratification as potentially relevant dimensions, because they affect students' sorting into schools, as well as the heterogeneity of curricula and the allocation of human and financial resources. My theoretical framework is then enriched by an additional dimension that might be specifically relevant for second-generation immigrants.

This is the duration of schooling, and in particular the starting age of (pre) school: an early inclusion of children of immigrants in the educational system could promote their cognitive, linguistic, and social development, with positive spillovers on future educational outcomes.

Along with the institutional dimensions, I consider the role played by the national context in setting the conditions under which the aforementioned dimensions of educational systems may worsen or reduce migrant achievement penalties. In particular, I take into consideration the linguistic distance between the host country language and those of the immigrant population. By including this dimension in my theoretical model, I acknowledge that the linguistic composition of immigrant populations can affect a country's capability to integrate their children in the school system (Heath and Brinbaum 2014a). For instance, countries where immigrants prevalently speak a close relative of the host language, or come from former colonies where the host language is still broadly spoken, will probably be more successful in integrating children of immigrants than countries where the host language is very different from those of most immigrants, no matter the structure of the educational system. At the same time, some features of educational systems – notably an early inclusion of children in (pre) school – are likely to be particularly salient in countries where linguistic distance is high. A second contextual element that I consider as potentially affecting a country's capability to tackle migrant penalties is the history of immigration. Despite the fundamental comparability of Western European countries, it is important to differentiate among them according to the moment when immigration became massive. Indeed, irrespective of the formal structure of educational systems, in countries where immigration started in the postwar period, effective teaching practices to deal with immigrant students might have been informally developed.

From this theoretical framework, I derive several research hypotheses on the role of educational systems, which I test with a variety of methods based both on variable-oriented and diversity-oriented approaches. More specifically, I first assess how explanatory variables are correlated to different degrees of migrant penalties. Next, I investigate the asymmetrical relations between different configurations of institutional and contextual conditions and the occurrence of severe migrant penalties. The empirical analysis proves helpful to refine the theoretical framework and to make it more fitting to specific contexts of Western European countries.

In a nutshell, the second part of this book aims to develop a theoretical framework for the explanation of migrant penalties and then to examine its empirical relevance in Western Europe. First, I identify dimensions of

educational systems and contextual conditions that could be specifically relevant for the educational achievement of second-generation immigrants. Second, I investigate which kinds of educational systems – conceived as complex entities of interconnected elements – produce severe migrant penalties, and which do not.

#### 1.2 The promise of diversity-oriented methods

Throughout the book, some cross-cutting methodological questions come along with the above-mentioned substantive questions: to what extent are mainstream statistical analyses helpful to scholars interested in the cross-country comparison of educational systems? What is the added value of diversity-oriented methods? Can methodological triangulation provide a better understanding of the complex causal patterns leading from the institutional structure of educational systems to students' outcomes?

While most comparative studies on educational systems, especially when focused on policy outcomes, adopt an exclusively quantitative perspective (Busemeyer and Trampusch 2011), the current book is based on a mixedmethods research design, combining and triangulating statistical analyses (including not-mainstream techniques, like regression-tree analysis) and fuzzy-set configurational analyses, which are best conceived as diversityoriented (as opposed to variable-oriented) methods.

There are several reasons to think that an exclusive focus on statistical methods might be reductive and to some extent problematic when willing to assess the role of educational systems for students' outcomes. First, typical cross-country studies in educational research apply regression techniques to a pooled sample of individuals across a variety of countries. To do so, they implicitly assume that educational systems are a sum of independent features, with additive effects on students' outcomes. Put otherwise, the impact of each institutional characteristic is assumed to be homogeneous across contexts, and the combination of two or more constitutive aspects of educational systems is not taken into consideration. This is often the case not only because the reduced number of countries limits the chances to estimate significant interaction terms, but also because these studies aim at identifying the net effects of single institutional features and are less interested in the effects of educational systems as a whole.

However, as I argue throughout the book, educational systems are indeed configurations of interconnected elements. For instance, the vocational specificity of secondary schooling tends to go hand in hand with the standardization of its certificates and certainly presupposes institutional differentiation in the form of a separation between academic and vocational tracks. Singling out one aspect from the other is not only empirically challenging, but also an abstract exercise, since results will rely on fictitious and often implausible educational systems.

