The Business of Choosing a College: A View of the For-Profit Sector

By

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In memory of my grandparents, all four of them, who instilled in my own parents the importance

of a college education, which they then passed down to me, and for my mother, for her never-

ending support and encouragement in all my undertakings,

academic and otherwise

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I would also like to thank Will Doyle for giving me the practical skills to perform the quantitative analyses I have conducted both in this work and in others. Five years ago the idea of computer programming was entirely alien to me and it is because of Will's instruction and patience that STATA and I are now old friends. It is an invaluable tool without which these analyses would not be possible.

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when there were times that I doubted myself, and they have been right behind me through every

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CHAPTER I

STUDENT CHOICE IN FOR-PROFIT HIGHER EDUCATION

Rationale

The benefits to the individual and society at large of investment in post-secondary

education have been well documented. In addition to the economic benefits realized by the

individual from higher earnings (Williams & Swail, 2005), post-secondary attainment is

correlated with lower rates of crime and unemployment (Institute for Higher Education Policy,

2005). Moreover, in an increasingly competitive and globalized marketplace, students must

possess the skills and knowledge necessary to compete. Post-secondary education provides a

medium through which students acquire these high level skills.

It is no wonder, then, that the demand for higher education globally has grown

exponentially in recent years. Enrollment in post-secondary education worldwide grew by 63%

in under a decade, from 92.5 million in 1999 to 150.5 million in 2007 (UNESCO, 2010). This

growth was more pronounced in some regions than others, especially those with developing

systems of higher education; however, even in the developed countries of North America and

Western Europe, where enrollments and participation rates were already high, enrollment

increased by 21%, from 28.2 million to 34 million (ibid).

The public sector in most countries has been unable to accommodate this vast increase in

student demand. Instead, increased access has been accomplished largely through privatization.

Privatization can take one of two forms. First, public universities may be encouraged or required

to decrease their dependence on public funds, usually by raising money from private sources

such as student tuition payments or by partnering with industry. Secondly, privatization can take

the form of provision of higher education by non-governmental institutions (UNESCO, 2009).

Both forms have occurred as a result of the push for access. However, the essays in this dissertation will deal with the second form.

A few decades ago, private higher education was absent or marginal in most countries. However, the private higher education sector has shown tremendous growth in recent decades. This has been especially true in developing countries. About 30% of enrollment worldwide is in private institutions (Guruz, 2008). Private higher education captures a major or fast-increasing portion of enrollments in Eastern and Central Europe, the Middle East and northern and sub-Saharan Africa, East and South Asia, and Latin America (Levy, 2006).The percentage of students enrolled in private higher education as a percentage of total enrollment differs by region and often by country within region but no region has been immune to growth in the sector.

There are numerous types of private higher education including religious, elite and semi-elite, and demand-absorbing. However, it is the demand-absorbing sector that is responsible for significant growth in enrollment in private higher education. In every country in which private higher education has become the majority sector, it is this demand-absorbing subsector that has been numerically significant. It tends to be both the largest private subsector and the fastest-growing one (UNESCO, 2009). The majority of the institutions making up this demand-absorbing sector are for-profit higher education institutions. However, there is no globally agreed upon definition of what makes an institution "for-profit." However, where this distinction is not clear, most of the private university sector is indeed for-profit.

In the United States, a clear legal distinction exists which defines an institution as "for-profit." NCES defines for-profit schools as private institutions in which the individual or agency in control collects compensation other than wages, rent, or other expenses for the assumption of risk (as cited in Kinser & Levy, 2006). In essence what this means is that for-profit institutions

of higher education are defined not by the fact that they make a profit but by what they can do with that profit. Nonprofit institutions must use any money left over after expenses to develop the organization or continue their charitable works. For profits can basically do whatever they want with the money including returning it to their owners or shareholders (Kinser & Levy, 2006).

In other countries, this distinction is not always so clear cut. Lack of a legal framework often de-facto allows for-profits, whereas subsequent law sometimes then disallows them. Some countries may not explicitly use the term nonprofit but may insist on provisions that suggest it (for example, a law in Georgia concerning the use of income). The case of Australia illustrates dramatic attempts to create elite private higher education associated with for-profit initiative and indirect ownership while keeping the university legally nonprofit (e.g., Bond University). Kenya requires a nonprofit designation even where an institution is set up by a corporation (e.g., Daystar University), yet it is mostly silent on what constitutes nonprofit versus for-profit, and some training institutions take advantage, keeping themselves in the higher education category, as can also be the case for foreign providers in Kenya (Kinser & Levy, 2006).

Regardless of how these schools are categorized, the demand for access and resultant increase in for-profit higher education means more students are attending institutions of higher education that, due to their structure and institutional characteristics, are fundamentally different from traditional colleges and universities. What was once an insignificant part of the higher education landscape has become its fastest growing sector.

The dramatic growth of for-profit higher education, however, has not occurred without incident. In the United States, specifically, although for-profits are enrolling ever increasing numbers of students, they are frequently criticized for overly aggressive recruitment of

unqualified students, for the lack of professionalism and curricular authority in academic staffs, and for what are sometimes viewed as excessive profits to owners and management—especially when some or even most of the revenue taken as profit is actually from taxpayers (via student loans) (Sanyal & Johnstone, 2011). Moreover, high debt burden and default rates (Futures Project, 2000) combined with high costs and growing awareness of the significant involvement of for profits in federal and state financial aid programs has attracted skepticism and scrutiny (Clowes, 1995; Beaver, 2009).

