Bachelor Thesis

Educational Decision-Making in Rural El Salvador

An Application of the Breen-Goldthorpe Model

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1 Introduction

Education crucially shapes the course of individual lives. Our educational record affects the activities we will pursue in our daily lives, the standards of living we will enjoy, the extent to which we will be able to participate in social life and the positions we will hold within society. Furthermore, education is of fundamental importance for the economic and social functioning of a society as a whole. Enhancing the productivity of individuals, it creates human capital and thereby increases the economic output of a society. Apart from its obvious economic benefits, education is also of high social relevance. For cooperation between huge numbers of individuals in a highly complex system to work, information needs to flow, to be understood and critically evaluated. To hold decision makers accountable, to manifest one's interests or even to manage administrative tasks (e.g. filing a tax return) a considerable level of cognitive and communicative skills is required: People need to be able to read the newspaper, to understand the issues of the political debate, and to react to them if they see their interests being violated. The functioning of a complex society thus depends crucially on people's capacity to process sophisticated information or – more generally speaking – on their education. Given the enormous social and individual relevance of education, it is no surprise that a large strand of theoretical and empirical literature focusses on questions regarding educational behavior: What factors influence someone's choice for more or less education? How do individuals decide between different educational paths? These questions relate to the *mechanisms of educational decision-making*.

In addition to its impact on the overall economic and social outcome of a society, education is crucially related to distributional issues. *Education* and *social stratification* are deeply entangled: On one hand, an individual's path to its position within a stratified society generally leads through the educational system. More and better education facilitates the access to positions that are attributed a higher socioeconomic status. On the other hand, social class shapes educational behavior: Children from less advantageous socioeconomic backgrounds tend to leave the educational system earlier and choose less ambitious tracks than their peers from higher social classes (e.g. Goldthorpe 1996, Breen and Goldthorpe 1997, Breen and Jonsson 2000, Erikson et al. 2005, Dumont et al. 2014). Taken together, these two mechanisms contribute to the reproduction of the social class structure: People from lower classes acquire less education and hence face a higher risk of ending up in a lower social class again. Education thus mediates the process of social mobility. Recently, scholars from different fields within the social sciences have shown considerable interest in understanding this process on a micro-

behavioral level: What are the mechanisms that bring about educational differentials between social classes? Or: Why do individuals from different social backgrounds make different educational choices? These questions refer to the *mechanisms behind class differentials in educational decision-making* or, more generally, to the process of social mobility.

A growing body of literature is trying to understand the mechanisms behind educational participation patterns from a *rational choice perspective*. Educational choices as well as the respective class-based choice differentials are then seen as the product of divergent cost-benefit calculations (cf. Mincer 1958, Becker 1964). Sociological rational choice theories of educational decision-making – as for example the Breen-Goldthorpe model – state that individuals (or their parents) evaluate costs, success probabilities and utility when making an educational choice (cf. Breen and Goldthorpe 1997). These calculations are taken to yield different results for individuals from different social classes. Rational choice models of educational decision-making have been rigorously tested with relatively favorable overall results. However, research has exclusively focused on the developed world, while hardly anything is known about the mechanisms behind educational choices and choice differentials in low- and middle-income countries. This study applies sociological rational choice theory to an empirical context that is completely different from previous research settings. In the rural department Morazán in El Salvador, median household incomes are lower than 300 USD a month. One out of four adults has not completed primary school and only 22% and 5% possess a secondary or tertiary degree respectively (author's calculations, based on EHPM 2015)[1]. How are educational decisions made in such a context? And do the theoretical assumptions of the Breen-Goldthorpe model hold in a completely different empirical setting?

To tackle these questions, a representative study was conducted with 450 students in Morazán, enrolled in their final high school year. The survey included questions about study perspectives, social background and various items regarding cost-benefit evaluation. The mechanisms of educational decision-making were then explored in three steps. (1) The first group of analyses was dedicated to measure the *extent of educational differentials*. It was estimated how much educational perspectives of high school graduates in Morazán depend on their social background. (2) Then the focus shifted to the *mechanisms of educational decision-making*. A rigorous analysis of the factors that influence tertiary education choices in Morazán was undertaken. (3) The final and most important set of questions turned around the *mechanisms*

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[1] Salvadoran Houshold Survey "Encuesta de Hogares de Propósitos Multiples"

behind status differentials in educational transitions: Do students from different classes perceive the costs, success probability and utility of further education differently? And what factors account for social background effects on educational decisions in Morazán?

This paper is structured as follows: Chapter 2 reviews the theoretical literature and presents empirical findings on the mechanisms of (class-based) educational decision-making. In Chapter 3, the reader is briefly introduced to the empirical context. Some important facts about Latin America, El Salvador and Morazán are presented. Chapter 4 outlines the research design of this study, providing detailed information on research questions, data collection, operationalization and statistical methods. Chapter 5 then presents the results on (1) status differentials in educational perspectives, (2) the mechanisms of educational decision-making and (3) the contribution of divergent cost-benefit evaluations to educational inequality in Morazán. The last chapter (Chapter 6) concludes with a discussion of the most important contributions and shortcomings of this study.

2 Theoretical Background

How do individuals make educational choices? And why do such choices depend on an individual's social background? A first important conceptual contribution to the understanding of the mechanisms of educational decision-making was made by Boudon (1974). He distinguished between *primary and secondary effects of social origin*. The former refer to class disparities in educational attainment that can be attributed to differences in levels of achievement between social classes.[2] Differences in economic, social or cultural resources between social classes lead to different levels of academic performance. That is, children from a more advantageous social background tend to fare better at school. As low-achieving children generally choose to (or are forced to) quit education earlier or to content themselves with less ambitious tracks, lower-status children will tend to acquire less education. Secondary effects in contrast refer to interclass differences in educational choices at given levels of educational performance. They embrace the systematic discrepancies in educational choices between children from different social backgrounds that remain when differences in abilities are accounted for.

At first sight, the existence of secondary effects of social origin is rather troublesome. It's easy to see why children from less advantageous backgrounds fare worse at school: Their parents may not inspire them to read books, be unable to help them with their homework or lack the capacity to pay for a private tutor in case of problems. But why should equally smart children from different social backgrounds take different educational paths? What mechanisms are responsible for secondary effects of social origin? In an attempt to explain not only the emergence of primary, but also of secondary effects of social origin, a series of micro-level models has been developed and empirically tested. These models try to make sense of the process of decision-making children and their families engage in at the different transition points within the educational system. The modeling of individual behavior in such a choice

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[2] Boudon himself defined class discrepancies in academic performance rather than their consequences for educational choices as primary effects of social origin. However, many scholars have used a slightly modified version of the concept where primary effects of social origin refer to ability-based class discrepancies in educational outcomes. For the sake of simplicity, we will follow this second approach.

setting calls for a theory of action. In this vein, an important and promising strand of literature models educational choices as a process of *rational decision-making*.[3]

This chapter reviews the literature on rational choice approaches to educational decision-making starting with a brief outline of the economic standard model (Section 2.1). In the following section, the sociological refinements of the model are presented (Section 2.2). The last section reviews the empirical evidence on the mechanisms of educational decision-making as proposed by the presented theories (Section 2.3).

2.1 Educational Decisions as Rational Choices

Educational decisions can be seen as the outcome of a rational evaluation of the costs and benefits of possible alternatives. If, for an individual, staying in education or opting for a specific program is the most beneficial of all available alternatives, Rational Choice Theory (RCT) would predict the individual to make its choice accordingly. But what are the costs and benefits of education? Economist and sociologist have typically answered this question differently.

Economists have pointed out that education is mainly to be seen as an *investment good*. When someone gets educated, she is acquiring human capital and raising her productivity. As in standard economic theory wages are paid according to people's productivity, this investment will translate into higher future earnings. This is why in Human Capital Theory (HCT) the individual economic *benefits* of education lay in its function as a ticket to better-paid jobs. On the other hand, getting educated also entails *costs*. HCT distinguishes between direct and indirect costs of education. The former refer to the monetary costs of schooling, i.e. tuition fees, book purchases, transport and living costs etc. Conversely, indirect or opportunity costs correspond to forgone earnings due to school attendance (instead of participation in the labor market). While costs already accrue in the present, benefits can be realized in the future only. Future gains have therefore to be discounted to compute the present value they represent for the respective individuals (cf. Mincer 1958, Becker 1964, Checchi 2006).

Under which circumstances will rational decision-makers opt for more education? According to HCT, individuals will demand more education as long as the marginal returns to education

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[3] In this study we will exclusively focus on the rational choice approach to explaining the mechanisms of educational decision-making. Alternative accounts based on cultural reproduction theory (cf. Bourdieu and Passeron 1990) generally stress the importance of (class-specific) norms and values rather than costs and benefits for educational decisions. They will not be reviewed in this paper.

exceed the marginal costs of its acquisition. As human capital is assumed to have decreasing marginal productivity, i.e. education brings higher income benefits for the less educated, demand will decrease for each additional year of education. Further, marginal returns are expected to be higher for the more talented, leading to higher demand among higher achieving students.

But how can the economic model account for class differentials in educational choices? Economists have been primarily concerned with the *mechanisms of educational decision-making* rather than those of *social status reproduction through education*. Nevertheless, economic theory offers some explanations regarding class disparities in educational behavior. Social class affects (1) the returns to education as well as (2) the direct costs of schooling.

> (1) According to HCT, the poorer performance of individuals from lower socioeconomic status should translate into lower returns to schooling and, consequently, have a negative impact on their demand for education. In this way, primary effects of social origin can be modeled within standard economic theory.

> (2) For certain economic settings, HCT also suggests a possible mechanism for the emergence of secondary effects of social origin. Poorer parents dispose of a smaller amount of resources for the financing of the educational careers of their offspring. Given their lower income, the direct costs of education impose a heavier or even unbearable financial burden on them. Nevertheless, this does not necessarily lead to class disparities in educational choices: When perfect financial markets exist, poor families could simply take up a loan to meet the costs and repay it as soon as the educational goal is met. But as empirical evidence shows, financial markets are not usually perfect and particularly imperfect at offering poor families attractive loans for huge and risky investments (Roland 2013: Chapter 17).[4] Assuming imperfect financial markets, the economic model of educational choices can thus also offer an explanation for the existence of secondary effects of social origin; they arise because individuals with a low

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[4] To insure themselves against the risk of default, financial institutions typically charge higher interest rates or require a collateral. As poor families often lack collateralizable wealth, educational loans may in practice only be available at prohibitively high interest rates or completely unavailable to them. The problem is further aggravated due to the indivisibility of human capital investment. Poor families cannot just invest in some months of education, then enjoy higher salaries thanks to their enhanced human capital and reinvest in further education. Some months of medical studies do not enable one to work a little bit as a doctor but might be worth nothing at all. This means that human capital investment is typically a huge "clumpy" investment in an entire educational career. It is exactly the kind of investment, financial institutions typically fail to provide for poor families (Roland 2013: Chapter 17).

socioeconomic status will soon reach a point where education is unpleasantly expensive or simply unaffordable for their families.

The economic model therefore allows for the integration of primary as well as secondary effects of social origin, and provides an explanation for the emergence of the latter. Nevertheless, the proposed cost-related mechanism falls short of explaining why secondary effects of social origin tend to persist when economic resources are controlled for. Neither can it convincingly account for the fact that during the process of massive economic growth and educational expansion experienced by all wealthy societies, class differentials have remained surprisingly stable (Breen and Goldthorpe 1997). Even in countries where education is affordable for a vast majority of people, individuals' educational choices at given ability levels depend crucially on their socioeconomic background. Sociological RC models have tried to address this paradox, especially by remodeling the utility dimension of the investment in education.

2.2 Sociological Rational Choice Models of Educational Decision-Making

Sociological RC approaches to educational decision-making have emphasized the social rather than the economic utility individuals or their families derive from education. They have pointed out that people do not only strive for the maximization of their lifetime earnings, but are also concerned about their relative position within society, i.e. about social status. Education is thus not primarily seen as an economic but rather as a social investment. How can we explain that children from less advantageous backgrounds (or their families) systematically choose to invest less into their future position within society?

In an attempt to answer this question, sociologists have developed micro-level models that picture class-based educational behavior within a broadly defined rational choice framework (Gambetta 1987, Erikson and Jonsson 1996, Breen and Goldthorpe 1997, Goldthorpe 1998, Esser 1999, Morgan 2002, Morgan 2005). All these models assume the same or very similar mechanisms to be at work, but differ with respect to the focus or their formalization strategies. The most prominent sociological RC approach to the class-based demand for education is the Breen-Goldthorpe (BG) model (Goldthorpe 1996, Breen and Goldthorpe 1997). Similar to the other sociological RC models in this field, it considers the educational choices of an individual – i.e. the choice whether to leave the educational system as well as the choice between different educational tracks – to depend on three general considerations: (1) the costs, (2) the probability of success and (3) the utility subjects attribute to education or specific educational careers. In all three dimensions, class disparities are assumed:

(1) Costs: Following the economic model, the costs of education are taken to embrace school-related expenses (direct costs) as well as forgone earnings (indirect costs). The costs of staying in education or opting for more demanding educational degrees will be experienced as more burdensome or even unaffordable by lower class families and should thereby partly account for secondary effects of social origin.

(2) Probability of success: A further determinant of educational decision-making is the expected likelihood for an individual to successfully complete a certain educational career. The subjective beliefs about the probability of educational success in turn depend on a student's ability. As pupils from less advantageous socioeconomic background generally exhibit lower levels of academic performance, they should, on average, be less optimistic about their chances to succeed when staying within the educational system or choosing a demanding track. Differences in the subjectively expected likelihood of success are thus taken to account for primary effects of social origin.

(3) Utility: The core proposition of the BG model of educational decision-making is related to the subjective utility of the acquisition of education. Families are taken to be concerned about the future status of their children and to invest, through education, in more advantageous positions for their offspring within society. This new focus on social rather than economic benefits of education, however, cannot yet account for class differentials in educational investments. But the BG model makes a further central assumption that is inspired by prospect theory (Kahneman and Tversky 1979): Parents are assumed to exhibit a *relative risk aversion* regarding the future positions of their children relative to their own positions. Intergenerational downward mobility is assumed to hurt them more than upward mobility to benefit them. Consequently, their subjective utility should be more sensitive to status losses than status gains. This provides them with a motive for *status maintenance*: They will seek to avoid that their children end up in a social position that is worse than their own. Even though families from all social classes are assumed to be equally motivated to minimize the risk of status deterioration, this mechanism will lead to class differentials in the evaluation of the benefits of education: When parents' social status is high, longer and more demanding educational careers are required to avoid downward mobility. For children from lower social classes, in contrast, less ambitious tracks may already be likely enough to serve the same purpose. The motive of status maintenance provides a potential explanation for class differentials in educational choices or, more specifically, for secondary effects

of social origin on such choices. Furthermore, it can account for the fact that the latter persist when family resources are controlled for or become less important.

In a later publication, Breen et al. (2014) have proposed a further differentiation of the BG model by including two additional benefit-related factors: *time discounting* and *risk aversion*. The former refers to the extent to which individuals discount future benefits when evaluating the present value of a good. This is particularly important for educational choices because the utility people derive from education will accrue in the future only. People who attach more weight to future benefits relative to present ones will – ceteris paribus – tend to advance further within the educational system. The second factor accounts for the fact that an investment in education is a risky endeavor. If an educational track is not successfully completed (or if its success is not rewarded with a better job) one will end up bearing the costs while failing to enjoy the benefits of getting educated. When opting for less education or less demanding tracks, future benefits might be lower but accrue with a higher certainty. People with a stronger aversion to uncertainty should therefore evaluate the benefits of education less positively and, all other things being equal, exhibit lower educational attainments. Individual risk preferences and discount rates can thus further account for interpersonal differences in the evaluation of the benefits of education and, consequently, educational choices. If individuals from different social classes differ systematically in such preferences, the latter would further contribute to the emergence of class differentials in educational outcomes.[5]

Based on an RC framework, sociological approaches like the BG model propose several mechanisms that could explain class disparities in educational attainment. While primary effects of social origin are assumed to be related to different subjective expectations about the probability of success, differences in cost and utility evaluations are taken to account for secondary effects of social origin. Notably, by assuming that individuals are motivated to maintain social status over generations, the model offers an explanation for the persistence of secondary effects of social origin that cost-related mechanisms fail to account for. Sociological

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[5] High status students might, for example, be more forward-looking and less risk-averse and therefore, evaluate the benefits of education more positively. Apart from this potential role in the process of *socioeconomic mediation*, time discounting and risk preferences could also influence children from different backgrounds differently (*socioeconomic heterogeneity*). Namely, the educational choices of children living in less advantageous backgrounds is asserted to be more sensitive to the risk and time discounting preferences.

RC models thus seem to be quite successful at predicting observable patterns on a macro-level, but do they accurately describe the mechanisms that are at work on a micro-behavioral level? The next section will try to answer this question.

2.3   Empirical Evidence on the Mechanisms of Educational Decision-Making

Most of the empirical research in the field of education and intergenerational mobility has focused on the extent of class differentials in educational choices rather than the underlying mechanisms of those choices. Across societies and time, socioeconomic background variables (e.g. parental occupation or education) are consistently found to have a strong impact on educational choices. Children from lower socioeconomic backgrounds tend to opt for less education and to choose less ambitious careers (e.g. Goldthorpe 1996, Breen and Goldthorpe 1997, Breen and Jonsson 2000, Erikson et al. 2005, Dumont et al. 2014). A different strand of literature has shown a stronger but still rather superficial interest in mechanisms and focused on the differentiation between primary and secondary effects of social origin. Numerous studies have tried to determine the extent to which differences in ability can account for class disparities in educational outcomes.[6] Generally, differences in academic performance (primary effects of social origin) are found to account for the major part (usually between 50% and 75%) of the class-based differentials in educational choices at certain transition points (e.g. Nash 2003, Erikson et al. 2005, Jackson et al. 2007, Erikson and Rudolphi 2010, Schindler and Reimer 2010, Morgan 2012). Nevertheless, this research falls short of explaining the existence of secondary effects of social origin.