Second, comparative studies, including in the field of educational research, are often plagued by limited diversity, i.e., the fact that the universe of relevant cases is typically too small to cover the property space entailed by the interplay of potential explanatory factors (Lazarsfeld 1937). This is an inherent (but overlooked) issue in comparative social science, regardless of the methodological approach chosen. However, in order to deal with it, quantitative scholars typically make restrictive assumptions that – although invisible to most readers – rely on 'extreme counterfactuals' (King and Zeng 2006).

In contrast to this variable-oriented perspective, configurational comparative methods follow a diversity-oriented approach: by relaxing the restrictive assumptions of additivity, unit homogeneity, and uniformity of causal effects typically made by mainstream statistical analysis, they allow researchers to detect causal complexity (Rihoux and Ragin 2009). When using configurational comparative methods, researchers can unveil patterns where multiple factors activate only in combination with each other – what John Stuart Mill (1868) called 'chemical causation' – as well as the existence of more than one explanation for the same outcome (the notion of equifinality or functional equivalence). Configurational comparative methods were introduced three decades ago by Charles C. Ragin (1987) and are based on Boolean and fuzzy-set theory: therefore, causal relations are here conceived in terms of subset/superset relations, rather than as symmetrical associations.

Another reason why comparative configurational methods are attractive to comparative scholars is that they are suitable to conduct research with a limited number of cases, unlike statistical inferential techniques. This is possible for two reasons. First of all, they openly address the issue of limited diversity with the use of counterfactual thinking. Researchers are asked to reflect upon the assumptions they make and to justify their plausibility (Schneider and Wagemann 2012). Theoretical and case knowledge are not disregarded, but can be called in to produce more parsimonious explanatory models (Ragin and Sonnett 2004). A second reason why comparative configurational methods are able to deal with small-N research designs is that their goal is not straight causal inference, but rather 'to aid causal interpretation, in concert with knowledge of cases' (Ragin 2008, 141). Through the systematic analysis of set relations, we can identify possible triggering and enabling conditions for the phenomenon of interest (Befani et al. 2007), but the framework is more exploratory than confirmatory. The deductive character of social science is often overrated: in most cases, the investigation of social phenomena is empirically grounded, and research processes are to some extent inductive (Ragin 1987, 164). Scholars using comparative configurational methods make this 'dialogue between ideas and evidence' explicit: concepts and hypotheses are open to reformulation during the research process. As a consequence, the resulting findings are not law-like regularities, but provide a deeper understanding of the processes underway for the cases of interest.

Conducting analyses on a limited number of cases is not only possible, but also recommended when adopting this methodological framework, which has a strong focus on cases. Indeed, a good knowledge of single cases is needed since configurational comparative methods combine an analytical strategy with a holistic conception of social phenomena: cases are seen as configurations of constitutive properties. Moreover, such properties are carefully operationalized based on their qualitative meaning.

Despite the sharp increase in the use of configurational comparative methods experienced in the last years (Rihoux et al. 2011), empirical applications in the field of comparative educational research are few (see for example Freitag and Schlicht 2009; Glaesser and Cooper 2013). The explanatory part of this book relies to a large extent on such methods, and in this way contributes to the assessment of their added value in this field of research.

The overarching research question of this book is why Western European countries display different degrees of migrant achievement penalties. This corresponds to a 'causes-of-effects' research design, an approach to explanation that is more common among qualitative than quantitative scholars (Goertz and Mahoney 2012). However, the methodological approach adopted in this book is neither strictly qualitative nor quantitative. On the contrary, I deliberately adopt a pluralistic strategy in order to explore potential explanations of the phenomenon of interest. I do so because I believe that – especially in the field of public policies, where the multiplicity of interpretative accounts often prevents the accumulation of established evidence – mixed-methods designs are better equipped than single-method designs to validate collective knowledge. Through methodological triangulation, scholars not only improve the overall confidence of their empirical findings, but are forced to pursue a greater precision in conceptualization, measurement, hypothesis formulation, and interpretation.