Although more attention is being paid to for profits as of late due to growth in the sector and the above-mentioned concerns, we still know little to nothing about how the students that choose to attend these institutions went about making that choice. Current models of college choice are designed to examine the college choice process for students in high school and begin with the "predisposition phase" which starts in middle school. The students in for-profits are by and large non-traditional and don't fit this mold. Therefore, it is unclear the degree to which these models may explain the college choice process for these students.

Thus, if we maintain that research in the field of higher education choice is important for effective decision-making at all levels and generally agree that it is important that applicants are able to make well-informed choices (Hesketh & Knight, 1999; Briggs & Wilson, 2007), and if we further believe that policy and practice should be based on the best evidence available (Tranfield, Denyer, & Smart, 2003), it is vital that we understand the choice process for the many students now enrolled in institutions outside the scope of traditional higher education.

Objectives

The objectives of the essays are four-fold: 1) Determine which student background characteristics predict enrollment in for-profit higher education. 2) Explore the admissions

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process for students in for-profits. 3) Suggest modifications to current models of college choice for students in for-profit institutions in the US context. 4) Propose adaptations of this new model for students in the Brazilian system which may also be relevant for students in other systems with similar constraints on choice (for example, the requirement that a student enroll not just in a specific program but in a specific discipline)

Research Questions

The overarching questions guiding all the papers in this volume are as follows: Why do students choose for-profit schools? What are the factors that influence student choice in for-profit higher education? I answer these questions through three sub-studies.

Paper 1 looks at the student background characteristics that actually predict student enrollment into for-profit institutions in the US. We know that they serve relatively more minority (Bailey, Badway, & Gumport, 2001) and low-income students (Choy, 2000), students with GED certificates rather than high school diplomas (Chung, 2008), and students who delay entering college (Lee & Merisotis, 1990; ECS, 2001; Chung, 2008; Bennett, Lucchesi, & Vedder, 2010). According to JBL & Associates, the vast majority is non-traditional, which means they tend to be older and financially independent. Students at for profits are also more likely to work full-time, to be married, and to be a first generation college student (as cited in Lee & Topper, 2006). However, we don't know which of these characteristics are actually predictive of enrollment. This paper answers that question.

Paper 2 explores an explanation for one of the findings in paper 1. First-generation college student status is predictive of enrollment in FPHE. The reason for this may lie in the nature of admissions. If we think of parental education as a proxy for knowledge of the higher education system, then students whose parents did not go to college are less likely to know and

understand the process of applying and enrolling. Admissions in for-profits are done in a way that fills this gap in knowledge of the higher education system for those with little or no experience. The process of applying to college and especially of applying for financial aid can be a daunting and complicated task, especially for students that are unfamiliar with the system and who do not have family members or others who have gone through the process to guide them. If those in admissions and financial aid at for-profits walk students through the whole process, this may be one reason why there is such a high incidence of first-generation college students in for-profits.

Paper 3 explores the effects of a policy in Brazil, which is designed to leverage the for-profits to open access to low-income students specifically. This is an interesting approach to a similar policy problem in the U.S. We have an increased push for access to higher education both from those wishing to attend and by federal and state governments that see a need for a more educated work force. Publicly funded community and technical colleges have been pushed as the answer here with several states introducing free community college programs. If the Brazilian program is successful, it may offer another option for increasing college-going behavior, assuming we can overcome the issues addressed in paper 2.

Historically, enrollment in higher education in Brazil has been tightly tied to family income, race, and private secondary school attendance. Students from (largely white) wealthy families attended private secondary schools and then went on to public universities free of charge. In its attempt to increase enrollment to aid economic development, beginning in 2004, the Brazilian government introduced ProUni (Programa Universidade Para Todos) in the private sector to encourage enrollment in higher education by those traditionally underrepresented. ProUni provides tax breaks to for-profit higher education institutions that allot a certain number

of spaces for low-income students. The government then provides these students with either a 50% or 100% scholarship, depending on family income. This paper examines the degree to which these policies have actually been effective. Are these factors (income, race, secondary school type) still highly predictive of enrollment in private, specifically for-profit, higher education, in Brazil?

Empirical Approach

The nature of both the research questions and the data used to answer them suggests that more than one method of analyzing data would be appropriate. In Paper 1, the dependent variable of interest is binary (either a student enrolls or they don't). Therefore, binary logistic regression is used. Paper 2 blends qualitative semi-structured interviews with survey data to explore the research questions. Little is known about the way admissions and financial aid processes are conducted in for-profit institutions. Thus, interviews with personnel who have worked in those positions provided insight into how things work. A survey of current students in for-profits then asked the students themselves about their experience with college choice and the factors that were key in making their decision to attend a particular school. The nature of the survey data (both categorical and short answer) makes possible the use of both basic descriptive statistics and content analysis of short-answer responses. Finally, Paper 3, like Paper 1, uses survey data with a binary dependent variable. For this reason, I have used binary logistic regression to analyze the data.

Contributions to Theory and Practice

The literature on for-profit institutions is limited at best. Although we have a broad picture of who attends these schools, we don't know why they choose them. The current models of choice are built around students experiencing choice in high school and entering college

directly thereafter. Most students in for-profit schools do not fit this mold. For this reason, it would be inappropriate to assume that they experience choice in the same way as those who do. As the population of students choosing to attend for-profit institutions grows, it has become increasingly important that we understand what choice does look like for them. The essays in this dissertation seek to accomplish just that, suggesting a modified model of college choice appropriate for this student population in the United States. Further, as systems of education worldwide move towards a more universal model of college choice driven by the massification of higher education and the differentiation of institutions within each system, the final essay will offer evidence as to the degree to which this universal model does exist as well as potential adaptations for systems where factors not relevant to the US case have the potential to complicate the process.