In recent years, social scientists have shown a rising interest in a more detailed empirical inspection of the mechanisms leading to social background effects in educational choices. The underlying assumptions of the BG and similar models have increasingly become the object of empirical evaluation. In this vein, the role of costs, success probabilities and benefits has been extensively explored:

> Regarding *the costs of education*, the relative cost burden is usually approximated through family income and generally found to positively affect educational outcomes (e.g. Fuller et al. 1982, Christofides and Hoy 2001, Carneiro and Heckman 2002, Kane 2006). However, other studies find no effect of family economic resources on study

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[6] The role of academic ability in educational differentials can be explored by decomposing the total effect of social origin on educational outcomes into an explained part that can be attributed to different levels of performance between classes (primary effect of social origin) and an unexplained part (secondary effect of social origin).

outcomes (e.g. Light and Strayer 2000). A different operationalization strategy has focused on the number of siblings competing for household resources. Brothers and sisters proved to have a negative impact on educational attainment (ibid.). Strategies to measure the impact of indirect costs have been employed, too. Forgone earnings were found to have a negative impact on the probability of a transition to post-secondary education but not on the likelihood of entering University in Spain (Peraita and Pastor 2000).

Success probabilities have typically been operationalized using standardized achievement test scores or grade point averages. Consistent with a broad research on primary effects of social origin, they are generally found to have an impact on educational attainment and to make significant contributions to the explanation of status differentials (e.g. Light and Strayer 2000, Alexander et al. 2001).

Regarding the *benefits of education*, the importance of the parental desire for intergenerational status maintenance has only scarcely been evaluated. One implication of the relative risk aversion hypothesis is that parents' status should have a nonlinear effect on children's transition probabilities at certain educational branching points: As long as parental status attainment is not secured, the propensity to make a certain transition is strongly related to social background. Conversely, for those whose educational attainment is already promising enough to avoid downward mobility, the link between social background and educational choices should become weaker. Even though the suggested non-linearity was found in several empirical studies, many scholars have failed to prove its existence (cf. Davies et al. 2002, Stocke 2007). The results regarding the existence of class-based differentials in the utility of education are thus rather mixed.

Although the results are generally encouraging, the measures used to represent the relevant parameters of the BG model are mostly very indirect. Family income might be closely related to the subjectively expected cost-burden of education, test scores to the perceived probabilities of success and nonlinearities in social status effects to relative risk aversion regarding status attainment. Nevertheless, the analyzed factors are only *objective antecedence conditions* for the subjective beliefs and evaluations the BG model relies on (cf. Stocke 2007). Very few studies have tried to test more *directly* whether educational choices can be seen as the product of the proposed *subjective* cost-benefit evaluation. In the remaining part of this section, they will be reviewed.

The most comprehensive test of the BG model was provided by Stocke (2007). Drawing on data of a parent survey in a German federal state, he explored the mechanisms behind differentials in secondary school track choices with questions specifically developed to represent the theoretical parameters in the BG model. To assess the subjective meaning of direct and indirect costs, parents were asked to indicate how strongly completing each track would impose a financial burden on them. As the subjective indicator of success probabilities, perceived chances of completing different educational degrees were asked for. Finally, the measurement of subjective utility was realized by asking respondents directly about status maintenance motives: They had to indicate (i) how much it would bother them if their children reached a less prestigious occupation than their own and (ii) how likely the different educational degrees would prevent this from happening. Educational decisions were found to be strongly affected by subjective success probabilities and the status maintenance motive, but not by monetary concerns. However, the direct effect of social background on school choice was only marginally reduced when controlling for the explanatory factors in the BG model. Other attempts to test the empirical accuracy of RC models of educational decision-making using subjective measures are less complete, but still provide interesting insights into the mechanisms that might be at work when people make choices concerning their education.

For the Netherlands, Need and de Jong (2001) found that adolescents' subjective beliefs about the highest educational level they could successfully complete are influenced by social status. Students with more highly educated parents were more likely to believe that they could obtain a university degree. Subjective ability, in turn, was found to have a significant effect on educational aspirations. However, the objective measure of ability, i.e. grade point averages, proved to be of higher relevance than students' self-evaluated success probabilities. Furthermore, the authors found parental status to have a stronger impact on educational aspirations than on educational choices. They take this to indicate that students are motivated by status maintenance.

Becker (2003) tested the effect of subjective costs, success probabilities and benefits on educational transitions for several federal states in Germany using different surveys. Depending on the survey, different (direct or indirect) measures were used to capture the respective concepts. To assess the burden of (potential) educational expenditures, parents were, for instance, asked if the transition to intermediate or upper secondary school would force them to make cuts in their expenditures. The most direct indicator of subjective success probabilities was whether parents believed their child to be a good student. Finally, educational benefits were

best measured by the parents' desire for their child to reach a social status higher than their own and their belief in the necessity of a certain educational certificate to realize status attainment. The results of the study confirm the theoretical expectations of sociological RC models of educational decision-making: For all theoretical parameters – regardless whether they were measured directly or indirectly – significant effects in the expected directions were found.

In a similar study for a different German region, Becker and Hecken (2009) use a dataset where students rather than parents were asked to give their subjective cost-benefit evaluations of different post-secondary educational careers and to report their study plans. Upper-class graduates were found to be (i) more likely to see higher education as particularly beneficial compared to other forms of education and (ii) less likely to be influenced by monetary motives in their career choice. Again, this is highly consistent with the basic assumptions of the GB model.

Also for Germany, Schindler and Reimer (2011) found that class disparities in students' choices regarding tertiary education were mediated through (i) utility-related factors such as job security and study content preferences as well as (ii) cost-related factors like the wish for short study duration or quick financial independence. However, status motives – e.g. the wish to achieve a high (occupational) status – were found to widen rather than explain the class-based educational discrepancies.

The explanatory power of RC models has not only been evaluated with respect to educational transitions, but also to within-school choices. To understand the mechanisms behind subject choices, Gabay-Egozi et al. (2010) conducted a survey with secondary school students in Israel. Their particular emphasis was on the importance of the status maintenance motive. The concept was assessed through a 6-item scale measuring relative risk aversion (RRA) proposed by Van de Werfhorst and Hofstede (2007). While failure expectations and general utility considerations proved to affect subject choices, status maintenance was not found to be of any relevance.

Finally, Breen et al. (2014) examined the importance of risk aversion and time discounting in the choices of secondary education tracks in Denmark. Risk preferences were assessed by asking respondents how much they would pay to participate in a risky lottery.[7] To measure time discounting preferences, a hypothetical choice scenario between jobs with different income

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[7] In this lottery, one out of ten persons would win 20 000 DKK (approx. 3,600 $).

profiles over time was used.[8] As expected, risk aversion and time discounting proved to have a significant impact on the educational track individuals were enrolled in. Those who were more reluctant to gamble and preferred long-term over short-term salary gains were more likely to pursue an academic track. However, risk aversion and time discounting were not found to mediate the effect of socioeconomic background on educational decision-making.[9]

All in all, the current state of empirical research gives some credentials to sociological RC models of educational decision-making. The BG and similar models seem to be quite suitable for the examination of class-based educational participation patterns. Educational decisions are indeed influenced by experienced costs, subjective probabilities of success and status-based utility assessments. Moreover, class-based differences in these cost-benefit evaluations can partly account for social background effects on educational outcomes. However, research in the field of educational decision-making is still inconclusive and has strongly focused on developed countries. For low- or middle-income countries, very little is known about the ways in which social background affects educational choices. Particularly, for Latin American countries, no study about the mechanisms accounting for class disparities in educational attainment has been conducted so far.

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[8] The students were asked to choose between (i) a job with an average salary from the start, (ii) a job with a low salary for the first 2 years and a high salary later on, and (iii) a job with a very low salary for the first 4 years compensated by a very high salary later on.

[9] In line with theoretical assumptions, risk aversion proved to be of importance for more disadvantaged students only. The authors take this to suggest that, in terms of status attainment, enrolling in a demanding educational track is a high-risk strategy for low-status but not for high-status students. While the former might be "gambling" about a potential status gain, the latter are still on the path to avoiding downward mobility.

3 Empirical Context

The mechanisms of educational decision-making and social status reproduction might be strongly dependent on the broader economic, social and institutional context in which people make their choices. They could, for example, be contingent on whether most people live in poverty, whether educational institutions are public or private, or whether different tracks are offered. This section will provide an overview on the socioeconomic and institutional context relevant for our study. We will first take a look at a very broad social context, i.e. Latin America (Section 3.1). In a second step, the specific institutional and socioeconomic conditions in Morazán, El Salvador will be reviewed (Sections 3.2 and 3.3).

3.1 Education and Social Mobility in Latin America

Latin America has gained the sad notoriety of being the most unequal region of the world. In no other part of the globe the gap between rich and poor is as wide as in Central and South America (e.g. Deininger and Squire 1996, Roland 2013, Torche 2014). In Latin America, the average income of the top 10% is 14.4 times higher than that of the bottom 10%, whereas the corresponding ratio for OECD countries is 4.2 (Roland 2013). Moreover, Latin American countries exhibit particularly low levels of intergenerational educational mobility (Hertz et al. 2007, Murakami and Blom 2008, Blanden 2013, Daude and Robano 2015). Nowhere else is parental status as good a predictor for a child's educational attainment as in this part of the world. Even in the course of the educational expansion recently experienced by almost all Latin American countries, these discrepancies have rather increased than declined (cf. Bashir and Luque 2012).

There has been surprisingly little scientific effort to study the factors behind these huge differentials in educational outcomes in Latin American countries. The few studies that come close to reviewing possible underlying mechanisms have mostly focused on the role of *cost-based factors*, i.e. on family income or educational expenses. In a cross-country study of six Central American countries – Costa Rica, Nicaragua, Guatemala, Panamá, Honduras and El Salvador – family income was found to be a strong predictor of educational attainment (Bashir and Luque 2012). Murakami and Blom (2008) confirm the relevance of cost-based mechanisms by directly evaluating the affordability of tertiary education in Brazil, Colombia, Mexico and Peru. They estimate that educational expenses, i.e. living and study costs, amount to 60% of GDP per capita for a Latin American student compared to 19% for high income countries (ibid.). In contrast, available evidence on the role of *success probabilities* in Latin America is

at best suggestive. Drawing on PISA data for five Latin American countries, Rosenblum (2009) shows that reading and math achievements are strongly related to socioeconomic conditions. Family background, spatial location and gender account for 17 to 29 percent of total inequality of achievement in these countries. Family background variables are found to have the strongest impact (ibid.). However, the role such class differentials in academic performance play in educational transitions has not been studied so far. Neither have researchers explicitly dealt with *utility-based choice mechanisms*, despite the extraordinarily high economic returns on tertiary education in Central America: The premium in annual earnings – i.e. the percentage difference in income between university and secondary school graduates – is estimated to be about 200% compared to 150% for OECD countries. Further, income increases proved to be higher for individuals with more educated fathers than for their peers from less advantageous backgrounds (Bashir and Luque 2012).[10]

The scarce research suggests that differences in the perception of educational costs might be of particular relevance for the explanation of educational differentials in Latin America, while the role of success probabilities and utility remains unclear. The precise mechanisms behind (class-specific) educational decision-making have not been studied for any country or region in Latin America.

This study contributes to filling the current gap of research by exploring the mechanisms influencing educational transitions after high school in a rural region in *El Salvador*. To understand the institutional context in which these transitions take place, we shall have a brief look at the Salvadoran educational system.

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[10] This effect does not necessarily indicate higher returns to the same educational careers for higher-status students but might also be the result of higher economic investments, i.e. the choice of more expensive and better universities.

3.2 The Educational System in El Salvador
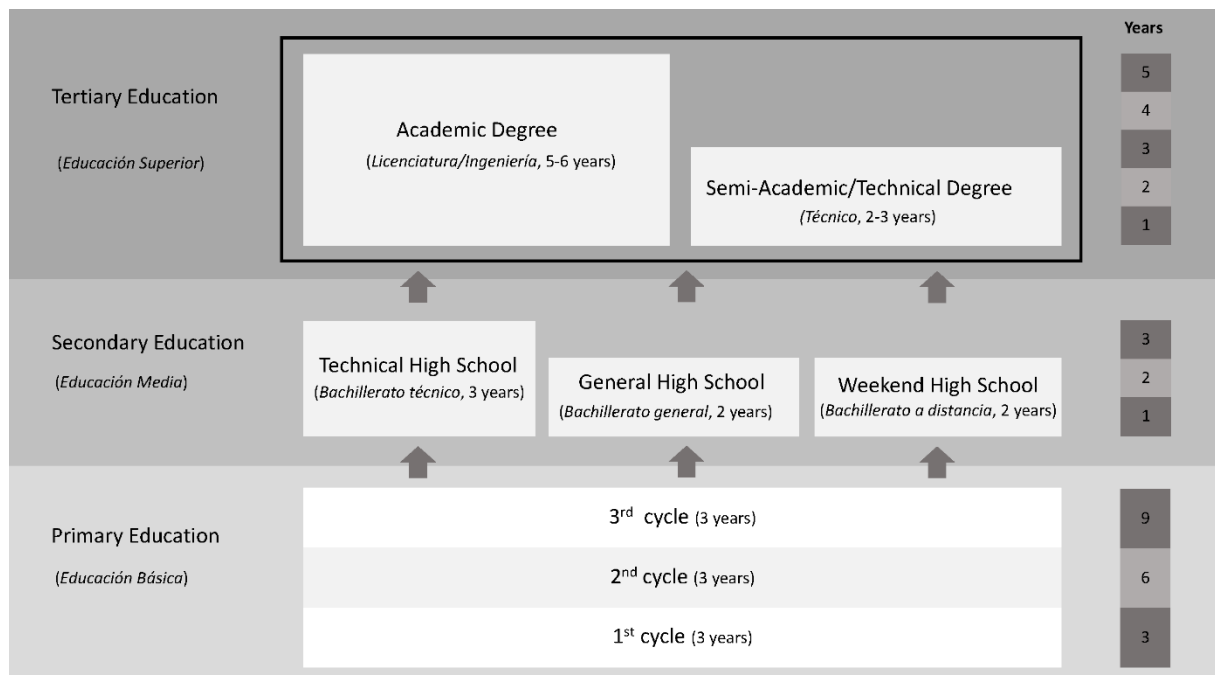
Figure 1: Educational System in El Salvador *(author's representation according to UNESCO (2012))*

The Salvadoran school system is essentially a one-track system where no ability-based grouping of students takes place (cf. Figure 1). The first level – *primary school* – covers the first nine years and is split into three cycles. Regardless of their performance, all primary school graduates can enter *secondary education*, i.e. high school. There are two types of secondary school programs: general high school and technical high school. The general program is a two-year education in general school subjects while the technical program takes three years and includes additional training in a chosen practical field (e.g. accounting or mechanics). Furthermore, secondary degrees can be completed by attending a "weekend program" that offers classes on Saturdays or Sundays. After graduating from high school, all students are eligible for *tertiary education*. There is a relatively small semi-academic sector offering short-duration careers (2-3 years) and a more extensive university sector offering longer academic courses (5-6 years).[11] Practically oriented alternatives such as VET (Vocational Education and Training) do not exist (cf. UNESCO 2012). Institutions hosting tertiary education programs are either private or public. 66% of students enrolled in tertiary education are studying in private

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[11]At a national level, 17% of the people with a tertiary degree completed a non-university track while the remaining 83% graduated from an academic or semi-academic career. The corresponding figures for Morazán are 27 and 73 percent. Both careers will be treated as tertiary or post-secondary education (author's calculations based on EHPM 2015 data).

institutions (author's calculation based on EHMP 2015 data).[12] The latter charge monthly fees of at least 70 USD while studying in a public university costs approximately USD 5 a month (author's calculations, cf. Table A 1). Access to a public university is conditional on the passing of an admission test. Private universities generally have no (or less demanding) admission requirements.[13] For students in the department of Morazán, the closest tertiary education institutions – one public university, three private universities and a private technological institute – are located in the neighboring department of San Miguel (cf. Table A 1).

In the next section, we take a look at the socioeconomic structure of the *department of Morazán*, where this study was conducted.

3.3 The Department of Morazán

The department of Morazán is one of the poorest and most rural regions in El Salvador and is located in the northeastern part of the country. Its 200 000 inhabitants are predominantly children or young adults – with 60% of the population being younger than 30 years (author's calculation, based on EHPM 2015).[14] The median household in the region has four members and a monthly income of 277 USD. According to national definitions, 56% of the people live below the poverty line and 18% in extreme poverty.[15] Morazán exhibits particularly low levels of educational attainment. 27% of the adult people do not have a primary degree, only 22% completed secondary school, and merely 5% possess a tertiary degree. An average adult has only acquired 5.4 years of education; one out of four adults does not know how to read or write. However, the region has experienced a considerable educational expansion in the last decades, especially regarding primary and secondary education. For the current generation of students, primary school enrollment is almost universal and roughly half of the youth complete secondary school. Tertiary enrollment, in contrast, is still very low. Only one out of three secondary

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[12] The University of El Salvador (*Universidad de El Salvador UES*) is the only public university in the country and operates through four campuses in different regions. Conversely, more than 40 private tertiary institutions in all major cities of the country offer private higher education. For Morazán, 37% of tertiary education students study in a public university.

[13] In 2016 the UES has started to implement a program to increase the enrollment of students from disadvantaged social background. Residents of the poorest municipalities in the county are exonerated of the admission exam.