In particular, this study is based on a two-step, mixed-methods analytical approach: in the first step I construct the explanandum, i.e., the variability of migrant achievement penalties in Western Europe; the second step is instead devoted to the investigation of potential explanantes, i.e., characteristics of educational systems as well as contextual conditions. In the first step, I mainly rely on statistical methods, in order to measure migrant penalties as the achievement disparity between natives and second-generation immigrants net of socioeconomic background. However, I also present a parallel investigation using the novel technique of fuzzy-set coincidence analysis, which enriches our understanding of migrant learning disadvantage in relation to the disproportionate accumulation of factors of disadvantage existing among immigrant parents. In the second step, I investigate the institutional determinants of cross-country differences in migrant penalties. In order to mitigate the issue of limited diversity, I develop a theoretical reflection that allows me to identify a reduced number of explanantes. Next, I systematically assess how these explanatory factors combine in influencing the emergence of migrant penalties in Western Europe. Again, the analytical strategy is based on both variable-oriented and diversity-oriented methods, though the latter play a more important role in this phase. I use configurational comparative methods - and notably fuzzyset Qualitative Comparative Analysis (fsQCA) - to explore which kinds of educational systems systematically lead to severe penalties, and which on the contrary are able to avoid them. In this framework, educational systems are conceived as configurations of institutional characteristics embedded in national contexts. Yet, in this phase I also use variable-oriented methods, to explore the association patterns between institutional variables and the outcome. In particular, I rely on regression-tree analysis, a recursive partitioning technique able to detect complex interaction patterns between explanatory variables.

#### 1.3 Structure of the book

The remaining chapters of this book are structured as follows. Chapter 2 describes the conceptual framework. As a first step, I define the main concepts concerning educational outcomes and opportunities used throughout the book and discuss them in the light of the theoretical debate on the process of intergenerational transmission of educational inequality. This leads to the question of how educational institutions interact with individual factors in this process and whether the structure of educational

systems makes the difference. Hence, I consider several classifications of educational systems and call attention to four institutional dimensions that are particularly relevant for the purposes of this book. In Section 2.3, I discuss the concepts of 'children of immigrants' and 'second-generation immigrants,' and clarify the definitions adopted here, while Section 2.4 offers a theoretical framework for the definition of the scope conditions and the case selection. In Section 2.5, which concludes the chapter, I provide an overview of the structure of Western European educational systems today and during the periods specifically relevant for this book.

Chapter 3 is devoted to the explanandum. The first part of the chapter presents previous studies on the educational disadvantage of children of immigrants with respect to attainment, achievement, and choices. The review distinguishes single-country studies focusing on micro-level factors, such as socioeconomic resources, or meso-level factors, such as teachers, classrooms, and schools, from cross-national comparative studies. In the second part of the chapter, I present original empirical analyses on migrant achievement penalties in Western Europe. After discussing the research questions and hypotheses, I present the analytical strategy, including a novel measure of migrant-specific penalties, and the data. The discussion of results that follows indicates that in most Western European countries second-generation immigrants dramatically underachieve with respect to their native peers and, even if this underachievement can be partially explained by socioeconomic resources, migrant-specific penalties in educational achievement are in place in all countries. In the third part of the chapter, I present additional analyses based on the novel procedure of fuzzy-set coincidence analysis, which reveal that second-generation immigrants disproportionately cumulate factors of socioeconomic disadvantage compared to natives.

In Chapter 4, I shift the focus toward institutional explanantes. After examining previous works looking for macro-level determinants of educational inequalities, I point at research gaps in this field. Next, I develop a theoretical framework of the institutional and contextual dimensions that are specifically liable to affect migrant achievement penalties, from which I derive four research hypotheses. In Section 4.3 I delineate my analytical strategy, which is based on methodological triangulation. After describing the construction of country-level indicators, I present the results from the variable-oriented approach (Section 4.5) and the diversity-oriented approach (Section 4.6). The key finding of this chapter is that the harsh disadvantage experienced by second-generation immigrants in some European countries can be explained by more than one institutional setting, pointing to the existence of functional equivalents. Equally severe disadvantages can be found in educational systems characterized by late entry, like Finland and Sweden, but also in the rigidly tracking systems of German-speaking and Dutch-speaking countries. Moreover, the findings support the notion of institutional complementarities: first, the degree to which an educational system is stratified seemingly interacts with a lack of standardization in the allocation of resources across schools. Second, some institutional effects might only activate in specific immigration contexts. In particular, a late entry in the educational system could be especially harmful in contexts where most immigrants speak a language distant from the one of instruction.

Chapter 5 puts the main findings of this book in a broader picture. I present the commonalities with respect to previous studies and put forward its substantive and methodological contributions. In the concluding sections, I discuss the implications of this study from a policy-oriented perspective, as well as its limitations and directions for future research.