Limitations

The limitations of this work stem primarily from the nature of the data used, and I will discuss each data source in turn. Additionally, as scholarship on the for-profit sector is still in its nascent phase, these papers must draw from the larger literature on choice anchored in the social sciences, rather than building on work that specifically examines this student population. My hope is that the findings presented here will serve as a starting point for future work on this topic.

The data used in Paper 1 is from the Beginning Postsecondary Students Study. This data surveyed students entering postsecondary education for the first time beginning in 2003-2004. That makes the data used in the analysis more than 10 years old. Although this is certainly a step up from some work that has been done using NELS (1988), it is not ideal. Enrollment in for-profits has more than doubled since 2003, from approximately 650,000 to nearly 1.4 million in 2014. As more recent data becomes available, it will be important to test to ensure that as

enrollment numbers have risen in the sector, the factors affecting choice have remained the same. Also, although the data offers more than 1,000 variables, it does not allow me to account for several variables which I term interactions between the student and a given institution, including both sources of information and the influence of others (parents, friends, etc.). I explore the potential role of these factors in paper 2, but the limitations of the data in paper 1 do not allow me to fully specify the model.

As for paper 2, the most significant limitation of the study is its size. I was only able to survey students at one institution in Tennessee. Although the institution and its students are typical of those in the for-profit sector, the findings of this survey do not necessarily translate to other institutions either in Tennessee or elsewhere. In the future, larger scale studies should be conducted to test the external validity of this study.

Secondly, the response rate to the survey was low, at around 10%. Although the collection of demographic information from the respondents allowed me to conclude that those responding to the survey were generally representative of their respective campuses, another study with a higher response rate (perhaps encouraged by offering compensation, something not possible in this study) would inspire more confidence in the results.

Finally, although the data used in paper 3 was extensive, it spanned only 4 years, only two of which were prior to the introduction of ProUni. For this reason, the identification of trends must be done very carefully. As more data becomes available, a fuller picture of the effects of the program will emerge. Related to this is the introduction of policies such as the Law of Social Quotas (2012) that affect student enrollment in public institutions. It is logical to expect that such laws will impact ProUni, perhaps with some students who might otherwise have benefited from ProUni scholarships gaining entrance to a public institution. Only time will tell

how these two policies work in tandem to affect Brazilian college choice, and the data utilized in

paper 3 is not recent enough to allow for that.

CHAPTER II

PREDICTING ENROLLMENT IN FOR-PROFIT HIGHER EDUCATION IN THE UNITED
STATES

Motivation

There are roughly 3,500 for-profit institutions of higher education in the United States.

Of these, 40% are now owned by one of 13 large, publicly traded companies (Wilson, 2010).

Examples of these are the Apollo Group (parent company to the University of Phoenix), Strayer,

DeVry, and Capella. Nearly 60 percent of all students in for-profits are enrolled in one of the

largest 15 firms in the industry (Bennett et al., 2010).

Table 1. *For-profit Higher Education Enrollment*

Type	Number of Institutions	Enrollment
Non-degree granting	1,998	366,133
2 year	669	338,707
4 year	782	1,470,191

Source: Digest of Education Statistics (NCES, 2013)

Although there are almost as many for-profit schools as there are public and non-profit

combined, until recently, schools in the for-profit sector enrolled a relatively insignificant

proportion of the total students in American higher education. In 1986, for-profits enrolled only

300,000 students, 2.4% of total enrollment (Bennett et al., 2010). By 2012, that number had risen

to nearly 1.9 million or 11% of total enrollment (National Center for Education Statistics, 2013).

That is a greater than 600% increase in students over the time period or a fourfold increase in the

market share (defined as the share of total students enrolled in postsecondary education).

The ability of institutions in this sector to realize such remarkable growth is tightly

connected to the regulatory environment. In the late 1980s and early 1990s, regulations were

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tightened in order to address perceived abuses in the sector after for-profits became eligible for federal funds under Title IV. The 1992 HEA reauthorization included several rules aimed specifically at for-profits, the most important of which was that which specified that no more than 85% of a school's revenue come from Title IV financial aid (the 85/15 rule). Because many schools rely heavily on federal funds, deriving as much of their revenue from Title IV as allowable by law, the cumulative effects of the new regulations on the for-profit industry were immediate and significant; many for-profit schools closed, particularly those located in inner cities (Moore, 1995). However, in the 1998 HEA reauthorization, the 85/15 rule became the 90/10 rule (Bennett et al., 2010), allowing a sector once restricted by regulation to flourish.

One might question why growth in the sector is or could be problematic. The usual assumption is that more competition is better and that non-public institutions stimulate public institutions (and perhaps other private institutions) in terms of efficiency and/or innovation. This is a primary assumption of the free-market system. However, for a market to work in practice as intended in theory means that consumers must have perfect information and use said information to make rational decisions. This also assumes that the firms in the marketplace (in this case, colleges and universities) are competing for the same students. In the case of higher education, I would argue that all three of these assumptions are violated, and thus the idea that for-profits will somehow stimulate other institutions to improve is fallacious. Paper 2 of this volume will explore these ideas in greater depth.