[14] As no statistics are available for Morazán, the figures in this section are based on the author's calculation using the EHPM 2015 dataset provided by the Salvadoran Department for Statistics DIGESTYC. EHPM is an annually conducted household survey providing representative data on a national and departmental level. The conducted analyses can be reproduced with the provided supplementary material.

[15] According to the author's calculation, the DIGESTYC is applying the following definitions:
- Urban poverty line (daily income per person): approx. 1.80 USD (3.60 USD PPP) for extreme poverty and 3.50 USD (7.20 USD PPP) for moderate poverty
- Rural poverty line (daily income per person): approx. 1.10 USD (2.30 USD PPP) for extreme poverty and 2.40 USD (4.60 USD PPP) for moderate poverty

graduates continues her or his studies after high school. The gross tertiary enrollment rate[16] is barely 16% and tertiary completion is even lower. At national level, it is estimated that almost half of the students entering tertiary education do not complete it (Bashir and Luque 2012). Tertiary enrollment and completion in Morazán crucially depend on family income: More than 50% of the students currently enrolled in a tertiary study program are from the highest income quartile, only 5% are from the poorest quartile.

The context where individuals take their educational decisions is thus shaped by high levels of inequality and economic deprivation, as well as a simple institutional framework providing only a small set of options to choose from.[17] These factors provide an interesting and totally unstudied empirical context for the application and evaluation of sociological RC models of educational decision-making.

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[16] Following standard practice, the gross tertiary enrollment ratio was computed as the number of people currently enrolled in tertiary education divided by the population of the 18-23 age group.

[17] It is not possible to be sure that the above-mentioned contextual features actually have an impact on the mechanisms of educational decision-making. If educational choices turn out to follow different rules in Morazán than in high-income countries, countless other differences on a macro-level might be responsible for it. Nevertheless, it seems appropriate to take the local context into account when thinking about choice mechanisms in a place where people's lives are completely different from those of people in developed countries.

4 Research Design

This study applies sociological RC theory to investigate the educational perspectives of secondary school graduates in the department of Morazán. Drawing on the broad theoretical and conceptual work in this field, it is attempted to shed light on the mechanisms behind educational choices of youth in rural El Salvador. Two major goals are pursued: First, detailed knowledge about the process of (class-specific) educational decision-making in Morazán shall be obtained. This is particularly important when it comes to informing local policies with scientific evidence. Second, the study strives to make a contribution to theoretical research by providing a comprehensive test of RC models of educational decision-making in a new empirical setting. This chapter provides a detailed overview on the research questions (Section 4.1), the data collection (Section 4.2), the relevant variables (Section 4.3) and the analytical method (Section 4.4).

4.1 Research Questions

The structure of the study reflects three interdependent research questions.

(i)   **Class-based differentials in educational perspectives:**
How do educational plans and wishes of high school graduates in Morazán depend on social background?

(ii)   **Mechanisms of educational decision-making:**
What factors matter for educational choices of high school graduates in Morazán?

(iii)   **Mechanisms of class differentials in educational decision-making:**
What factors mediate the relationship between educational choices of high school graduates in Morazán and their parents' social status?

The first question aims at grasping the extent of educational differentials. In contrast, the second question is concerned with the process of educational decision-making. It involves an evaluation of the role of different costs, success probabilities and utility-related factors for educational choices. The last question then combines the former two in order to explore the causal pathways leading to educational differentials. It will be examined how (differently) perceived costs, success probabilities and benefits can account for class-based discrepancies in educational choices.

To tackle the above questions, a survey with a random sample of high school senior classes in Morazán was conducted. A comprehensive questionnaire including items about (i) study

intentions, (ii) social background and (iii) the perceived costs, success probabilities and benefits of education was administered to approximately 450 students. The obtained data was then analyzed using logistic regression models and decomposition methods.

4.2 Data

In coordination with the NGO Consciente, El Salvador and the Salvadoran Ministry of Education (MINED), a survey was conducted with 20 high school classes in their final year. The classes were selected on a random basis from a list previously obtained from MINED.[18] To enhance the efficiency of estimations, a stratified sample was drawn. Geographical location (North, Center, and South) and secondary school track (general, technical, and weekend high school) were used as stratifying variables.[19] In the selected classes, all students present at the time of data collection participated in the survey. Overall student absenteeism of about 8% resulted in a response rate of more than 90%. Following the advice of the departmental director of the Ministry of Education, the survey was set out as an online study. However, the implementation of this survey mode faced several problems at the implementation stage. Typical issues were dysfunctional computers, low internet connectivity and locked computer labs (nobody around with a key). Hence, only 48% of the questionnaires could be completed online while the remaining participants answered an ordinary paper-and-pencil form.[20]

Survey questions are inspired by previous theoretical and empirical research in the field – particularly by the BG model – and adapted to the Salvadoran context. Furthermore, a pretest with two high-school classes was conducted and several questions were modified accordingly. The resulting questionnaire was composed of five sections.[21] In the first section, general items including questions about study attitudes and school grades were surveyed. This was followed by a section where students had to provide information about their socioeconomic background. The third section was dedicated to life perspectives; students had to indicate their plans and wishes after high school. The forth section then focused on educational perspectives including

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[18] Data was verified and completed with information obtained through phone calls to all high school directors.

[19] Both variables were expected to be strongly related to decisions regarding tertiary education. Geographical location was used because universities are closer and thus more accessible for those living in the south of the department. School track was assumed to play an important role because the general high school (2 years) is a more direct path to university than its technical counterpart (3 years). Furthermore, the weekend-based high-school is usually preferred by those who are already in the labor market and thus possibly less inclined to enroll in tertiary studies. Furthermore, the variables were also expected to be related to other important characteristics such as poverty, urbanization or ability.

[20] The application of the online-tool was particularly likely to fail in poor rural schools. This makes a reliable test for potential survey mode effects a complicated endeavor.

[21] The codebook of the survey questionnaire is included in the provided background material.

items about educational plans and aspirations as well as questions related to perceived costs, success probabilities and utility of education. The last section finally turned to labor perspectives and included questions about salary expectations and occupational status maintenance. At the end of the survey, participants were confronted with two real choice situations about time discounting and risk preferences respectively. Survey completion took most students between 20 and 50 minutes. Item non-response was prohibited by the online tool and, in the paper-and-pencil mode, by the interviewer. A total of 450 students from 20 classes and 15 different schools participated in the final survey. Data collection took place during the first two weeks of October 2016, i.e. one month before the end of the school year, and was performed by Consciente, El Salvador.[22] Digitalization of paper-and-pencil surveys (through the online tool) was completed several days later by a group of Salvadoran students. Subsequently, variables for primary sampling units, strata and design weights were included in the dataset.[23]

4.3 Operationalization and Variables

Three types of variables are of importance for this study: (1) dependent variables on educational perspectives, (2) independent variables on social background and (3) mediating variables related to perceived costs, success probabilities and benefits of education (cf. Figure 2).
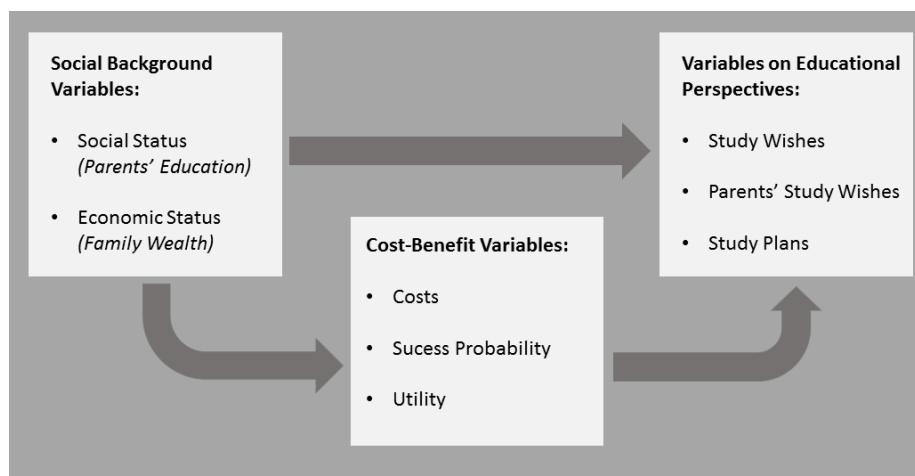
Figure 2: Analytical Framework: Variables

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[22] In the majority of classes, data collection was realized by the author herself.
[23] Design weights corrected for the fact that the resulting sample did not exactly represent the frequency distributions over the strata. Two controllable imprecisions originated from the cluster-based sampling design (selection of classes rather than individuals). Firstly, proportional sampling would have required the selection of a small non-integer number of classes within every strata (e.g. 2.4). However, only entire classes could be selected. Secondly, class sizes exhibited a considerable variance again leading to an over- or underrepresentation of students in different strata. For major precision, both biases were corrected by using probability weights.

4.3.1 Dependent Variables

The dependent variables in this study are based on students' self-reported educational perspectives after high school. Broadly speaking, high school graduates from Morazán are confronted with a binary choice: They can enter a tertiary education institution (to either study a technical or an academic career), or they can leave the educational system.[24] Based on that, three different concepts are analyzed as dependent variables: (1) students' study wishes, (2) parents' study wishes and, most importantly, (3) students' study plans. For each of them, two different measures are used. Table 1 provides an overview on all dependent variables.

Table 1: Dependent Variables

Concept/Variable	Wording (translated from Spanish and summarized)	Coding/Measure
Study wish	Measure 1 (General): If anything was possible: Would you like to continue your studies after high school?	Yes=1, No=0
	Measure 2 (Concrete): If anything was possible: What would you like to do after graduating from high school?	Academic studies=1, Technical studies=1, Work=0, Housework=0, Migration=0
Parental study wish	Measure 1 (General): Does your family want you to continue your studies after high school?	Yes=1, No=0
	Measure 2 (Concrete): What does your family want you to do after you graduate from high school?	Academic studies=1, Technical studies=1, Work=0, Housework=0, Migration=0
Study plan	Measure 1 (General): Will you continue your studies after high school?	Yes=1, No=0
	Measure 2 (Concrete): What do you plan to do after graduating from high school?	Academic studies=1, Technical studies=1, Work=0, Housework=0, Migration=0

Measure 1 is always based on a direct question about study wishes or plans and is taken to represent *general* study perspectives. For measure 2, in contrast, students were asked about their perspectives after high school and "studying" was presented as one possible answer. Measure 2 captures whether studying is the one thing respondents want or plan to do immediately after high school and is thus labeled *concrete* study wishes or intentions. The main focus of this study is on general educational perspectives (Measure 1). Results for concrete educational perspectives (Measure 2) are presented too and used as a robustness check.

4.3.2 Social Background Variables

To assess students' social backgrounds, two different measures are used: (1) The first measure represents the highest educational degree completed by the students' parents (cf. Table 2). As the Salvadoran educational system is relatively simple, the variable has only four categories.

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[24] For reasons of simplicity, technical studies and academic studies are treated as a single outcome.

Parents can have no degree or a primary, secondary or tertiary degree. When parents differed in their educational attainments, the degree of the more educated parent was taken.[25] This was the degree of the mother in 38% of the cases and the degree of the father in 12% of the cases. In the remaining 53% of the cases, both parents had identical educational attainments.[26] The resulting measure is taken to represent educational or *social status*. (2) Furthermore, an indicator for *economic status* was included. Economic status was assessed through family wealth, i.e. the number or availability of different status items (cars, televisions etc.) and facilities in the student's household.[27] For each household item, the reported numbers were divided by the square root of the number of household members and then standardized.[28] The resulting figures were finally added up (and again standardized) to compute a *Wealth Index*. With a Cronbach's alpha of 0.81, the scale reliability of the index is very high.

Table 2: Social Background Variables

Concept/Variable	Wording (translated from Spanish and summarized)	Coding/Measure
Social status (Parental education)	What is your mother's highest educational degree? What is your father's highest educational degree?	Highest status of both parents: No educational degree=0, primary degree=1, secondary degree=2 tertiary degree (university or technical)=3
Economic status (Family wealth)	Which (and how many) of the following facilities/items does your household possess: electricity, internet, computer(s), television(s), car(s) How many rooms does your household include? How many people live in your household?	Index of standardized items: Scale items = Number of rooms, computers, cars and televisions divided by sqrt(#household members) and availability of internet (yes/no)

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[25]This so-called "dominance" approach is common in educational sociology. However, alternative operationalization strategies – e.g. only considering the father's class position (conventional model), the average class position of both parents (joined model), or the position of the same-sex parent (sex-role model) – have been proposed, too (see Korupp et al. 2002 for an overview).

[26] The reason for that pattern is not that mothers are generally more educated than fathers, but rather that in 27% of the cases, respondents were unable to report their father's educational degree in the first place (and mothers' educational degree was taken). It is common for Salvadoran fathers to play only a negligible role in their children's lives. In our sample, only half of the youth live with their fathers – many of them do not even know them.

[27] This is non-standard approach to status measurement, which is usually conducted using data on parental occupations rather than family wealth. However, for our empirical context, the wealth-based approach seems very appropriate: As many people in Morazán cannot (or find it hard to) afford computers, televisions, cars, internet or spacious homes, the mentioned items and facilities are generally perceived to represent economic status: Whoever has the means generally acquires them.

[28] The index attempts to adjust for the fact that a one-person household with one TV has a higher economic standing than a 10-person household with one TV but is less "wealthy" than a 10-person household with 10 TV's. Absolute wealth (total number of items) would thus disproportionally "favor" big families while relative wealth (wealth per person) would underreport their wealth. By dividing the number of items by the square root of the number of household members, a middle course is steered. The availability of internet was of course included in an absolute sense.

4.3.3 Cost-Benefit Variables

A considerable number of theory-driven variables related to perceived costs, success probabilities and benefits of education was used for this study. The operationalization strategy for these variables roughly follows Stocke's (2007) approach, but adaptations of questions to the local context were undertaken and further questions were added. Finally, six cost-related, four success-related and five benefit-related variables were used for this analysis. They either represent the *subjective* parameters in cost-benefit assessment of the BG model (or similar models) or their *objective* antecedence conditions. The latter refer to the pre-conditions that are assumed to lead to individual (and class-based) differences in cost-benefit-evaluations and are (i) family income for cost-related mechanisms and (ii) academic abilities for success-related mechanisms. For the utility dimension, no objective variable was included.

Table 3 summarizes all **cost-related variables**. As *objective antecedence condition* for the creation of cost-related educational differentials, logged household equivalence income is used. Subjective measures refer to absolute direct and indirect costs of education as well as to the respective relative cost burden. To assess *direct costs* (absolute) of education, students were asked to estimate their monthly expenditures in case they enter university. *Indirect costs* (absolute) of education are represented through a measure of forgone earnings. Students were asked about the probability to find a job after finishing high-school and about their estimated earnings in a potential job. Forgone earnings were then computed as the product of subjectively assessed employment probabilities and expected salaries.[29] The remaining variables represent the relative burden of direct and indirect costs respectively. The *relative burden of direct costs* were measured twofold: Respondents were asked (i) whether they believed that their families had the means to pay for tertiary education (yes/no) and (ii) how difficult the financing would be. As an indicator *for relative burden of indirect costs*, the students were asked whether their parents wanted them to work as soon as possible in order to contribute to the family's economy.

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[29] As people in El Salvador are generally not familiar with probabilities, participants were not asked to report numeric probabilities. Instead, they had to answer on a language-based six-point-scale (1=impossible, […] 6=completely certain). To obtain probabilities, the answers on this scale were then linearly transformed into numeric values between 0 and 1. Note that this procedure only provides an approximation of the true subjective probabilities as perceived by the students.

Table 3: Cost-Related Variables

Concept/Variable	Wording (translated from Spanish and summarized)	Coding/Measure
Objective antecedence condition: household income	*How many people in your household are currently working?* *How much does [Person x] earn? [Monthly income of each person]* *Do you receive remittances? [Monthly remittances]* *Do you have other sources of income? [Monthly income]* *How many people live in your household?*	*Logged household equivalence income: log (total income/sqrt(household members))*
Direct costs (absolute)	Imagine you continue your studies after high school: How much do you think you would spend for your studies (for books, transportation, food, tuition fees…)?	Monthly expenses in USD
Indirect costs (absolute)	Imagine you want to work after high school: Do you think that you would find a job? Imagine you start to work after high school: How much do you think you would earn?	Product of estimated probability of finding a job and expected earnings in USD
Burden of direct costs (relative)	Measure 1: Think about the resources of your family (e.g. money): Do you think your family can/could pay for your academic studies? Measure 2: How difficult would it be for your family to pay for your academic studies?	Yes=1, No=0 Very easy=1, […] very difficult= 6
Burden of indirect costs (relative)	My parents think that I should work as soon as possible to support the family.	*Not at all true=1, [...] completely true= 6*

Variables related to **success probabilities** are presented in Table 4. As *objective antecedence condition*, students' grades are used. The survey included two questions asking about average grades in the current and the previous trimester respectively. However, grades are hardly comparable across school classes. In different high school tracks (general vs. technical) and schools, grading is handled with different degrees of severity. As a response to that problem, grades were standardized within school classes.[30] As subjective measures, students' success expectations and students' as well as parents' academic confidence. *Success expectations* were measured by asking students if they believed that they would successfully graduate if they decided to enroll in university. *Academic confidence* was measured on 6-point-scale, where students had to indicate whether they believed to have the qualities for an academic career. As an assessment of *parental academic confidence*, respondents had to report their parents' trust in their academic abilities.

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[30] Note that the resulting variable is still a rather poor representation of students' academic abilities. It captures how well students fare relative to their classmates, but neglects differences in abilities between school classes. Unfortunately, the available data does not contain reliable information that would allow such an interclass comparison.