My interest in exploring this topic is largely driven by concerns over potential exploitation of already disadvantaged students. However, renewed scrutiny of the sector has largely been driven by financial concerns, namely the use of taxpayer financed federal student aid programs. For-profit students received $4 billion in federal grants and $20 billion in DOE

loans in 2009 (Gilbert, 2011). The for-profit share now accounts for 26% of all federal student aid covering 11% of higher education students (ibid). In 2008, students received $18.3 billion in Pell Grants. About $4.3 billion or 24% of that went to for profits (Pope, 2009; Sanyal & Johnstone, 2011). The University of Phoenix alone collected $656.9 million (ibid). The table below explains the situation. More students participating in student loan programs in the for-profit sector coupled with students borrowing more on average would result in their share of total student aid being proportionally higher.

Table 2. *Student Loan Volume and Dropout Rates (2011-2012)*

	Public		Private non-profit		Private for-profit	
	2 yr	4 yr	2 yr	4yr	2 yr	4 yr
Average Loan Amount	$4800	$6500	$7000	$7600	$7600	$8400
% Participating	28%	51%	66%	62%	83%	83%
Dropout Rate	42%	30%	40%	20%	34%	40%

Source: NCES (2013)

Moreover, default rates for students at for profits are uniformly higher than their non-profit counterparts, both public and private (Johnson, 2011). A principal reason for this is the high dropout rate at for profits. Students attending for profits are among the least likely to complete school (NCLC, 2010). The dropout rate was more than 50% in the 2008-2009 school year (Verschoor, 2011). More recent numbers suggest an improvement in retention in for-profits. However, the rates in four-year institutions, where the large majority of students are enrolled according to Table 1, are still higher than those of their non-profit and public counterparts. These numbers also don't include students enrolled in non-degree granting institutions, which would likely have higher dropout rates. According to the U.S. Department of Education, the overall

student loan default rate within three years of beginning repayment was 13.8% in 2010 (as cited in Verschoor, 2011). This overall rate conceals a wide disparity between the rates for students at for profits (25%) and those in traditional public (10.8%) or private (7.6%) institutions (ibid). For-profit students represent 46% of loan defaulters (Gilbert, 2011).

On the other hand, growth in the for-profit sector has been achieved by providing educational opportunities for students historically underserved by the traditional sector. The for profit sector serves relatively more minority (Bailey, Badway, & Gumport, 2001) and low-income students (Choy, 2000), students with GED certificates rather than high school diplomas (Chung, 2008), and students who delay entering college (Lee & Merisotis, 1990; ECS, 2001; Chung, 2008; Bennett et al., 2010). According to JBL & Associates, the vast majority is non-traditional which means they tend to be older and financially independent. Students at for profits are also more likely to work full-time, to be married, and to be a first generation college student (as cited in Lee & Topper, 2006).

The aforementioned issues coupled with the fact that for profits enroll large proportions of low-income and minority students raise the broader issue of educational equity at these schools. This class and racial and ethnic stratification is troubling for two reasons: 1) There is little evidence that this stratification is the result of informed choice on the part of students and their families. 2) In too many cases, students who enroll in these programs do not improve their life chances or increase their social mobility. We know that students in for-profits are more likely to possess one or more of these non-traditional characteristics, including being from a low-income or racial minority group. What we don't know is which of these characteristics actually predicts enrollment. This paper answers that question.

Conceptual Framework and Literature

The college choice literature is extensive. In addition to the large literature in education examining college choice and enrollment, a large body of work on college choice exists across the social science disciplines. Much of the research on college enrollment patterns is founded upon the "human capital" model advanced by Gary Becker (1993). According to human capital theory, one decides to enroll in college as an investment in future earning power. Individuals calculate the value of attending college by comparing costs with expected income gains, and they make the decision that will maximize their utility over the long term. To understand enrollment behavior according to this model, one must look at factors such as tuition levels, student financial aid, average wages for high school graduates, and the difference in lifetime earnings between high school and college graduates (MathTech, 1998).

Economists agree, however, that non-pecuniary factors also play a major role in the college enrollment decision. Sociologists' models of status attainment have suggested a number of student background variables that join with economic factors to influence college decisions (Jackson, 1982). These include both personal traits (e.g., academic ability) and interpersonal factors, such as the level of encouragement a student receives from parents and teachers.

Within the economic and sociological models outlined above, the factors affecting enrollment in college can be divided into three general types: (i) those specific to individual students, such as academic achievement and parental education levels, (ii) those specific to a given institution such as size and reputation, and (iii) those best categorized as an interaction between a student and a given institution (i.e., school location). Students'

enrollment decisions can be viewed as jointly determined by their individual

characteristics and the institutional or societal conditions that prevail (MathTech, 1998).

Within the education literature, models of college choice incorporate these concepts

from both economics and sociology. Hossler & Gallagher's (1987) three-stage model of the

college choice process is the most widely used in attempting to understand how students

decide if and where to go to college. It includes the phases of predisposition, search, and

choice. It has been modified to explore the choice process specifically for both students of

color (Solorzano, 1992; Mickelson, 1990; Kao & Tienda, 1998) and students from low-

socioeconomic backgrounds (Conley, 2001; Keane, 2002; Kaufman & Gabler, 2004).

However, research on the college decision-making process focuses almost exclusively on

students in non-profit private or public 4-year colleges and universities. Moreover, studies

of college choice have focused only on traditional students, those who enter college

immediately after high school, live on their college campus, and attend school full time. No

attempts have been made to use the existing models to determine whether the factors

influencing the college choice of traditional students attending traditional institutions also

pertain to students in for-profits. Thus, although the literature related to college choice will

be reviewed in order to inform the models used in this study, no studies which explicitly

explore college choice in for-profits currently exist.

Individual factors

Individual factors most commonly associated with comprehensive models of college

choice include student background characteristics (Hanson & Litten, 1982; Jackson, 1982;

Callender & Jackson, 2008; Cho et al., 2008; Harker, Slade, & Harker, 2001; Perna & Titus,

2004), aspirations (Chapman, 1981; Hossler, Braxton, & Coopersmith, 1989; Jackson, 1982)

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and educational achievement (Hanson & Litten, 1982; Jackson, 1982). More specifically, student background characteristics include family income, parental education level, gender, age, race/ethnicity, and socioeconomic status (often a combined measure consisting of both income and parental education level). Measures of aspirations may include both student aspirations in terms of highest degree achieved as well as parental education aspirations with regards to their children. Educational achievement can be measured in various ways. High school GPA and test scores from college entrance exams (SAT or ACT) are frequently used. Also, some nationally representative datasets include scores from achievement tests, usually in math and language arts. These may be used as indicators of achievement in high school; however, because they are not considered in the college admissions process, they are less useful than alternative measures such as GPA.

Another important individual factor in terms of determining if and where to go to college is perceived private rate of return of a college education. This is not something I can include in the models due to data limitations. In theory, a student evaluates alternatives, weighs costs and benefits, and chooses if and where to attend. A significant accusation leveled at for-profit schools is that students very often do not improve their lives by investing in an education at these schools. Unfortunately, I could not locate data on institution or program-specific private rates of return. However, the numbers given above on dropout rates and student loan debt do lend credence to this accusation. If this is the case, though, then why do students invest? Although I cannot answer this question definitively, I would surmise that, again, it has to do with a lack of accurate information needed to make an informed decision. I am nearly certain that at the time students enroll

they do believe they are making a decision that will improve their lives. This is borne out in survey responses from Paper 2.

Institutional factors

The second group of factors important in student college choice is institutional characteristics. According to Hossler & Gallagher (1987), it is during the search phase that students determine which characteristics of institutions are important. Students seek information and use it to develop institutional choice sets. These may include items such as entrance standards (Callender & Jackson, 2008), course program offerings (Desjardins, Ahlburg, & McCall, 2006; Johnson & Stewart, 1991; Sanders, 1990), quality (Cabrera & LaNasa, 2000), majors (Callender & Jackson, 2008), size, etc. Although no empirical evidence exists to support why students choose for-profit colleges, scholars and practitioners in for-profit post-secondary education suggest that it is due to specific institutional characteristics that set these schools apart from their non-profit and public counterparts. Specifically, they cite flexibility (Traub, 1997; Soley, 1998; Blumenstyk, 2000; Bailey et al., 2001; Lee & Topper, 2006), convenience (Traub, 1997; Soley, 1998; ECS, 2001), high level of customer service (Traub, 1997; Soley, 1998; ECS, 2001), decreased time to degree (Bailey et al., 2001), and relevant curriculum (Bailey et al., 2001; Zamani-Gallaher, 2004).

Interaction

In addition to characteristics of individual students and particular institutions, items that can be characterized as an interaction between the student and a given institution are important in college choice. Location would be a chief example, as students may desire to

stay within a certain distance from home (Callender & Jackson, 2008; DesJardins et al., 1999; Goenner & Pauls, 2006; Reay, Davies, David, & Ball, 2001; Stewart & Post, 1990).

In addition to location, financial variables such as net cost (St. John, 1990; 1991) and receipt of financial aid (Chapman, 1984; St. John & Starkey, 1995) play a role in student decisions. Depending on the level of resources of a given student, the cost of a given institution may play a lesser role in their decision-making. Moreover, the impact of costs and aid are more deeply felt by students from low socioeconomic backgrounds and students of color (Dynarski, 2003; Ikenberry & Hartle, 1998; Lillis, 2008; McPherson & Shapiro, 1998; Paulsen & St. John, 2002).

Table 3: *Potential Factors Affecting College Choice for Students in For-Profit Institutions*

Student Characteristics	Institutional Factors	Interaction between Students and Institutions
Gender	Reputation	Location
Race	Quality of Teaching	Cost
Age	Courses Offered	Financial Aid
Family Income	Career-oriented Curriculum	Sources of Information
SES	Length of program	Influence of others (parents,
Parental Education	Size	friends, etc.)
Academic Qualifications	Entrance Standards	
	Job Placement Rates	
	Convenience	
	Flexibility of schedule	

Contribution of the Present Study

The availability of the National Education Longitudinal Study of 1988 (NELS) made it possible to update the results of previous college choice studies and to investigate the process in greater depth (Perna, 2000; Hagy & Ordovensky-Staniec, 2002; Jacob, 2002; Cho, 2007). However, neither before, nor after the availability of NELS, have there been any concerted efforts to investigate the choice of for-profit college. No studies differentiate the students in for-

profit colleges from the students at non-profit schools. This paper provides the needed research in that area.

Research Questions

In my study I will use the Beginning Postsecondary Students Study (BPS) to explore the student level characteristics that predict enrollment in for-profit higher education in the United States. Although we know that students in for-profits are more likely to be non-traditional as described above, we don't know which of these non-traditional characteristics actually predicts enrollment. Answering this question is the primary focus of this study. The model will be fully specified to account for the various factors in the literature that have been found to be important in the choice process. However, the relationship between student background characteristics and enrollment will be my primary focus. As such, my research questions are as follows:

- What student level background characteristics predict enrollment in for-profit higher education?