Table 4: Success Probability Variables

Concept	Wording (translated from Spanish and summarized)	Coding/Measure
Objective antecedence condition: Ability	*What was your average school grade in this trimester?* *What was your average school grade in the last trimester?*	*Average degree, standardized by school class*
Success expectations	Think about your academic abilities: Do you think you would pass all examinations and successfully graduate from university?	Yes=1, No=0
Academic confidence	I have the abilities for an academic career.	Not at all true=1, […] completely true= 6
Parents' academic confidence	My parents think I have the abilities for an academic career.	Not at all true=1, […] completely true= 6

For the operationalization of **benefit-related variables**, several subjective measures were used.[31] To assess *economic benefits* of education, the subjectively expected returns to education were computed. They are represented as the difference in expected earnings of the students (employment probability * expected salary) as high school or University graduates. Social benefits, i.e. benefits in terms of status attainment, were measured twofold: Students were asked (i) how important they believed education to be in order to become "someone in life" and (ii) how much it would bother their parents if they ended up in a less prestigious position than theirs (relative risk aversion).[32] The variables representing time discounting and risk preferences were measured through two real choice situations. The first situation was designed to assess *time discounting preferences*. Respondents were informed that all survey participants would enter a lottery with one winner. In case they won, they would either (i) receive 10 USD immediately or (ii) 100 USD in one year. Subsequently, participants had to indicate their preferred choice. When data collection was complete, the winner was determined by chance and contacted through a phone call. *Risk aversion* preferences were measured in a similar way. At the end of the survey, all students were told that they would receive a small gift for their participation. According to their choice, they either (i) received a candy or (ii) participated in a lottery for twelve candies with success chances of one third. Winners were determined by the online tool or by cards and candies were distributed when all students in a class had completed the survey.

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[31] While lower incomes may lead to higher relative cost assessments and lower abilities to lower success expectations, it is social status itself that is assumed to affect utility perception. No objective measure was thus included in the utility-dimension.

[32] Note that the second variable does not allow us to analyze the contribution of status maintenance motives to educational differentials as risk aversion is assumed to be constant across social classes. For this reason, some further analyses were conducted to check for non-linearities in the effect of social status on the probability of a transition to tertiary education.

Table 5: Utility-Related Variables

Concept	Wording (translated from Spanish and summarized)	Coding/Measure
Economic benefits	Imagine you want to work after high school: Do you think that you would find a job? How much do you think you would earn in that case? Imagine you graduated from a university and wanted to work: Do you think that you would find a job? How much do you think you would earn in that case?	Absolute increase in expected earnings: difference between the products of the probability of labor market participation and the salary for university graduates and high-school graduates respectively.
Social benefits	Education is important to be "someone" in life.	Not at all true=1, […] Completely true= 6
Relative risk aversion	How much would it bother your parents if you ended up in a less prestigious profession than theirs?	Not at all =1, […] Very much= 6
Time discounting	Choice situation: You can now participate in a (real!) lottery. Among all participants, we will randomly select one winner. If you win you have two choices: (1) You get 10 USD immediately or (2) you get 100 USD in a year. What is your choice?	Choice 1 = 1 (higher time discounting); choice 2= 0 (lower time discounting)
Risk aversion	Choice situation: As a reward for your participation we would now like to give you a gift. You can choose between 2 options: (1) You get a candy or (2) you enter a lottery for 12 candies where, on average, one out of three persons will win. What is your choice?	No participation = 1 (risk averse); participation = 0 (not risk averse)

According to previous theoretical and empirical research, all included cost-benefit variables are assumed to affect educational decisions, while only some of them should contribute to the creation of educational differentials. Table 6 provides an overview on the expected effects of the different cost-benefit variables.

Table 6: Cost-Benefit Evaluation Concepts and their Expected Effects

Dimension	Concept	Expected Effect on Educational Outcomes	Class Differentials
Costs	*Objective antecedence condition: household income*	↑ educational transition perspectives	Yes
	Direct costs (absolute)	↓ educational transition perspectives	No
	Indirect costs (absolute)	↓ educational transition perspectives	No
	Burden of direct costs (relative)	↓ educational transition perspectives	Yes
	Burden of indirect costs (relative)	↓ educational transition perspectives	Yes
Success probability	*Objective Antecedence Condition: Ability*	↑ educational transition perspectives	Yes
	Success Expectation	↑ educational transition perspectives	Yes
	Academic Confidence	↑ educational transition perspectives	Yes
	Parents Academic Confidence	↑ educational transition perspectives	Yes
Utility	Economic Benefits	↑ educational transition perspectives	Unclear
	Social Benefits	↑ educational transition perspectives	Yes
	Relative Risk Aversion	↑ educational transition perspectives	No
	Time Discounting	↓ educational transition perspectives	Unclear
	Risk Aversion	↓ educational transition perspectives	Unclear

4.4   Method

To assess the effect of social background and cost-benefit variables on educational perspectives (Section 5.2 and 5.3), logistic regression models were estimated. Effect sizes were presented as marginal effects, or, for dichotomous variables, as discrete change effects. To deal with missing values, further analyses using multiple imputation were conducted as a robustness check. In order to compare the predictive power of different status variables (Section 5.2), the Proportional Reduction of Error (PRE) approach proposed by Jann and Seiler (2014) was used. The PRE estimate represents the "usefulness" of the information contained in one or several variables (e.g. parental educational background) when it comes to predicting a specific outcome (e.g. children's status). To assess the relative importance of the cost-benefit variables (Section 5.3), dominance analyses were conducted. With this method, the contributions of different independent variables to the fit statistic in an estimation model can be computed (see Grömping 2007 for an overview). For the sake of simplicity (e.g. for interpretation), the presented estimates of the dominance analysis are based on linear probability models (LPM).

The mechanisms behind educational differentials (Section 5.4) were analyzed using different types of regression models (Section 5.4.1) and Oaxaca decomposition (Section 5.4.2.) Oaxaca decomposes the total effect of a dichotomous variable in a linear regression into an unexplained "direct" effect and the explained "indirect" effects of different variables (Oaxaca and Ransom 1994, Jann 2008).[33] Non-linear relationships (i.e. Logit or Probit models) can then be modeled using a weighting method proposed by Yun (2004). Further background analyses were conducted with an alternative non-linear decomposition method proposed by Fairlie (2005).

The survey design, i.e. weights, clusters and strata, was taken into account in all analyses.

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[33] As social and educational status are not dichotomous variables, different models were estimated to compare binary differentials between differently arranged groups.

5 Results

This chapter presents the main findings of the study. After taking a brief look at descriptive statistics (Section 5.1), the results regarding the *extent* of status differentials in educational wishes and plans will be presented (Section 5.2). Section 5.3 then reviews the *mechanisms of educational decision-making*, i.e. it presents the findings concerning the role of cost-benefit variables in study wishes and plans. The last section (Section 5.4) finally turns to the *mechanisms behind class differentials in educational plans*. In a first step, it will be explored whether social classes differ in their perceptions regarding the perceived costs, success probabilities and benefits of education. In a second step, it will be reviewed if and how different cost-benefit assessments can account for class discrepancies in educational plans (cf. Figure 2 for an overview on the analytical strategy).

5.1 Descriptive Statistics

Table 7 displays (weighted) descriptive statistics for the variables used in this study, starting with the *dependent variables*. More than 90% of the students report that they would like to continue their studies after high school and 82% state that their parents would like them to do so. When it comes down to reality however, only 52% of the students plan to enter tertiary education.[34] Educational *social background* exhibits strikingly little variance: Only 40% of the students have at least one parent with a primary (11%), secondary (17%) or tertiary (13%) degree. In the remaining 60% of the cases, none of the parents has completed primary school. Economic standards of the students' homes are relatively modest, too. Respondents live in households with an average of 5.2 members, 4 rooms, 1.1 televisions, 0.6 computers and 0.3 cars. 4% of the households have no electricity and 86% no internet (not shown).

According to students' estimates, household income ranges from 0 to 3900 USD with an average income of 392 USD (not shown). However, income measurement might be subject to a substantial measurement error, as students found it hard to report the earnings of their family members.[35] With regards to the *subjective costs of education*, average expected expenditures amount to 225 USD a month (median: 200 USD).[36] Forgone monthly earnings, in contrast, are

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[34] The corresponding figures for concrete educational perspectives (Measure 2) are 74% for study wishes, 65% for parental study wishes and 44% for study plans.

[35] Furthermore, many parents are self-employed or lack regular sources of income, making estimation of monthly earnings even more challenging.

[36] This variable has some weaknesses: Estimates like 1 USD or 1000 USD indicate that some participants might have misunderstood the question or exhibit serious problems in handling numbers. Note further that average

estimated to be as low as 80 USD: Students seem to be quite pessimistic about their labor perspectives after high school. More than half indicate that it would be "impossible" (10%), "almost impossible" (9%) or "rather unlikely" (35%) for them to find a job (not shown), and average expected salaries are only 150 USD (median: 130 USD). Consistent with these estimations, affordability of tertiary education seems to be very limited: Only 50% of the students believe their families to have the financial capacity to pay for their tertiary education studies. On a six-point scale ranging from 1 (very easy) to 6 (very difficult), 84% of the students report superior education financing to be rather difficult (37%), difficult (22%) or very difficult (25%) for their families (not shown). The indirect burden of educational costs – i.e. parents' insistence on a timely contribution to the household economy – is also reported to be very high.

School grades in El Salvador range from 0 to 10 with a 6 being required to pass. Self-reported average grades are 7.9. However, this scale loses its relevance after the within-class standardization procedure. As to the *subjective probability of success*, students seem to be very confident about their academic abilities. As much as 95% believe that they would successfully complete an academic career. Almost all students are totally convinced (49%), convinced (35%) or quite convinced (12%) of their academic abilities (not shown). The corresponding figures for student-reported parental confidence are 60%, 26% and 8% indicating that parents are positive about the academic abilities of their offspring, too (not shown).

Students further seem to attribute a high *utility* to education. Expected employment probabilities and salaries of university graduates are perceived to be considerably higher than those of high-school graduates, with an increase in expected earnings of more than 200 percentage points (from 80 USD to 263 USD). "Social returns" to education are reported to be high, too: 94% of high school graduates are convinced (16%) or very convinced (78%) that in order "to be someone in life, education is very important". However, worries about potential status loss seem to be less of a concern: Almost 50% percent of the students think that intergenerational occupational downward mobility would rather not (15%) or not at all (34%) bother their parents. Further, Salvadoran students seem to exhibit strong risk aversion and very high discount rates: Only 46% decided to enter the lottery (for 12 candies with the odds of winning being 1/3), and even more surprisingly, only 31% preferred 100 USD in one year over 10 USD today.

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estimates for university expenditures represent almost 60% of average total household incomes. 36% of the students provide higher estimates for university expenditures than for their family incomes.

Table 7: Descriptive Statistics

	Mean	Sd	Min	Max	N
Dependent Variables					
General Study Wish (Measure 1)	.9121731	.283358	0	1	450
Concrete Study Wish (Measure 2)	.7419185	.4380661	0	1	450
General Parental Study Wish (Measure 1)	.8233231	.3818195	0	1	450
Concrete Parental Study Wish (Measure 2)	.6503305	.4773963	0	1	450
General Study Plan (Measure 1)	.5200661	.5001532	0	1	450
Concrete Study Plan (Measure 2)	.4443876	.4974507	0	1	450
Social Background Variables					
Parents' Degree					
No Degree	.5981911	.4908402	0	1	426
Primary Degree	.1090196	.3120302	0	1	426
Secondary Degree (High School)	.1656388	.3721932	0	1	426
Tertiary Degree	.1271506	.3335332	0	1	426
Family Wealth (Index)	0	1	-1.217003	4.018828	450
Cost-Benefit Variables					
C Ant.: Household Equivalence Income (logged)	4.61924	1.298666	0	7.464586	450
C Direct: Study Expenditures	224.5024	161.5417	1	1000	439
C Indirect: Forgone Earnings	79.40315	80.15037	0	600	443
C Rel. Direct: Affordability	.4951374	.5005328	0	1	450
C Rel. Direct: Economic Burden	4.474	1.199871	1	6	450
C Rel. Indirect: Indirect Burden	4.360762	1.475425	1	6	445
S Ant.: Grades (std. within classes)	0	.9779296	-2.910307	2.715562	450
S Exp.: Success Expectation	.9490279	.2201856	0	1	450
S Conf.: Academic Confidence	5.280392	.8594442	1	6	448
S Par.: Parents' Academic Confidence	5.393362	.9297501	1	6	444
U Econ.: Economic Returns	179.2286	190.4823	0	1000	441
U Social.: Status Returns	5.674636	.7550627	1	6	446
U RRA: Parents Relative Risk Aversion	2.672617	1.485642	1	5	449
U Risk: Risk Aversion	.5389333	.4990392	0	1	448
U Disc.: Discount Rate	.6903053	.4628835	0	1	449
Control Variables					
Sex	.5171097	.5002633	0	1	450
Age	18.13336	1.937724	16	37	449

Students in Morazán thus seem to attribute high costs, success-probabilities and benefits to tertiary education. But how do all these factors play together to shape patterns of educational transitions? The next three sections present the main results regarding this question.

5.2   Class-Based Differentials in Educational Perspectives
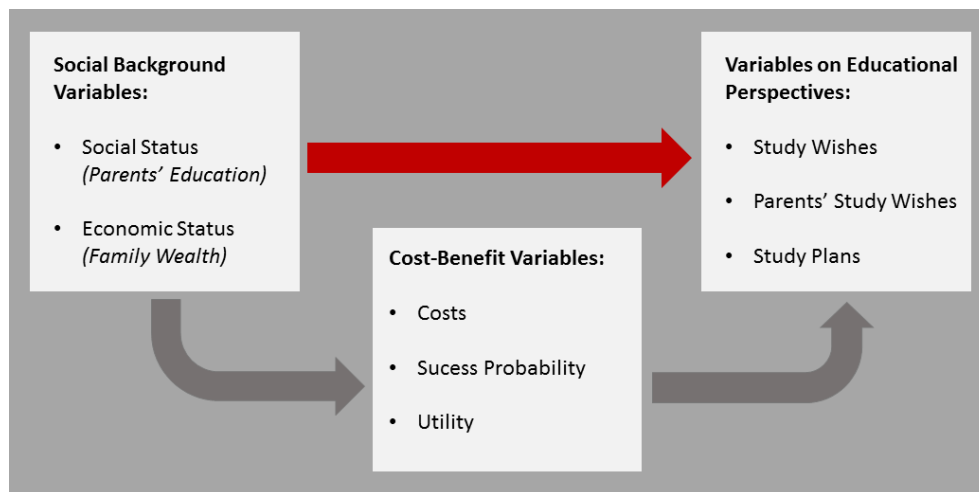
Figure 3: Analytical Framework: Class-Based Differentials in Educational Perspectives

This section deals with the first piece of the analytical jigsaw: How do educational perspectives of high school graduates in Morazán depend on socioeconomic background?[37]

Figure 4 displays students' and parents' study wishes and students' study plans by *parental educational degree*. The resulting pattern is easy to describe: With regards to students' wishes, status differentials seem to be virtually inexistent. Regardless of parental social status, more than 90% of students would like to continue their studies after high school. When it comes to parents' wishes, however, some class-based discrepancies can be observed. While almost 100 percent of children from the most educated homes report that their parents would like them to enroll in tertiary education, this is only true for two thirds of students with the least educated parents. Huge class differentials finally emerge when turning to educational plans rather than wishes. The propensity to have intentions to enroll in tertiary education declines sharply with parental education. More than 80% of children whose parents completed tertiary education plan to follow the same educational path. Conversely, less than 40% of the students from the least advantaged educational backgrounds have plans to enroll in tertiary education.