- Do these characteristics differ by race, age, or for those who delay enrollment?

Note that though the BPS data allows me to capture students enrolling in higher education later in life, it does only consist of students that have enrolled. Thus, I can only predict enrollment in a for-profit school versus enrollment in a public or non-profit institution. I cannot predict enrollment in a for-profit versus not enrolling at all. Thus, my research questions are more specifically, if a student were to enroll in an institution of higher education, which characteristics would predict enrollment in a for-profit school and would those characteristics differ by race, age, or for those who delay enrollment?

Hypotheses

In general, it is expected that low-income status will be associated with a higher probability of enrollment in for-profit higher education. This is in line with the experience of those in the for-profit sector who contend that low-income students are attracted to institutional characteristics unique to these types of schools, more specifically, shortened time to degree and relevant curriculum.

Methods

Data Source

Longitudinal studies (such as NELS) that only follow students 8 years post high school are unlikely to capture many of the students in for-profits, as the majority are over the age of 25 and should they enroll in a for-profit, are likely to do so after the final follow-up. The Education Longitudinal Study (ELS) is a more recent option but will again only capture students that enter higher education within 8 years of high school graduation.

In an effort to capture those students enrolling later in life, this study will utilize data from the Beginning Postsecondary Students Longitudinal Study (BPS) (04:09). This study collected information about students' education and employment in the six years since they first enrolled in higher education. All sampled students for the BPS:04 cohort were first time enrollees in institutions of higher education in the US or Puerto Rico during the 2003-2004 academic year who were eligible for the 2003-2004 National Postsecondary Student Aid Study (NPSAS:04 is the base year study for BPS). The first follow-up was conducted in 2006 and the final follow-up was completed in 2009. At the completion of data collection, the data set contained 16,680 respondents.

Data collection was comprised of three parts. The initial data collection and both follow-ups included interviews with the respondents. The majority of respondents (63%) completed interviews via a web-based instrument, with the remainder completing the interview by telephone or in person. In addition to interview data, data collection also included transcript data and an administrative records match.

The BPS employed a two-stage sampling process in which eligible institutions were selected in the first phase and eligible students within eligible institutions were selected in the second stage. Eligible institutions consisted of those eligible to receive federal funding under Title IV of the HEA. Eligible students were those enrolled in an eligible institution and who satisfied the two eligibility requirements.[1] Of the 1,630 institutions, 1,360 provided enrollment lists. Of the 270 institutions that were for-profit private, 240 or 84% provided enrollment lists.

Total student weights are used to address the complex survey design of BPS. Because some groups were oversampled and some were under sampled, each student represents a different number of other students. Because of this, weights are different for different students; the sampling weight corresponding with the types of data analyzed was selected. Using the correct weight ensures findings may be generalized to all students entering higher education in 2003-04.

Because I'm interested in comparing models across racial groups, I have focused my analysis on the largest three groups in the U.S. today: white, black, and Hispanic. All other racial groups were dropped from my final sample. My final sample consisted of 15,050 respondents.

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[1] 1) They were enrolled in either an academic program, at least one course for credit that could be applied toward fulfilling the requirements for an academic degree, or an occupational or vocational program that required at least 3 months or 300 clock hours of instruction to receive a degree, certificate, or other formal award. 2) They were not concurrently or solely enrolled in high school or in a General Educational Development (GED) program or other high school completion program.

Variables

My dependent variable is student enrollment in a for-profit institution. Using information from the base year, I have created a binary variable, enrolled in for-profit or not. Students who enrolled in a for-profit institution in 2003-04 are coded as 1. Everyone else is coded as zero (public and non-profit). For the purposes of this study, I am only interested in whether a student enrolls in any for-profit institution. I am not interested in exploring the nuances between a for-profit versus a public as opposed to a for-profit versus a non-profit or the different levels of each (2 year, 4 year, etc.). The reason for this is due to a larger goal of this volume: to compare the findings in papers 1 & 3 and suggest the degree to which a universal model of college choice is appropriate. The grouping of institutions in the United States (2-year, 4-year, public, private, etc.) is not the same as how universities are categorized in Brazil (federal, state, municipal, non-profit, for-profit) and thus performing a probit analysis on a categorical dependent variable would disallow me from comparing the two studies. In future iterations of the paper, I intend to perform probit analyses in order to further probe the predictors of enrollment in a for-profit school versus public 2- and 4-year colleges specifically.

My primary independent variables of interest are those student background variables that often describe those enrolled in for-profits. I have recoded these variables as binary so that they may be included in a logistic regression. They are as follows: female, married, GED, first generation, dependent child, and low income. In each instance, a respondent is coded 1 if they have that characteristic and 0 if they do not. I have also included age, which is a continuous variable. I would normally include race. Rather than including race in the models, however, I have subset the sample by race and will run the models separately for each group. This is in

keeping with the understanding in the literature that minority students may experience choice in a different way than their white peers.

In addition to student background characteristics, I will also include institutional variables. The BPS asks students if particular characteristics of their institution were the reason for their enrollment. They were allowed to answer yes to as many as were applicable. I have included the following reasons for attendance as binary variables in the model: graduation rate, affordability, coursework, reputation, and location. I recognize that these variables are based on student perception of a given institution rather than an objective criterion. However, since student perception is what matters in terms of choosing a school, these variables will suffice for my purposes. Information on intended major for a given student is not available with this dataset and thus cannot be included. However, the inclusion of the coursework variable and its significance or lack there of should tell us something about the importance of the curricular offerings at for-profits in attracting students.