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[37] This section looks at social (i.e. educational) as well as economic background (family wealth), treating them as two different concepts. Note, however, that family wealth and parental education are strongly correlated: Parental education (i.e. mothers' as well as fathers' education) accounts for more than 50% of the variance of family wealth.
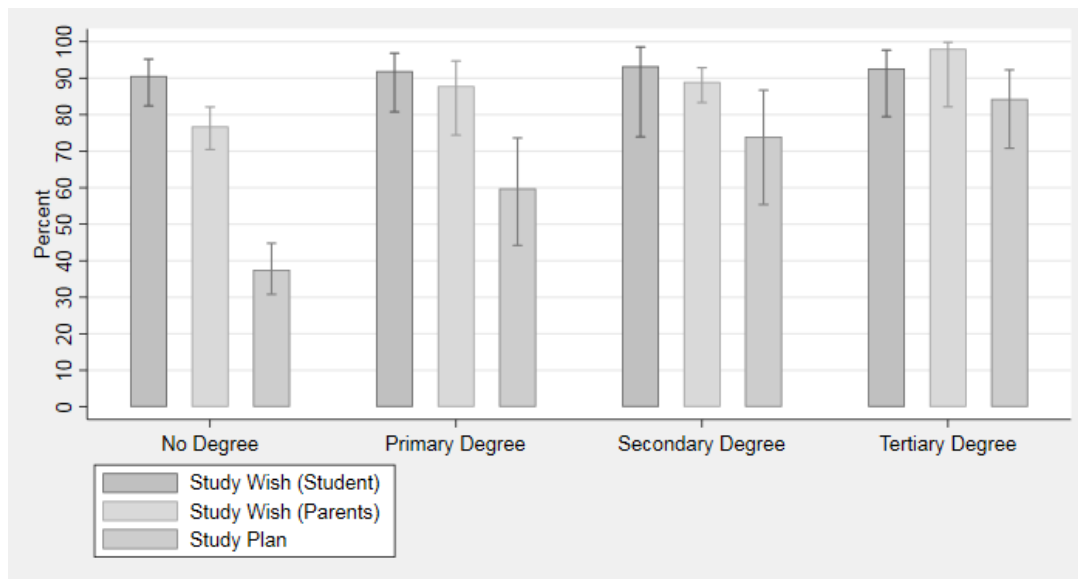
Figure 4: Social Background and Educational Perspectives: Study Wishes and Plans by Parents' Educational Degree

A similar pattern can be observed for *economic background*. Figure 5 shows educational wishes and intentions by family wealth quartiles. Children from poorer households do not seem to be less interested in tertiary education than their more privileged peers. However, their parents are less likely to share their study dreams: While in 90% of the richest families, parents want their children to enroll in tertiary education, only 70% of the parents in the poorest families have further study wishes for their offspring. Once again, the most striking differentials arise at the level of educational plans. In the richest quartile, 80% of the high school graduates report that they will go to a tertiary education institution. In the poorest quartile, in contrast, only about 30% indicate to have such plans.
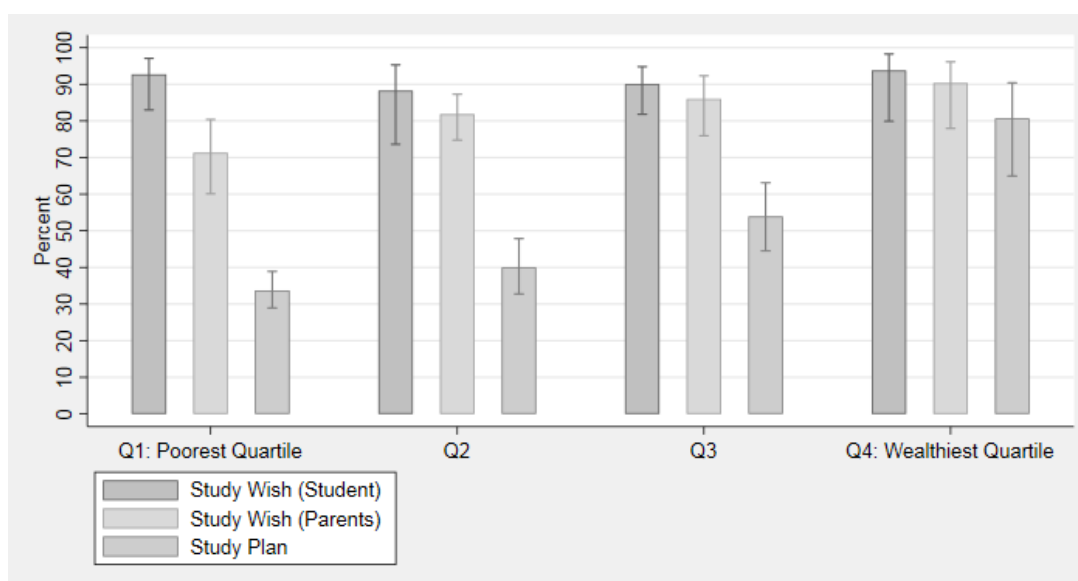
Figure 5: Economic Background and Educational Perspectives: Study Wishes and Plans by Family Wealth Quartiles

The bivariate illustrations provided up to this point gave first insights in the patterns of educational transitions from secondary to tertiary education in Morazán. Study plans, parents' educational aspirations, but not students' study wishes seem to be strongly shaped by social as well as economic background. But how do these differentials manifest themselves in a multivariate framework? And how good a predictor for educational perspectives are social and economic status respectively?

Table 8 shows the marginal effects of multivariate logistic regression analyses for study wishes, parental study wishes and study plans. Once again, the interpretation of the results is straightforward: Parents' education and family wealth do not have a significant effect on students' wishes. Social background effects on study plans, however, are highly significant and impressive in size. With each standard deviation of additional wealth, the probability to have further study intentions increases by 12 percentage points, and children from the most educated homes are almost 30 percentage points more likely to have further study plans than their peers with the least educated parents. Interestingly, social rather than economic status seems to matter for parents' educational aspirations. More educated parents are significantly more likely to have study wishes for their offspring, while multivariate regression results do not indicate a similar pattern for wealthier parents.

Table 8: Study Wishes and Plans by Socioeconomic Background: Multivariate Logistic Regression Models.

	Study Wish		Parents' Study Wish		Study Plan	
	General	Concrete	General	Concrete	General	Concrete
Family Wealth *(Index)*	0.0129	-0.0354	0.0514	0.0276	0.120**	0.0953*
	(0.0250)	(0.0326)	(0.0399)	(0.0199)	(0.0392)	(0.0333)
Parental Education *(Ref: No Degree)*						
Primary	0.0103	0.101	0.0679	0.00368	0.134	0.136
	(0.0306)	(0.0612)	(0.0416)	(0.0799)	(0.0813)	(0.0944)
Secondary	0.0254	0.0465	0.0740	0.156**	0.274**	0.221**
	(0.0347)	(0.0389)	(0.0422)	(0.0441)	(0.0717)	(0.0645)
Tertiary	0.00714	0.0325	0.166**	0.250**	0.271*	0.266**
	(0.0543)	(0.0721)	(0.0515)	(0.0741)	(0.116)	(0.0829)
Age	0.00484	-0.0245*	-0.00521	-0.0167	-0.0143	-0.0410
	(0.0112)	(0.00836)	(0.00644)	(0.00968)	(0.0104)	(0.0328)
Sex *(Ref. Male)*	0.00414	0.0629+	-0.0591**	-0.0605	0.0661+	0.0526
	(0.0222)	(0.0298)	(0.0187)	(0.0566)	(0.0350)	(0.0425)
N	425	425	425	425	425	425

Standard errors in parentheses
+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Furthermore, young women are slightly more likely to have study wishes or plans than their male peers but perceive their parents to be less enthusiastic about their further educational careers. Estimates in all six models do not change substantially when computed through multiple imputation (cf. Table A 2).

Further analyses based on the PRE approach reveal economic and social status to be roughly equally important for educational transition plans. Using them as predictors for study plans leads to proportional error reductions of 10% and 11% respectively (not presented). Furthermore, maternal status is found to be more relevant than paternal status for educational plans (cf. Table A 3).[38]

Economic and especially social status thus seem to play a crucial role in educational perspectives of high school graduates in Morazán. The observed class-based educational discrepancies indicate that, for some reasons, students from different social background take different decisions regarding tertiary education. Rational choice theories claim that these differences are rooted in divergent cost-benefit calculations. Can educational decision-making in Morazán thus be seen as the result of a subjective evaluation of costs, success probabilities and benefits of education? The next section explores the mechanisms of educational decision-making in Morazán drawing on the theoretical framework of the Breen-Goldthorpe model.

5.3   Mechanisms of Educational Decision-Making
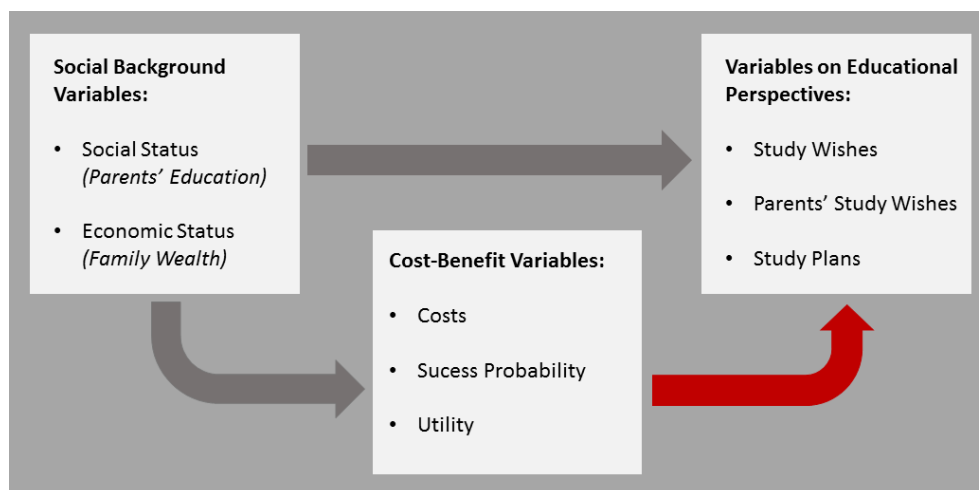
Figure 6: Analytical Framework: Mechanisms of Educational Decision-Making

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[38] Note that analyses are conducted with a selective subsample including only those who *do* know their father's social status. For the remaining 27%, fathers can be expected to play an even more negligible role in the lives of their sons and daughters. When the impact of fathers' and mothers' status is estimated using multiple imputation, the effect of maternal status is indeed even stronger (not presented). This further supports the hypothesis that mothers rather than fathers play an important role in the students' educational lives.

This section analyzes the relationship between cost-benefit assessment and educational perspectives. Regarding the former, two types of variables are explored: (i) Variables representing different dimensions of subjective cost-benefit evaluations and (ii) their objective antecedence conditions.

Table 9 presents the results for the effects of the *antecedence conditions*, i.e. logged household equivalence income and school grades, on educational perspectives.[39] Household income is not found to influence study wishes, but has a significant impact on study plans. The effect of school grades is less clear-cut. Good students within a school class are more likely to have study wishes and concrete study plans, but no significant effect of school grades on general study plans could be found.[40]

Table 9: Effects of Antecedence Conditions

	Study Wish		Parents' Study Wish		Study Plan	
	General	Concrete	General	Concrete	General	Concrete[(1)]
Household Equivalence Income	-0.0146	-0.0222	0.0200+	0.0156	0.0380*	0.0428*
(logged)	(0.0103)	(0.0196)	(0.0110)	(0.0112)	(0.0151)	(0.0141)
School Grades *(std.)*	0.0459*	0.0750**	0.0568*	0.0257	0.0379	0.0680*
	(0.0172)	(0.0201)	(0.0223)	(0.0167)	(0.0237)	(0.0245)
Age	0.00196	-0.0235**	-0.0135+	-0.0343*	-0.0548*	-0.0590*
	(0.00705)	(0.00714)	(0.00656)	(0.0143)	(0.0196)	(0.0235)
Sex *(Ref. Male)*	-0.00612	0.0557	-0.0863***	-0.0702	-0.00766	-0.00889
	(0.0277)	(0.0466)	(0.0129)	(0.0589)	(0.0335)	(0.0510)
N	449	449	449	449	449	449

Standard errors in parentheses
+ $p<0.10$, * $p<0.05$, ** $p<0.01$, *** $p<0.001$
(1) Linear probability model (because of a perfect predictor)

Household income and ability thus seem to influence subjective cost-benefit assessments. This leads to the next question: How do subjective assessments rather than objective preconditions shape the process of educational decision-making in Morazán?

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[39] Note that estimates for both variables could be downward biased. The presumed imprecision of the income measurement should lead to an attenuation bias (cf. Hutcheon et al. 2010) while the within-class standardization disregards (potential) further ability-based effects across school classes.

[40] Further analyses were conducted to check whether objective preconditions influence subjective cost-benefit assessments (not presented). As theory suggests, household income has a significant and substantial impact on the subjectively assessed relative cost burden, but no effect on perceived absolute costs. However, no effect on relative indirect costs could be found. Again in line with theoretical expectations, better grades were found to translate into higher subjective success expectations and greater academic confidence of students and their parents.

Table 10 presents the results of a logistic regression analysis including all subjective cost-benefit variables as well as their antecedence conditions. To estimate the relative importance of the different cost-benefit variables, a dominance analysis based on the corresponding linear probability models was further conducted. Results of the dominance analysis are shown in Table A 4 (Appendix). Since the underlying models are linear, the estimates can be interpreted as relative shares of explained variance.

For **students' study wishes**, *success-related variables* seem to be of pivotal importance. Binary success expectations as well as academic confidence significantly and substantially increase the probability to have study wishes. Taken together, success probability variables account for 27% of individual variance in study wishes. *Cost-based mechanisms* play a less important but still significant role (4%): Absolute direct costs seem to demotivate students from having study wishes. Contrary to expectations, relative direct costs have a positive rather than a negative impact on study wishes: Students who believe further education to be unaffordable for their families tend to be more motivated to continue their educational career. The *utility-dimension* is, if at all, only marginally relevant for educational wishes. Results suggest that perceived economic returns might inspire the wish to study. However, the respective effect is only significant at the 10%-level. Conjointly, cost-benefit variables account for 32% of the variance in students' study aspirations.

When it comes to **parental educational aspirations** for their children, the *costs of education* – particularly the relative burden of direct costs – seem to weigh more heavily. Cost variables account for 8% of individual outcome differentials. However, *success-related factors* such as parents' confidence in their children's academic abilities are again the most crucial determinants (23%). Furthermore, parents' educational wishes seem to be partly driven by *utility-based* status maintenance concerns. Parents with stronger relative risk aversion are more likely to have further educational aspirations for their children. Taken together, cost benefit-variables account for 31% of the variance in parents' study wishes.

Table 10: Educational Decision-Making as a Product of Cost-Benefit-Evaluation

	Study Wish		Parents' Study Wish		Study Plan	
	General	Concrete	General	Concrete	General	Concrete[1]
Cost Variables						
C Ant.: Household Income	-0.0130	-0.00387	0.0164	0.0116	0.00313	0.0132
	(0.0101)	(0.0157)	(0.0128)	(0.0105)	(0.00936)	(0.00754)
C Direct: Study Expenditures	-0.000194*	-0.000263*	0.00000334	-0.000255	-0.000289*	-0.000229
	(0.000064)	(0.000113)	(0.000101)	(0.000156)	(0.000125)	(0.000201)
C Indirect: Forgone Earnings	0.0000171	-0.000367	-0.000582*	-0.000429	-0.0000493	-0.000266
	(0.000088)	(0.000235)	(0.000204)	(0.000274)	(0.000308)	(0.000277)
C Rel. Direct: Affordability	0.0501	-0.0258	0.134*	0.171*	0.399***	0.429***
	(0.0321)	(0.0594)	(0.0468)	(0.0582)	(0.0199)	(0.0487)
C Rel. Direct: Economic Burden	0.0232+	0.0519**	-0.0247	-0.00640	-0.000324	0.00561
	(0.0130)	(0.0163)	(0.0207)	(0.0209)	(0.0177)	(0.0231)
C Rel. Indirect: Indirect Burden	-0.00126	-0.0171	0.00315	-0.0569**	-0.0307*	-0.0117
	(0.00876)	(0.0145)	(0.0121)	(0.0155)	(0.0116)	(0.0158)
Success Variables						
S Ant.: Grades (std. within classes)	-0.00669	0.0271*	0.0204	-0.0194	0.00472	0.0364
	(0.0101)	(0.0112)	(0.0224)	(0.0213)	(0.0238)	(0.0229)
S Exp.: Success Expectation	0.169**	0.540**	0.204**	0.251*	0.378+	0.215**
	(0.0400)	(0.142)	(0.0613)	(0.102)	(0.178)	(0.0547)
S Conf.: Academic Confidence	0.0545*	0.107***	0.0291	0.0438	0.0462*	0.0536+
	(0.0211)	(0.0130)	(0.0303)	(0.0446)	(0.0181)	(0.0298)
S Par.: Parents' Confidence	0.00214	-0.0259	0.0925***	0.0999**	-0.00395	0.0111
	(0.0134)	(0.0188)	(0.0173)	(0.0291)	(0.0168)	(0.0272)
Benefit Variables						
U Econ.: Economic Returns	0.000170+	0.000205+	0.0000248	0.0000522	0.000187+	0.000326*
	(0.000084)	(0.000115)	(0.000086)	(0.000126)	(0.000093)	(0.000121)
U Social.: Status Returns	0.0206	0.0305	-0.0408	-0.0387	-0.0155	-0.0141
	(0.0155)	(0.0248)	(0.0252)	(0.0321)	(0.0365)	(0.0343)
U RRA: Parents Rel. Risk Aversion	-0.00946	-0.0131	0.0259**	0.0343+	0.00646	0.0256*
	(0.00707)	(0.0101)	(0.00768)	(0.0168)	(0.0126)	(0.0116)
U Risk: Risk Aversion	-0.0108	0.0232	0.0511*	-0.0264	-0.0389	-0.00848
	(0.0314)	(0.0239)	(0.0208)	(0.0406)	(0.0263)	(0.0362)
U Dis.: Discount Rate	-0.0261	-0.0257	-0.0187	-0.0203	-0.0540	-0.103*
	(0.0199)	(0.0402)	(0.0418)	(0.0727)	(0.0440)	(0.0417)
Age	0.00556	-0.0269**	-0.00413	-0.0223+	-0.00889	-0.0405*
	(0.00803)	(0.00704)	(0.00638)	(0.0104)	(0.0133)	(0.0137)
Sex (Ref. Male)	0.0124	0.0592	-0.0482*	-0.0139	0.0530	0.0225
	(0.0230)	(0.0521)	(0.0188)	(0.0466)	(0.0407)	(0.0558)
N	417	417	417	417	417	417

Standard errors in parentheses
+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001
(1) Linear probability model (because of a perfect predictor)

The most important results are displayed in the last two models about **study plans.** Contrary to study wishes that are hypothetical in nature, study plans refer to actual (albeit preliminary) decisions. Hence, the proposed cost-benefit mechanisms should be most effective. Indeed, cost-benefit variables account for 43% of the variance in reported study plans. Study plans seem to be predominantly determined by *cost-based mechanisms*. Affordability – i.e. the relative direct costs of education – has a huge and significant impact on study plans. Students who report that their families could pay for tertiary education are 40 percentage points more likely to have study plans than those who lack this confidence. Furthermore, high expected expenditures and burden of indirect costs seem to discourage students from entering tertiary education. Forgone earnings, in contrast, are not found to be of any relevance. Conjointly, cost-variables account for striking 37% of the variance in study plans, affordability alone for almost 30%. Not only cost-, but also *success-variables* (5%) and *utility-related factors* (2%) influence study plans. Success expectations and academic confidence significantly increase the propensity to enter tertiary education. The same is true for economic returns and relative risk aversion. Furthermore, students with higher discount rates are less likely to have concrete study plans.

Educational plans of high school students in Morazán as well as their parents' aspirations seem to be mainly driven by concerns about the relative cost burden of education. Success probability, in contrast, has a major impact on study wishes (of parents and students) and a minor influence on study plans. Utility-related variables do not seem to play a major role for any of the three dimensions.[41]

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[41] However, up to the point, our analysis does not fully qualify us to discard the role of status maintenance motives for educational decisions. The predicted effect of relative risk aversion (RRA) as proposed by the BG model cannot accurately be captured with the respective variable in our model because RRA is assumed to be constant across classes: Parents from different classes are not assumed to differ in their status maintenance concerns but to perceive the social utility of further education differently because they may or may not perceive it to be necessary to avoid downward mobility. As the role of relative risk aversion is difficult to assess directly, some further indirect analyses were conducted (not presented). For this analysis, parental status was recoded to represent the years of completed education. Then a further dummy variable indicating whether parents' educational level was not yet reached was included in the model. No significant non-linearities in study plans and parents' aspirations were found. Furthermore, social status effects on parental aspirations lose their significance when variables for costs and success probabilities are controlled for. As for students' study plans, children of academics are not significantly more likely to plan to enroll in tertiary education when costs and success probabilities are controlled for. Our data does therefore not support the hypothesis that educational decisions of high school students on Morazán are driven by status maintenance concerns of their parents. Furthermore, social status effects on parental aspirations lose their significance when variables for costs and success probabilities are controlled for. As for students' study plans, children of academics are not significantly more likely to plan to enroll in tertiary education when costs and success probabilities are controlled for. Our data does therefore not support the hypothesis that educational decisions of high school students on Morazán are driven by status maintenance concerns of their parents. Furthermore, social status effects on parental aspirations lose their significance when variables for costs and success probabilities are controlled for. As for students' study plans, children of academics are not significantly more likely to plan to enroll in tertiary education when costs and success probabilities are controlled for. Our data does therefore not support

So far, the existence of large class-based educational differentials in the transition to tertiary education in Morazán has been documented (Section 5.2). Furthermore it has been shown that educational wishes and, most importantly, educational plans are strongly shaped by individual differences in cost-benefit evaluations of education (Section 5.3). The next section will turn to our final question: Are class-based differentials in educational decisions rooted in differently perceived costs, benefits and success-probabilities?

5.4 Mechanisms of Social Status Reproduction

This section explores the mechanisms behind social background effects on educational transitions of high school graduates in Morazán. By doing so, it tests the accuracy of the Breen-Goldthorpe model for the explanation of status differentials in educational choices in this specific empirical setting. We will first briefly review how the perceived costs, success probabilities and benefits of education depend on social and economic status (Section 5.4.1). Then, the effects of social background on educational plans will be decomposed to analyze how cost-benefit variables contribute to the generation of educational differentials (Section 5.4.2).

5.4.1 Class-Specific Cost-Benefit Perceptions
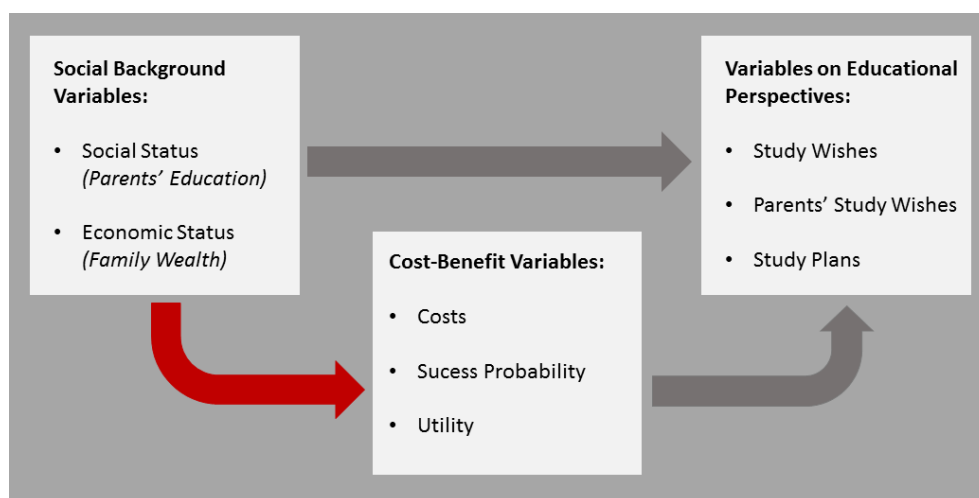
Figure 7: Analytical Framework: Class-Specific Cost-Benefit Perceptions

the hypothesis that educational decisions of high school students on Morazán are driven by status maintenance concerns of their parents. However, this may also be the consequence of insufficient power: Only very few students (approx. 50) have not reached their parents educational status so far. Furthermore, status maintenance concerns may be related to occupational rather than educational status. In a context of massive educational expansion, more than parental education might be required to avoid occupational status deterioration. Such mechanisms cannot accurately analyzed with the available data (information on parents' occupational status was provided by students but has yet to be prepared for analysis).

Before turning to the final question about the generation of educational differentials, one last piece of the jigsaw has to be put: How do costs, success probabilities and benefits of education differ between social classes?

Regarding the **costs of education**, results are highly consistent with theoretical expectations (cf. Table A 5 and Table A 6). Children from less educated homes have lower family incomes and perceive the direct and indirect costs of education as more burdensome. The same is true for children with a lower economic status. Also in line with RCT, educational status is not found to affect absolute direct or indirect cost evaluations. Contrary to expectations, students with a higher economic standing perceive forgone earnings to be higher than those who come from less wealthy families.

For **success-related** variables, the results are less clear-cut (cf. Table A 7 and Table A 8). Higher parental educational status indeed seems to lead to higher levels of ability. However, the difference between school grades of the students from the most educated and the least educated homes is only significant at the 10%-level. Subjective success expectations, students' academic confidence and parents' academic confidence have a clear tendency to increase with social status. These effects remain significant when school grades are controlled for (not presented). Lower status students' lack of confidence in their abilities might thus be partly unwarranted.[42] For economic status no effects on school grades, success expectations and parents' academic confidence could be found, but wealthier children seem to be more confident about their academic abilities.[43]

Hardly any substantial class-differentials can be observed in the perception of the **benefits of education** (cf. Table A 9 and Table A 10). Children from more educated and wealthier homes

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[42] The imperfection of our within-class ability measure does not allow us to safely draw the conclusion that subjective success probabilities are biased rather than rational. Children from lower status might, for example, be well aware of the fact that they go to worse schools and take this into account in the assessment of success probabilities. Such an ability-effect would not be captured by within-class grades.

[43] Some further analyses using variables about study attitudes and parental support were conducted to better understand the mechanisms behind primary effects of social origin (not presented). They yield unexpected results: Students with a higher social or economic status are not more, but significantly less interested in education. Furthermore, wealthier children report to be less compliant with their homework. This suggests that differences in study attitudes widen rather than close the unexplained achievement gap for high school graduates in Morazán. In contrast, parental support might partly account for inter-class differences in study outcomes. Unsurprisingly, children with more educated parents are more likely to receive help with their homework. However, they do not perceive their parents to be significantly more interested in their education.

Note that the higher levels of study motivation for students from less advantageous backgrounds may be the result of prior selection: After compulsory school, children with lower socioeconomic status continue their education only if they are highly motivated, while those who have wealthier or more educated parents might be more likely to continue regardless of their motivation (e.g. because their parents want them to or/and can easily afford it).

are not found to perceive economic returns differently or to attribute a higher value to education as a means of status attainment. However, and contrary to the expectations of the BG model, parents with a tertiary degree tend to be more strongly concerned about intergenerational downward mobility than those without an educational degree – although this effect is only significant at the 10%-level.[44] No status differentials in risk preferences could be found, but children from uneducated parents have significantly higher discount rates than those whose parents have at least a primary degree (not presented).[45]

Children from different social backgrounds do indeed seem to perceive the costs, success probabilities and utility of education differently. But how can these differences in perceptions account for their divergent educational choices?

5.4.2   Class Differentials as a Product of Divergent Cost-Benefit Evaluations
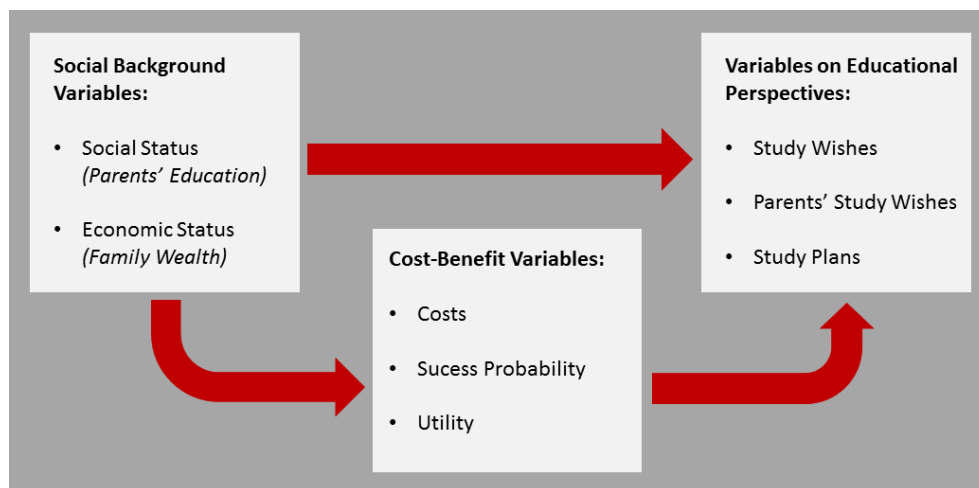
Figure 8: Analytical Framework: Class Differentials as a Product of Divergent Cost-Benefit Evaluations

In the last and most important step of our analysis, everything is put together: Status differentials in tertiary education enrollment decisions of high school graduates in Morazán will be decomposed into the contributions of the different cost-benefit variables. For this task, we will leave study wishes aside and focus exclusively on study plans.[46]

Table 11 shows the results of the Oaxaca decomposition of **social status effects** (parental education) on general study plans adapted for a logistic regression. As the method only

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[44] Parents from all classes are assumed to have an equally strong relative risk aversion.

[45] They are 10 percentage points more likely to prefer the immediate 10 USD over the 100 USD in a year (p <0.05) (not presented).

[46] Decompositions of the class differentials in parental wishes were conducted too. They are included in the Appendix (Table A 12 and Table A 13). As no class differentials in students' study wishes were observed, no decomposition analyses were conducted for the latter.

decomposes binary outcome differentials, several models were estimated to contrast differently arranged status groups. Conjointly, the cost-benefit variables account for 70% of the educational differentials between children of uneducated (no educational degree) and those of educated (at least a primary degree) parents (Model 1).[47] Only one variable significantly contributes to explaining the gap between these two groups: the relative burden of direct costs. Affordability alone accounts for 54% of the status differentials in study plans. The contribution of success expectations (9%) is significant only at the 10% level, while no other variables make any significant contributions. Results are similar when students whose parents have no degree or only a primary degree are contrasted with those who come from more educated homes (Model 2). Different cost-benefit evaluations (as measured in our model) can account for 74% of the gap in study intentions between these two groups. Once again, affordability plays the crucial role and accounts for 57% of the class-based differentials. Inter-class differences in success expectations further explain 8% of the gap in educational plans. The last model (Model 3) contrasts students with the highest social status, i.e. tertiary education, with all other students. Again, the respective gap in study plans seems to be mainly driven by cost-related mechanisms. Affordability explains as much as 76% of it. Success expectations and academic confidence are of some relevance, too, accounting for 8% and 6% of class-based differentials in educational choices respectively. Taken together, cost-benefit variables completely explain class-based discrepancies in this model. Decompositions of concrete rather than general study plans yield similar results (cf. Table A 11). Furthermore, the main findings could be replicated using alternative model specifications based on the decomposition method proposed by Fairlie (not presented).

Table 12 displays Oaxaca decompositions of the effects of **economic status** (family wealth) on general study plans. Once again, differently arranged groups (wealth quartiles) are contrasted. Results are straightforward: Only affordability seems to make a substantial contribution to educational differentials and explains between 55% and 66% of them (depending on the model). Cost-benefit variables account for 84% (Model 1), 83% (Model 2) and 67% (Model 3) of the respective class differentials in educational plans. Results for direct rather than general study plans (Table A 11) and for the Fairlie decompositions (not presented) are very similar.

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[47] Percentage values can be computed by dividing the estimate of interest by the respective total difference between the groups ("Difference" in the table).

Table 11: Oaxaca Decomposition of Social Status Effects on General Study Plans

	(1) None vs. Prim./Sec./Tert.	(2) None/Prim. vs. Sec./Tert.	(3) None/Prim./Sec. vs. Tert.
Group 1 (Higher Status)	0.741***	0.790***	0.831***
	(0.0417)	(0.0387)	(0.000000305)
Group 2 (Lower Status)	0.373***	0.408***	0.467***
	(0.0334)	(0.0319)	(0.0323)
Difference	0.368***	0.382***	0.364***
	(0.0488)	(0.0435)	(0.0323)
Explained Part	0.258***	0.283***	0.373***
	(0.0365)	(0.0342)	(0.0294)
Unexplained Part	0.110*	0.0993*	-0.00879
	(0.0440)	(0.0334)	(0.0395)
Cost variables			
C Ant.: Household Income	-0.00333	-0.00243	-0.00148
	(0.00664)	(0.00587)	(0.0132)
C Direct: Study Expenditures	0.00326	-0.000122	0.00702
	(0.00331)	(0.00244)	(0.00601)
C Indirect: Forgone Earnings	-0.00132	-0.00175	-0.00250
	(0.00325)	(0.00443)	(0.00721)
C Rel. Direct: Affordability	0.200***	0.218***	0.275***
	(0.0330)	(0.0356)	(0.0327)
C Rel. Direct: Economic Burden	-0.000617	0.00296	0.00682
	(0.0172)	(0.0139)	(0.0213)
C Rel. Indirect: Indirect Burden	0.00769	0.0128	0.0204
	(0.00701)	(0.00813)	(0.0119)
Success Variables			
S Ant.: Grades (std. within classes)	0.00183	0.00179	0.00611
	(0.00291)	(0.00300)	(0.00661)
S Exp.: Success Expectation	0.0335+	0.0305+	0.0289+
	(0.0182)	(0.0162)	(0.0160)
S Conf.: Academic Confidence	0.0100	0.0159	0.0218+
	(0.00649)	(0.00909)	(0.0102)
S Par.: Parents' Confidence	-0.00277	-0.00219	-0.00495
	(0.00572)	(0.00594)	(0.0110)
Benefit Variables			
U Econ.: Economic Returns	0.00258	0.00449	0.0112
	(0.00491)	(0.00545)	(0.00912)
U Social: Status Returns	0.000972	0.00115	0.000790
	(0.00764)	(0.00458)	(0.00299)
U RRA: Parents' Rel. Risk Aversion	-0.00104	-0.00259	-0.00104
	(0.00299)	(0.00572)	(0.00589)
U Risk: Risk Aversion	0.00228	0.00108	0.00189
	(0.00349)	(0.00336)	(0.00456)
U Dis.: Discount Rate	0.00467	0.00348	0.00282
	(0.00421)	(0.00528)	(0.00814)

Standard errors in parentheses
+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Table 12: Oaxaca Decomposition of Economic Status Effects on General Study Plans

	(1) Q1 vs. Q2-Q4	(2) Q1/Q2 vs. Q3/Q4	(3) Q1-Q3 vs. Q4
Group 1 (Higher Status)	0.597***	0.682***	0.822***
	(0.0301)	(0.0351)	(0.0463)
Group 2 (Lower Status)	0.353***	0.369***	0.424***
	(0.0420)	(0.0310)	(0.0264)
Difference	0.244***	0.313***	0.399***
	(0.0478)	(0.0435)	(0.0495)
Explained Part	0.207***	0.261***	0.268***
	(0.0295)	(0.0397)	(0.0383)
Unexplained Part	0.0377	0.0528	0.130*
	(0.0442)	(0.0459)	(0.0593)
Cost variables			
C Ant.: Household Income	0.00185	0.0000420	-0.00300
	(0.00949)	(0.0105)	(0.0100)
C Direct: Study Expenditures	-0.00552	-0.00287	0.00791
	(0.00779)	(0.0101)	(0.00674)
C Indirect: Forgone Earnings	0.0000832	-0.000741	-0.00401
	(0.000757)	(0.00361)	(0.0106)
C Rel. Direct: Affordability	0.150***	0.208***	0.219***
	(0.0239)	(0.0313)	(0.0261)
C Rel. Direct: Economic Burden	-0.000484	-0.00567	-0.0132
	(0.0160)	(0.0259)	(0.0278)
C Rel. Indirect: Indirect Burden	0.0151	0.0181+	0.0125
	(0.00902)	(0.00972)	(0.00829)
Success Variables			
S Ant.: Grades (std. within classes)	0.00207	0.00149	0.00212
	(0.00476)	(0.00315)	(0.00463)
S Exp.: Success Expectation	0.0226	0.0301	0.0244+
	(0.0139)	(0.0171)	(0.0136)
S Conf.: Academic Confidence	0.00616	0.00591	0.00882
	(0.00581)	(0.00523)	(0.00525)
S Par.: Parents' Confidence	0.000236	-0.000145	-0.000318
	(0.00117)	(0.000726)	(0.00233)
Benefit Variables			
U Econ.: Economic Returns	0.00830	-0.0000887	0.00316
	(0.00578)	(0.00606)	(0.00552)
U Social: Status Returns	0.00202	0.00183	0.00165
	(0.00624)	(0.00571)	(0.00715)
U RRA: Parents' Rel. Risk Aversion	-0.000466	0.0000816	0.000198
	(0.00170)	(0.000647)	(0.000960)
U Risk: Risk Aversion	0.000874	0.000711	0.00232
	(0.00265)	(0.00305)	(0.00370)
U Dis.: Discount Rate	0.00346	0.00429	0.00661
	(0.00421)	(0.00528)	(0.00814)

Standard errors in parentheses
+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

All in all, there seems to be one central and virtually all-explaining driver of social and economic status differentials in educational transitions after high school in Morazán: the relative burden of direct costs. To put it plainly: Students with a lower socioeconomic background do not continue their studies because their families cannot afford to pay for it.