I also included variables described above as an interaction between students and an institution. These include distance from home and net cost, both of which are continuous variables. I should specify that distance is distance to the particular institution in which they enrolled. Many models include distance to any institution as a determining factor of whether or not a student will enroll in college at all. However, all students in this sample are enrolled at a college or university. The model is seeking to predict enrollment in a for-profit institution versus another type of school, not enrollment at a for-profit versus not at all. The literature suggests that students that choose for-profits often do so for convenience, one such factor being proximity of a school to home or work. It would make sense then that distance from home to that particular school might help predict

enrollment, especially since for-profits are often located close to one another in densely populated urban areas.

Sources of information and influence of significant others (parents, friends, etc.) are interaction variables that are not measured within this dataset and are thus not included in the model. However, paper two in this volume will explore the importance of such factors in determining student choice.

Statistical Models

My dependent variable of interest is binary (enrolled in a for-profit institution or not) and thus I utilized logistic regression for both the full model and the models that differentiate by age and for those who delay enrollment. The first model used is as follows: $P(y=1|x) = P(y=1|X_1, X_2, X_3, X_4, X_5, X_6, X_7, X_8, X_9, X_{10}, X_{11}, X_{12}, X_{13}, X_{14})$, where X_1 is female, X_2 is married, X_3 is GED, X_4 is low income, X_5 is dependent child, X_6 is age, X_7 is first generation, X_8 is graduation rate, X_9 is affordable, X_{10} is coursework, X_{11} is reputation, X_{12} is location, X_{13} is distance from home, and X_{14} is net cost.

The second model is identical to the first except it no longer controls for age. It is as follows: $P(y=1|x) = P(y=1|X_1, X_2, X_3, X_4, X_5, X_6, X_7, X_8, X_9, X_{10}, X_{11}, X_{12}, X_{13}, X_{14})$. In this model, rather than controlling for age, I run the model separately just for those students who are 30 and over. As with the full model, I run the second model separately for each racial group.

The third model is again identical to the first except it includes a variable for achievement. Student high school achievement is generally included in models of student choice. However, the data available on achievement in BPS is the ACT/SAT score and it is missing for a number of respondents (approximately 1/3); some did not take the test and some just did not report their scores on the survey. Rather than attempt to construct a proxy for achievement, I will run the model

just for the students that have achievement scores. It is as follows: P (y=1|x)= P (y=1| X_1, X_2, X_3, X_4, X_5, X_6, X_7, X_8, X_9, X_{10}, X_{11}, X_{12}, X_{13}, X_{14}, X_{15}).

Finally, the fourth model is for those who delayed enrollment into higher education. Because delay in enrollment is highly correlated with age, age has been removed from the model. Thus, the model is identical to model 2; however, it is run only on students who delayed enrollment. It is as follows: P (y=1|x)= P (y=1| X_1, X_2, X_3, X_4, X_5, X_6, X_7, X_8, X_9, X_{10}, X_{11}, X_{12}, X_{13}). Because I am running separate models for three racial groups as well as for older students, those who delay enrollment, and those with achievement data, I end up with 12 separate regressions, three for each of the four models.

Descriptive Statistics

Table 4 provides descriptive statistics for all variables used in the study including the dependent and independent variables of interest. The statistics are presented for each racial group. Below, I will further describe the sample in terms of the primary variables of interest by addressing each in turn.

Enrollment in a For-Profit School

Of the 15,050 students in the final sample, 1,784 or 11.9% were enrolled in for-profit institutions (Figure 1). This is in keeping with the approximately 12% of students in higher education in the United States being enrolled in the for-profit sector. This proportion did differ significantly by race, with significantly higher proportions of black and Hispanic students enrolled in for-profits. Only 9% of the white students in the sample were enrolled in a for-profit school; this figure stood at 24% for both black and Hispanic students. This again mirrors what we know about the disproportional representation of minority groups in for-profit schools (Figures 2-4).

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Student Characteristics

Race. The final sample consisted of 10,738 white students (71%), 2,200 black students (14.6%), and 2,112 (14%) Hispanic students. The other characteristics of the students in the sample differed significantly by race, especially between white students and their minority peers.

Income. Figure 5 graphically depicts the distribution of income by race. As shown in the figure, the majority of black and Hispanic students come from households with incomes under $50,000 per year; the average income for black and Hispanic students was $32,271 and $38,762, respectively. Moreover, 57% of black students and 47% of Hispanic students in the sample were categorized as low-income. White students, on the other hand, are much more likely to come from a family making greater than $50,000 per year, with the average income being $68,717 and only 21% categorized as low-income.

Regardless of race, enrollment in for-profit institutions differed greatly by income level (Figures 6-9). Of those in the lowest income quartile, 20% were enrolled in for-profit institutions. Conversely, only 4% of those in the highest income quartile were enrolled in a for-profit.

Gender. Overall, the sample had more women than men. This is again in keeping with what we know about women outpacing men in enrollment in higher education. This fact was even more pronounced among black and Hispanic students. While 56% of the white students in the sample were female, 63% of the black students and 60% of Hispanic students were female.

First-generation status. In every racial group, the majority of the students in the sample were first generation college students. For the purposes of this survey, a student was categorized as first generation if they did not have at least one parent that had graduated from college. The incidence of first-generation status was greater across the black and Hispanic samples, however.