6 Conclusion

Education is fundamental for individual as well as social welfare. Furthermore, it is crucially related to social stratification and mobility. Less advantaged children generally acquire less education and are consequently left with worse prospects for attaining well-paid jobs or high class positions. But why do children from different social backgrounds reach different levels of educational attainment? Class-based differentials in educational outcomes have been widely studied for developed countries. Lately, scientific focus has shifted from merely reporting the extent of such differentials to exploring the mechanisms behind them. Scholars within the field of social mobility have proposed and tested micro-level models that provide an explanation for educational differentials within a rational choice framework. The most prominent approach was put forward by Breen and Goldthorpe (1997) and pictures educational choices as the result of a subjective evaluation of costs, success probabilities and benefits. In all dimensions, class disparities are assumed. While (relative) costs are assumed to be higher, success probabilities and benefits should to be lower for children from less advantageous backgrounds. The main mechanism is taken to be rooted in parental wish for intergenerational status maintenance. The BG model and similar models have been repeatedly tested. However, the inspection of their empirical accuracy yields inconclusive results and has, most importantly, so far been limited to developed countries.

This study applied the BG model to a completely new empirical context. A random sample of 450 high school graduates in the department of Morazán (El Salvador) participated in an extensive survey including questions about tertiary education perspectives, social background and cost-benefit assessments regarding education. Data was then analyzed to grasp the extent of educational differentials (Section 5.2) and to explore the process of educational decision-making (Section 5.3) and the mechanisms conductive to educational differentials (Section 5.4). This study has made two important contributions: On the one hand (1), it has helped to better understand the process of (class-based) educational decision-making of high school students in Morazán and thereby offered a basis for future projects and policies. On the other hand (2), it has also provided a test of the accuracy of the BG model in an empirical setting completely different from that of previous validations.

(1) The story behind class-based educational decision-making in Morazán turned out to be a fairly simple one. Regardless of social class, high school graduates seem to be highly motivated for entering tertiary education and confident about their abilities to

successfully complete it. Individual variance in *study wishes* turned out to be mainly driven by subjective success expectations rather than cost- and utility-based considerations. For *parents' study aspirations*, moderate class differentials were found. Parents seem to take success-probability as well as costs into account when deciding, if they wish their child to study. Huge class-based discrepancies exist at the level of *study plans*. Preliminary study decisions as well as class differentials therein mainly appear to be a result of cost-related factors, namely of affordability. Affordability alone accounts for 30% of the individual variance regarding study decisions and for more than 50% of the involved class differentials. The influence of variables related to success probabilities or benefits of education were found to be less important for individual choices and the respective class-based discrepancies. To be sure, this does not mean that individuals in Morazán do not take utility and success expectations into account when deciding whether to continue their studies. But it might indicate that, regardless of social background, almost all students (and their families) perceive returns to higher education and their success probability to be high enough to judge the investment in tertiary education to be profitable. Whether they will finally end up making it or not depends primarily on their access to financing. Economically speaking, tertiary education in Morazán may be a "failing" market where demand cannot be met due to credit constraints (cf. Carneiro and Heckman 2002). This leads to a highly inefficient and unjust allocation, where the rich rather than the talented and motivated acquire further education. These findings are highly relevant for local policy-making: If equal chances or meritocracy are to be promoted, tertiary education has to be made affordable for the poor. Conditional cash transfer programs or study loans could, for example, provide financial aid to talented students from disadvantaged backgrounds. Furthermore, alternatives to academic (or semi-academic) tracks such as VET (Vocational Education and Training) might be introduced. They could not only serve to provide professional qualifications to all those who do not go to university, but also create a higher diversity in skills and knowledge. An important first policy step was already taken when preliminary results of this study were presented and discussed with local authorities in Morazán in February 2017. Moreover, the findings have encouraged Consciente, El Salvador to open a student residence for youth from poor families in rural regions, which now grants access to tertiary education to 15 pupils from disadvantaged backgrounds.

(2) In addition to its practical relevance at a regional level, this study has also made an important contribution to the theoretical research in the field of educational decision-

making and social mobility. Sociological rational choice models like the one proposed by Breen and Goldthorpe (1997) were found to be applicable to this specific empirical context. However, findings regarding the importance of the different parameters of the model contradict previous results for developed countries: Cost- rather than success- and utility-based mechanisms seem to be the main drivers behind individual and interclass differences in educational choices. Furthermore, the huge discrepancy between study wishes and study plans and the pivotal role of affordability raise concerns about the appropriateness of intentional terms like "choice" or "decision" when talking about educational transitions in such a context. For youth from low status families in Morazán, entering higher education does not seem to be an unattractive but rather an unavailable option. The set of alternatives they are seriously considering when deciding what to do after high-school might, for lack of financing possibilities, not even include tertiary education. In contexts where people do not experience themselves as choosing agents, considering them as having choices may appear inadequate. To use Gambetta's words: It may make more sense to look at "educational decisions as, so to speak, non-decisions, as pure individual manifestations of social forces" (Gambetta 1987).

Some important shortcomings of this study should not go unmentioned. Firstly and most importantly, only educational plans, but no actual educational outcomes could be studied. A comparison with the estimates based on the EHMP data suggests that the students are substantially biased about their transition possibilities. Only one out of three high-school graduates – and not 50%, as suggested by study plans in our data – end up studying in a tertiary education institution. It remains an open question whether the mechanisms behind actual transitions differ from those that shape transition plans. Furthermore, data on academic abilities, income, and parental perception is of unsatisfactory quality as it relies on students' reports and, in case of abilities, on within-class measures. It would thus be highly informative to conduct further surveys collecting information on actual transition choices and obtaining parental reports as well as objective and comparable ability measures. Furthermore, this study has treated educational transitions after secondary education as a binary choice situation for or against further education. However, high school graduates in Morazán can choose between different educational tracks with different durations and degrees of ambition and between different types of tertiary education institutions (e.g. private vs. public). The underlying dataset of this study could be used to conduct further analyses taking these distinctions into account.

Last but not least, I want to emphasize the importance of research in low- and middle-income countries. Research within the social sciences has mainly focused on those parts of the world where social problems are least pressing. For less wealthy societies, in contrast, very little is known about the factors that make individuals take certain decisions in specific settings. The present study suggests that the mechanisms of educational decision-making may be very different in a context governed by poverty. This kind of knowledge is indispensable for the design of effective policies and projects that may give young people the chance to realize their dreams, lift families out of poverty and foster inclusive development. Given the enormous practical impact potential, researchers should consider to desist from scrutinizing their relatively well-shaped front yards with ever-fancier methods and data, and increasingly turn to developing countries. They should consider getting their hands dirty with the tedious collection of imperfect data in order make a contribution to a scientifically informed bottom-up development process.

7 Literature

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8 Appendix

Tables

Table A 1: Postsecondary Institutions within Reach for Students in Morazán, El Salvador

Name	Location	#programs	Type	Annual Fees ($)	Homepage
Universidad de El Salvador (UES)	San Miguel	34	Public	63.30	www.fmoues.edu.sv
Universidad Capitán General Gerardo Barrios (UCGB)	San Miguel	21	Private	880.00	www.ugb.edu.sv
Universidad Dr. Andrés Bello (UNAB)	San Miguel	15	Private	No information	www.unab.edu.sv
Instituto Tecnológico Centroamericano (ITCA)	San Miguel	3	Private	1500.00	www.itca.edu.sv
Universidad de Oriente (UNIVO)	San Miguel	22	Private	840.00	www.univo.edu.sv

Data sources: Websites of the institutions, Ministerio de Educacion El Salvador (2014) and Altillo (2017)

Table A 2: Study Wishes and Plans by Socioeconomic Background: Multivariate Logistic Regression Models with Multiple Imputation

	Study Wish		Parents' Study Wish		Study Plan	
	General	Concrete	General	Concrete	General	Concrete
Family Wealth (Index)	0.0104	-0.0330	0.0414	0.0295	0.120**	0.0970*
	(0.0257)	(0.0347)	(0.0324)	(0.0214)	(0.0378)	(0.0329)
Parental Education *(Ref: No Degree)*						
Primary	0.00887	0.1000	0.0718	0.0193	0.138	0.135
	(0.0325)	(0.0700)	(0.0464)	(0.0763)	(0.0787)	(0.0949)
Secondary	0.0147	0.0447	0.0750	0.152*	0.267**	0.215**
	(0.0382)	(0.0438)	(0.0421)	(0.0538)	(0.0701)	(0.0627)
Tertiary	-0.00508	0.0309	0.156*	0.252**	0.271*	0.259*
	(0.0592)	(0.0762)	(0.0627)	(0.0774)	(0.109)	(0.0817)
Age	0.00502	-0.0242*	-0.00650	-0.0180	-0.0126	-0.0397
	(0.0113)	(0.00898)	(0.00670)	(0.0105)	(0.00996)	(0.0311)
Sex *(Ref. Male)*	0.0126	0.0828+	-0.0479*	-0.0367	0.0592	0.0572
	(0.0223)	(0.0383)	(0.0192)	(0.0599)	(0.0369)	(0.0440)
N	449	449	449	449	449	449

Standard errors in parentheses
+ $p<0.10$, * $p<0.05$, ** $p<0.01$, *** $p<0.001$

Table A 3: Study Wishes and Plans by Mothers' and Fathers' Educational Background

	Study Wish		Parents' Study Wish		Study Plan	
	General	Concrete	General	Concrete	General	Concrete
Mothers' Education *(Ref: No Degree)*						
Primary	0.00289	0.0849	0.0572	0.0221	0.213**	0.231*
	(0.0466)	(0.0572)	(0.0513)	(0.120)	(0.0649)	(0.0888)
Secondary	-0.0169	-0.0291	-0.0493	0.126+	0.197*	0.160*
	(0.0383)	(0.0623)	(0.0398)	(0.0704)	(0.0797)	(0.0699)
Tertiary	0.0497	-0.153	0.0696*	0.249**	0.345***	0.346***
	(0.0424)	(0.0919)	(0.0272)	(0.0758)	(0.0619)	(0.0678)
Fathers' Education *(Ref: No Degree)*						
Primary	0.0203	-0.152+	0.111	-0.0369	0.142	0.00701
	(0.0569)	(0.0802)	(0.0671)	(0.132)	(0.126)	(0.151)
Secondary	0.0277	0.0633	0.120	0.0221	0.174	0.124
	(0.0280)	(0.0840)	(0.0709)	(0.0550)	(0.119)	(0.0958)
Tertiary	-0.0516	0.147*	0.145*	0.172*	0.126	0.101
	(0.0951)	(0.0639)	(0.0529)	(0.0725)	(0.121)	(0.142)
Age	0.000359	-0.0281*	-0.0244**	-0.0327**	-0.0342*	-0.0828**
	(0.00890)	(0.00979)	(0.00719)	(0.00960)	(0.0119)	(0.0241)
Sex *(Ref. Male)*	0.000340	0.0883	-0.0819***	-0.0856+	0.0388	-0.00740
	(0.0239)	(0.0571)	(0.0156)	(0.0449)	(0.0564)	(0.0621)
N	318	318	318	318	318	318

Standard errors in parentheses
+ $p<0.10$, * $p<0.05$, ** $p<0.01$, *** $p<0.001$
Note: PRE estimates for mothers' and fathers' social status provide further evidence for the higher relevance of mothers' status. Information on maternal education seems to be more useful to predict educational transition plans than information on paternal education (not presented).

Table A 4: Dominance Analysis for the Effects of Cost-Benefit Variables on Educational Perspectives

	Study Wish		Parents' Study Wish		Study Plan	
	General	Concrete	General	Concrete	General	Concrete
Cost Variables						
C Ant.: Household Income	0.00402	0.000432	0.00345	0.00233	0.00518	0.00993
C Direct: Study Expenditures	0.0138	0.00683	0.00255	0.0107	0.0153	0.00770
C Indirect: Forgone Earnings	0.000288	0.00725	0.00560	0.00267	0.000963	0.00125
C Rel. Direct: Affordability	0.00581	0.00193	0.0513	0.0638	0.290	0.187
C Rel. Direct: Economic Burden	0.0103	0.0226	0.0117	0.0124	0.0405	0.0226
C Rel. Indirect: Indirect Burden	0.00138	0.00276	0.00106	0.0314	0.0193	0.00560
Success Variables						
S Ant.: Grades (std. within classes)	0.00511	0.0158	0.00625	0.00125	0.00365	0.0130
S Exp.: Success Expectation	0.178	0.0974	0.0595	0.0280	0.0251	0.0214
S Conf.: Academic Confidence	0.0655	0.0661	0.0313	0.0191	0.0116	0.0143
S Par.: Parents' Confidence	0.0184	0.00736	0.128	0.0521	0.00686	0.00800
Benefit Variables						
U Econ.: Economic Returns	0.0113	0.0112	0.000630	0.000424	0.00335	0.0136
U Social: Status Returns	0.00704	0.00560	0.00257	0.00438	0.00310	0.00214
U RRA: Parents Rel. Risk Aversion	0.00156	0.00306	0.00769	0.0100	0.00107	0.00908
U Risk: Risk Aversion	0.000195	0.00193	0.00227	0.00313	0.00652	0.00193
U Dis.: Discount Rate	0.000856	0.000327	0.000501	0.000206	0.00164	0.00703
N	418	418	418	418	418	418

Standard errors in parentheses
$^{*}\ p < 0.05$, $^{**}\ p < 0.01$, $^{***}\ p < 0.001$
Note: Estimates are based on linear probability models.

Table A 5: Social Status Effects on Cost-Perceptions

	(1) C Ant.: Household Income (Lin)	(2) C Direct. Direct: Study Expenditures (Lin)	(3) C Indirect: Forgone Earnings (Lin)	(4) C Rel. Direct: Afford. (Logit)	(5) C Rel. Direct: Burden (Ologit)	(6) C Rel. Indirect: Burden (Ologit)
Parental Education *(Ref: No Degree)*						
Primary	0.384+	-38.27	6.074	0.189**	-1.084**	0.0724
	(0.214)	(22.72)	(9.263)	(0.0618)	(0.339)	(0.374)
Secondary	0.0252	5.839	0.828	0.268**	-0.565*	-0.465
	(0.110)	(12.66)	(7.812)	(0.0745)	(0.225)	(0.268)
Tertiary	0.956***	-36.07	15.37	0.554***	-1.634***	-0.922**
	(0.149)	(24.76)	(16.65)	(0.0429)	(0.293)	(0.261)
Sex *(Ref. Male)*	0.0969	1.106	-10.82	0.0127	-0.135	0.0515
	(0.168)	(15.79)	(9.104)	(0.0380)	(0.117)	(0.169)
Age	-0.0816**	-5.054	-0.280	-0.0549*	0.111**	-0.0142
	(0.0242)	(5.411)	(1.947)	(0.0208)	(0.0319)	(0.0354)
N	425	414	418	425	425	420

Standard errors in parentheses
+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Table A 6: Economic Status Effects on Cost-Perceptions

	(1) C Ant.: Household Income (Lin)	(2) C Direct. Direct: Study Expenditures (Lin)	(3) C Indirect: Forgone Earnings (Lin)	(4) C Rel. Direct: Afford. (Logit)	(5) C Rel. Direct: Burden (Ologit)	(6) C Rel. Indirect: Burden (Ologit)
Family Wealth *(Index)*	0.531***	-11.53	15.46*	0.211***	-0.951***	-0.356**
	(0.0694)	(7.816)	(6.204)	(0.0264)	(0.0993)	(0.0995)
Sex *(Ref. Male)*	0.132	2.276	-9.561	0.00206	-0.0463	0.0593
	(0.132)	(16.33)	(8.530)	(0.0435)	(0.155)	(0.177)
Age	-0.0383	-5.351	1.990	-0.0494	0.0705*	-0.0145
	(0.0284)	(5.431)	(1.904)	(0.0297)	(0.0259)	(0.0320)
N		449	438	442	449	449

Standard errors in parentheses
+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Table A 7: Social Status Effects on Success Probability Perceptions

	(1) S Ant.: School Grades (std. in classes) (Lin)	**(2)** S Exp.: Success Expectation (Logit)	**(3)** S Conf.: Academic Confidence (Ologit)	**(4)** S Par.: Parents' Confidence (Ologit)
Parental Education *(Ref: No Degree)*				
Primary	0.00487	0.0430	-0.290	0.395
	(0.129)	(0.0297)	(0.301)	(0.527)
Secondary	0.00249	0.0372+	0.418*	0.335
	(0.0551)	(0.0186)	(0.159)	(0.375)
Tertiary	0.199+	0.0708**	0.907**	1.253*
	(0.0997)	(0.0196)	(0.280)	(0.531)
Sex *(Ref. Male)*	0.331*	-0.0194	0.166	0.190
	(0.126)	(0.0168)	(0.212)	(0.223)
Age	-0.0197	-0.00123	0.0782	0.151*
	(0.0201)	(0.00534)	(0.0746)	(0.0672)
N	449	449	447	443

Standard errors in parentheses
+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Table A 8: Economic Status Effects on Success Probability Perceptions

	(1) S Ant.: School Grades (std. in classes) (Lin)	**(2)** S Exp.: Success Expectation (Logit)	**(3)** S Conf.: Academic Confidence (Ologit)	**(4)** S Par.: Parents' Confidence (Ologit)
Family Wealth *(Index)*	0.0419	0.0177	0.204*	0.140
	(0.0349)	(0.0182)	(0.0743)	(0.125)
Sex *(Ref. Male)*	0.368**	-0.0235	0.234	0.182
	(0.118)	(0.0157)	(0.168)	(0.192)
Age	-0.0153	-0.00211	0.0812	0.110*
	(0.0226)	(0.00417)	(0.0696)	(0.0382)
N	449	449	447	443

Standard errors in parentheses
+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Table A 9: Social Status Effects on Utility Perceptions

	(1)	(2)	(3)	(4)	(5)
	U Econ.: Economic Returns (Lin)	U Social: Status Returns (Ologit)	U RRA: Parents Rel. Risk Aversion (Ologit)	U Risk: Risk Aversion (Logit)	U Dis.: Discount Rate (Logit)
Parental Education (Ref: No Degree)					
Primary	-13.47	-0.344	-0.188	-0.0204	-0.197+
	(29.00)	(0.308)	(0.214)	(0.0929)	(0.0985)
Secondary	-2.684	-0.129	0.200	-0.0348	-0.0667+
	(26.32)	(0.421)	(0.237)	(0.0563)	(0.0344)
Tertiary	64.90+	0.133	0.509+	-0.0422	-0.0604
	(30.99)	(0.537)	(0.254)	(0.0870)	(0.0906)
Sex *(Ref. Male)*	5.987	0.549+	-0.469**	0.114+	0.0320
	(25.62)	(0.253)	(0.137)	(0.0561)	(0.0684)
Age	-0.292	0.250*	0.0400	0.00900	-0.00355
	(5.101)	(0.0984)	(0.0610)	(0.0224)	(0.0102)
N	416	421	424	423	424

Standard errors in parentheses
+ $p<0.10$, * $p<0.05$, ** $p<0.01$, *** $p<0.001$

Table A 10: Economic Status Effects on Utility Perceptions

	(1)	(2)	(3)	(4)	(5)
	U Econ.: Economic Returns (Lin)	U Social: Status Returns (Ologit)	U RRA: Parents Rel. Risk Aversion (Ologit)	U Risk: Risk Aversion (Logit)	U Dis.: Discount Rate (Logit)
Family Wealth (Index)	7.219	-0.172	0.0600	-0.0387	-0.0434
	(11.43)	(0.120)	(0.0953)	(0.0265)	(0.0327)
Sex (Ref. Male)	7.658	0.533*	-0.502**	0.108*	0.0252
	(23.82)	(0.232)	(0.131)	(0.0456)	(0.0640)
Age	0.0403	0.219+	0.0326	0.00604	-0.00525
	(5.345)	(0.106)	(0.0656)	(0.0209)	(0.00967)
N	440	445	448	447	448

Standard errors in parentheses
+ $p<0.10$, * $p<0.05$, ** $p<0.01$, *** $p<0.001$

Table A 11: Oaxaca Decomposition of Social and Economic Status Effects on Concrete Study Plans

	Social Status Models			Economic Status Models		
	None vs. 1°/2°/3°	None/1° vs. 2°/3°	None/1°/2° vs. 3°	Q1 vs. Q2-Q4	Q1/Q2 vs. Q3/Q4	Q1-Q3 vs. Q4
Group 1 (Higher Status)	0.657***	0.705***	0.783***	0.505***	0.606***	0.690***
	(0.0502)	(0.0511)	(0.0529)	(0.0350)	(0.0419)	(0.0538)
Group 2 (Lower Status)	0.306***	0.341***	0.397***	0.241***	0.271***	0.358***
	(0.0359)	(0.0329)	(0.0332)	(0.0496)	(0.0345)	(0.0292)
Difference	0.350***	0.364***	0.386***	0.265***	0.334***	0.333***
	(0.0581)	(0.0556)	(0.0639)	(0.0569)	(0.0499)	(0.0545)
Explained Part	0.204***	0.229***	0.338***	0.149**	0.171**	0.226***
	(0.0408)	(0.0443)	(0.0499)	(0.0394)	(0.0483)	(0.0516)
Unexplained Part	0.146*	0.136**	0.0483	0.116+	0.164*	0.106+
	(0.0480)	(0.0395)	(0.0595)	(0.0552)	(0.0574)	(0.0521)
Cost Variables						
C Ant.: Household Income	0.00680	0.00665	0.0173+	0.0115	0.00625	0.0140
	(0.00435)	(0.00400)	(0.00848)	(0.00675)	(0.00792)	(0.00849)
C Direct: Study Expenditures	0.00269	-0.000121	0.00591	-0.00414	-0.00265	0.00447
	(0.00332)	(0.00201)	(0.00650)	(0.00600)	(0.00765)	(0.00545)
C Indirect: Forgone Earnings	-0.00164	-0.00151	-0.00332	0.000131	-0.00265	-0.0101
	(0.00283)	(0.00290)	(0.00592)	(0.00197)	(0.00377)	(0.00950)
C Rel. Direct: Affordability	0.157***	0.170***	0.234***	0.122***	0.165***	0.190***
	(0.0298)	(0.0338)	(0.0333)	(0.0226)	(0.0299)	(0.0287)
C Rel. Direct: Economic Burden	-0.00160	0.00140	0.00355	-0.00560	-0.0186	-0.0132
	(0.0166)	(0.0135)	(0.0226)	(0.0162)	(0.0242)	(0.0275)
C Rel. Indirect: Indirect Burden	0.00296	0.00420	0.00718	0.00262	0.00221	0.00300
	(0.00402)	(0.00599)	(0.0103)	(0.00608)	(0.00769)	(0.00606)
Success Variables						
S Ant.: Grades (within classes)	0.00239	0.00265	0.00731	0.00486	0.00393	0.00676
	(0.00295)	(0.00307)	(0.00670)	(0.00480)	(0.00332)	(0.00451)
S Exp.: Success Expectation	0.00970+	0.00974*	0.0137*	-0.000197	0.00630	0.00521
	(0.00493)	(0.00354)	(0.00531)	(0.00472)	(0.00406)	(0.00614)
S Conf.: Academic Confidence	0.00890	0.0148+	0.0207+	0.00298	0.00439	0.00897
	(0.00644)	(0.00813)	(0.00959)	(0.00526)	(0.00462)	(0.00618)
S Par.: Parents' Confidence	-0.00228	-0.00190	-0.00468	-0.000315	0.000142	0.000272
	(0.00602)	(0.00606)	(0.0126)	(0.00189)	(0.000721)	(0.00295)
Benefit Variables						
U Econ.: Economic Returns	0.00432	0.00764	0.0207	0.0103	-0.00129	0.00313
	(0.00844)	(0.00796)	(0.0121)	(0.00665)	(0.00804)	(0.00748)
U Social.: Status Returns	0.00135	0.00139	0.000940	0.00208	0.00178	0.00255
	(0.00562)	(0.00379)	(0.00258)	(0.00487)	(0.00388)	(0.00568)
U RRA: Parents' Rel. Risk Av.	0.00479	0.00825	0.0101	-0.00313	0.0000639	-0.000119
	(0.00474)	(0.00615)	(0.00839)	(0.00356)	(0.00368)	(0.00418)
U Risk: Risk Aversion	0.000408	0.000284	0.000309	0.000110	0.000107	0.000202
	(0.00156)	(0.00107)	(0.00138)	(0.000672)	(0.000706)	(0.00187)
U Dis.: Discount Rate	0.00867	0.00549	0.00391	0.00541	0.00579	0.0115
	(0.00633)	(0.00520)	(0.00861)	(0.00508)	(0.00567)	(0.00934)

Standard errors in parentheses; + p<0.10, * p<0.05, ** p<0.01, *** p<0.001
Note: No reweighting for logistic regressions was conducted for concrete study perspectives (because of a perfect predictor).

Table A 12: Oaxaca Decomposition of Economic Status Effects on Parents' Study Wishes

	(1) None vs. Prim./Sec./Tert.		(2) None/Prim. vs. Sec./Tert.		(3) None/Prim./Sec. vs. Tert.	
	General	Concrete	General	Concrete	General	Concrete
Group 1 (Higher Status)	0.853***	0.689***	0.877***	0.720***	0.894***	0.758***
	(0.0180)	(0.0272)	(0.0232)	(0.0313)	(0.0308)	(0.0395)
Group 2 (Lower Status)	0.727***	0.521***	0.765***	0.572***	0.798***	0.610***
	(0.0442)	(0.0432)	(0.0318)	(0.0401)	(0.0199)	(0.0291)
Difference	0.125*	0.168**	0.113*	0.149*	0.0961*	0.148*
	(0.0494)	(0.0474)	(0.0430)	(0.0489)	(0.0384)	(0.0502)
Explained Part	0.0432	0.0745+	0.0790*	0.138**	0.0744	0.153**
	(0.0297)	(0.0400)	(0.0352)	(0.0389)	(0.0439)	(0.0495)
Unexplained Part	0.0823	0.0935*	0.0335	0.0103	0.0217	-0.00487
	(0.0535)	(0.0381)	(0.0591)	(0.0480)	(0.0691)	(0.0513)
Cost Variables						
C Ant.: Household Income	0.00751	0.00806	0.0105	0.0129	0.0101	0.0146
	(0.00999)	(0.0108)	(0.0109)	(0.00986)	(0.0101)	(0.0110)
C Direct: Study Expenditures	0.00000329	-0.00444	-0.0000338	-0.00262	-0.0000826	0.00511
	(0.00127)	(0.00603)	(0.000819)	(0.00745)	(0.00140)	(0.00535)
C Indirect: Forgone Earnings	0.000196	0.000211	-0.00450	-0.00457	-0.0110+	-0.0130
	(0.00295)	(0.00317)	(0.00429)	(0.00512)	(0.00545)	(0.00966)
C Rel. Direct: Affordability	0.0262*	0.0502*	0.0414+	0.0752*	0.0377+	0.0804**
	(0.0113)	(0.0169)	(0.0191)	(0.0266)	(0.0208)	(0.0253)
C Rel. Direct: Economic Burden	0.0109	0.00369	0.0188	0.00983	0.0190	0.0126
	(0.0128)	(0.0148)	(0.0195)	(0.0221)	(0.0184)	(0.0248)
C Rel. Indirect: Indirect Burden	-0.00135	0.0201	-0.00199	0.0279*	-0.000989	0.0199
	(0.00353)	(0.0116)	(0.00485)	(0.0123)	(0.00325)	(0.0117)
Success Variables						
S Ant.: Grades (std. within classes)	0.00149	-0.00273	0.00141	-0.00206	0.00192	-0.00339
	(0.00246)	(0.00322)	(0.00196)	(0.00244)	(0.00253)	(0.00358)
S Exp.: Success Expectation	-0.000130	-0.000231	0.00509	0.00847	0.00317	0.00624
	(0.00312)	(0.00553)	(0.00385)	(0.00619)	(0.00402)	(0.00759)
S Conf.: Academic Confidence	0.00122	0.00252	0.00196	0.00393	0.00310	0.00753
	(0.00244)	(0.00488)	(0.00269)	(0.00537)	(0.00365)	(0.00805)
S Par.: Parents' Confidence	-0.00468	-0.00695	0.00144	0.00195	0.00630	0.0100
	(0.00901)	(0.0142)	(0.00562)	(0.00756)	(0.00774)	(0.0116)
Benefit Variables						
U Econ.: Economic Returns	0.000216	0.00116	-0.0000832	-0.000216	0.000182	0.000533
	(0.00226)	(0.00440)	(0.000589)	(0.00145)	(0.000743)	(0.00180)
U Social.: Status Returns	0.00410	0.00564	0.00437	0.00550	0.00506	0.00775
	(0.00375)	(0.00582)	(0.00374)	(0.00544)	(0.00462)	(0.00722)
U RRA: Parents' Rel. Risk Aversion	-0.00254	-0.00429	0.0000609	0.0000975	-0.0000840	-0.000161
	(0.00284)	(0.00486)	(0.00351)	(0.00562)	(0.00296)	(0.00566)
U Risk: Risk Aversion	-0.000551	0.000550	-0.000330	0.000288	-0.00161	0.00157
	(0.00154)	(0.00174)	(0.00196)	(0.00176)	(0.00221)	(0.00323)
U Dis.: Discount Rate	0.000558	0.00101	0.000924	0.00152	0.00149	0.00296
	(0.00163)	(0.00439)	(0.00230)	(0.00540)	(0.00328)	(0.00963)

Standard errors in parentheses
+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Table A 13: Oaxaca Decomposition of Social Status Effects on Parents' Study Wishes

	(1) Q1 vs. Q2-Q4		(2) Q1/Q2 vs. Q3/Q4		(3) Q1-Q3 vs. Q4	
	General	Concrete	General	Concrete	General	Concrete
Group 1 (Higher Status)	0.908***	0.770***	0.922***	0.826***	0.979***	0.898***
	(0.0249)	(0.0337)	(0.0296)	(0.0441)	(0.0181)	(0.0513)
Group 2 (Lower Status)	0.769***	0.580***	0.785***	0.587***	0.802***	0.621***
	(0.0305)	(0.0319)	(0.0262)	(0.0270)	(0.0229)	(0.0265)
Difference	0.138**	0.190***	0.137**	0.239***	0.177***	0.278***
	(0.0331)	(0.0418)	(0.0372)	(0.0470)	(0.0281)	(0.0605)
Explained Part	0.119**	0.146**	0.134***	0.159**	0.202***	0.235***
	(0.0282)	(0.0366)	(0.0289)	(0.0369)	(0.0362)	(0.0397)
Unexplained Part	0.0191	0.0443	0.00342	0.0807+	-0.0256	0.0423
	(0.0370)	(0.0357)	(0.0361)	(0.0451)	(0.0373)	(0.0588)
Cost Variables						
C Ant.: Household Income	0.00706	0.00265	0.00650	0.00209	0.0168	0.00516
	(0.00758)	(0.00499)	(0.00669)	(0.00433)	(0.0161)	(0.0119)
C Direct: Study Expenditures	-0.000572	0.00237	0.0000245	-0.000105	-0.00122	0.00522
	(0.00150)	(0.00279)	(0.000409)	(0.00174)	(0.00333)	(0.00547)
C Indirect: Forgone Earnings	-0.00311	-0.00416	-0.00289	-0.00378	-0.00563	-0.00758
	(0.00337)	(0.00435)	(0.00401)	(0.00514)	(0.00709)	(0.00927)
C Rel. Direct: Affordability	0.0532*	0.0738*	0.0592*	0.0751*	0.0785**	0.105*
	(0.0185)	(0.0289)	(0.0203)	(0.0308)	(0.0222)	(0.0364)
C Rel. Direct: Economic Burden	0.0110	0.00927	0.0100	0.00836	0.0167	0.0138
	(0.0104)	(0.0142)	(0.00884)	(0.0124)	(0.0145)	(0.0194)
C Rel. Indirect: Indirect Burden	0.000658	0.0111	0.00108	0.0185+	0.00195	0.0291+
	(0.00331)	(0.00943)	(0.00571)	(0.00990)	(0.00902)	(0.0151)
Success Variables						
S Ant.: Grades (std. within classes)	0.000171	-0.00118	0.000174	-0.00116	0.000447	-0.00369
	(0.00124)	(0.00179)	(0.00131)	(0.00178)	(0.00385)	(0.00467)
S Exp.: Success Expectation	0.0163+	0.0130+	0.0154*	0.0123*	0.0215*	0.0172*
	(0.00861)	(0.00699)	(0.00636)	(0.00519)	(0.00940)	(0.00772)
S Conf.: Academic Confidence	0.00505	0.00773	0.00947	0.0131	0.0117	0.0173
	(0.00652)	(0.00845)	(0.0114)	(0.0137)	(0.0134)	(0.0166)
S Par.: Parents' Confidence	0.0260	0.0181	0.0282+	0.0199	0.0566*	0.0391+
	(0.0170)	(0.0139)	(0.0139)	(0.0123)	(0.0202)	(0.0207)
Benefit Variables						
U Econ.: Economic Returns	-0.000379	0.00000012	-0.000594	-0.000117	-0.00111	-0.000206
	(0.00165)	(0.00184)	(0.00265)	(0.00318)	(0.00686)	(0.00837)
U Social.: Status Returns	0.00387	0.00606	0.00224	0.00351	0.00139	0.00222
	(0.00382)	(0.00662)	(0.00369)	(0.00602)	(0.00261)	(0.00427)
U RRA: Parents' Rel. Risk Aversion	0.00330	0.00596	0.00620	0.0103	0.00682	0.0117
	(0.00335)	(0.00564)	(0.00453)	(0.00670)	(0.00575)	(0.00900)
U Risk: Risk Aversion	-0.00214	0.000785	-0.00111	0.000465	-0.00189	0.000692
	(0.00329)	(0.00194)	(0.00300)	(0.00147)	(0.00454)	(0.00209)
U Dis.: Discount Rate	-0.00105	0.0000861	-0.000367	0.0000950	-0.000197	0.000301
	(0.00507)	(0.00957)	(0.00280)	(0.00507)	(0.00181)	(0.00323)

Standard errors in parentheses
+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

„Ich erkläre hiermit, dass ich diese Arbeit selbstständig verfasst und keine anderen als die angegebenen Quellen benutzt habe. Alle Stellen, die wörtlich oder sinngemäss aus Quellen entnommen wurden, habe ich als solche gekennzeichnet. Mir ist bekannt, dass andernfalls der Senat gemäss Artikel 36 Absatz 1 Buchstabe o des Gesetzes vom 5. September 1996 über die Universität zum Entzug des aufgrund dieser Arbeit verliehenen Titels berechtigt ist.“

Bern, 27.08.2017

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