57% of the white students in the sample were first generation. For black and Hispanic students those numbers were 74% and 78% respectively.

GED holder. A small proportion of the sample held a GED rather than a traditional high school diploma. Black and Hispanic students were slightly more likely to be GED holders, but not by much. 7% of the white students in the sample held GEDs; that figure was 9% for both black and Hispanic students.

Marital Status. A proportionally small number of students in the sample were married. That figure was highest among Hispanic students at 14%. Black students were the least likely to be married at 8%, while white students fell in between, at 11%.

Age. The average age of students in the sample differed slightly by race, with slightly less than 1.5 years between the oldest and youngest. The average age of black students was highest at 23.18 years. The average age of Hispanic students was slightly younger at 22.44 years. White students were the youngest on average at 21.89 years.

Results and Analysis

Impact of Student Characteristics on Enrollment in a For-Profit Institution

My first question asked what student level background characteristics predict enrollment in for-profit higher education. The results of my first model are presented in Table 5. This constitutes the full model (it is not subset by age or timing of enrollment or availability of achievement data). Of the seven student level characteristics included in the model, three were statistically significant across all three racial groups: low-income status, 1st generation status, and having dependent children. In each case, possessing one of these characteristics made a student more likely to enroll in a for-profit institution. In each case, the results are significant at the .001 level, except for first-generation status among black students, which was significant at the .05

level. Additionally, for white and Hispanic students, having a GED increased the probability of enrollment in a for-profit institution. Gender, marital status, and age were insignificant across the board.

As a measure of model fit, I use the area under the ROC curve for each regression. The model fit is greatest for white students at 83.12%. Although lower, the fit is still good for both black and Hispanic students, at 80.49% and 82.24%, respectively.

Impact of Student Characteristics on Enrollment in a For-Profit Institution for those with Achievement Data

As mentioned above, a measure of student achievement is generally included in all models of student college choice. However, in the BPS, for the two measures of achievement available, GPA and ACT/SAT score, approximately 1/3 of respondents are missing data. For this reason, I ran the full model without achievement data (detailed above; results in Table 5) and then ran a model on the subpopulation of respondents for whom achievement data was available. The results apply <u>only</u> to these students. The results of the second model are presented in Table 6.

After controlling for achievement in this model, low-income status and first-generation status remain statistically significant predictors of enrollment in higher education. The only other student background characteristic that remains significant after controlling for achievement is having a GED, and this is only for white students. For students for whom achievement data is available, having dependent children is not a statistically significant predictor. Thus, the differences between the full model and the model utilizing only the subpopulation of students with achievement data were slight.

Impact of Student Characteristics on Enrollment in a For-Profit Institution for Students Age 30 and Above

My second research question asks if the characteristics that are important in predicting enrollment in for-profit higher education differ for different sub-populations. The first sub-population I examined was students over the age of 30. As mentioned above, it is logical to expect that older students experience choice in a way that is different from their counterparts that are fresh out of high school (or recently so). For this reason, perhaps some background characteristics related to a student's family (first-generation status, for example) might be less important for older students. The results of my third model are presented in Table 7.

Indeed, only one student level background characteristic was statistically significant for this student population: low-income status. For students over age 30, being categorized as low-income, regardless of racial group, increases the probability of enrolling in a for-profit institution. Although the institutional and interaction variables in the model are not of primary interest, it is worth noting that very few of them are significant in this model. The implications of this finding will be discussed further in the following section.

Impact of Student Characteristics on Enrollment in a For-Profit Institution for Delayed Enrollees

My final subpopulation of interest is those who delay enrollment in higher education. The results of my fourth and final model are presented in Table 8. Interestingly, the results for the model for those who delayed enrollment were very similar to the results of the full model with just a few exceptions.

Again, low-income status, regardless of race is a statistically significant predictor of enrollment in a for-profit institution. Having dependent children is also significant as is first-generation status except for in the case of black students, where first-generation status is not

significant. Additionally, for white students, being a female did increase the probability of enrollment.

Discussion and Implications

In answer to my first research question, I found that low-income status and first-generation student status both predict enrollment in for-profit higher education. In the case of low-income status, this was as I predicted. This was true not only in the full model, but also in all the sub-populations, with the exception of those over the age of 30, in which only low-income status was a significant predictor. Now that I have determined that these are the characteristics that are predictive of enrollment, the logical question to ask next is why is this the case?

I can think of a few reasons why low-income and first-generation students may be more likely to enroll in these schools. The first reason is the one I offered as a rationale for my original hypothesis. According to those working in for-profit higher education, low-income and first-generation students are often looking for a program with relevant curriculum that leads them into a particular job. These students do not want to spend a lot of time in classes that are not germane to their area of study, what we might term a "liberal arts core." This goes hand in hand with wanting a shorter time to degree, as less time spent in non-major classes means completing a degree or certificate in a fraction of the time. Additionally, research suggests that low-income students are risk-averse when compared to their middle and high-income counterparts. In this case, that means that they are looking for a clear path into a job. While many students in public or non-profit private institutions major in a broad discipline (economics in my case), and then take that degree in many different directions (including some that don't use the degree all), low-income students are uncomfortable with that uncertainty; this is especially true if they are borrowing money for education.

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A second potential explanation may have to do with the information received by these students from for-profit institutions. This was one factor that I noted as potentially important that I was not able to include in my models due to data limitations. We know that low-income and first-generation students have less access to and knowledge about higher education opportunities. For-profit schools actively market to potential students. This includes television commercials, billboards, radio ads, Internet popups, and anything else they can think of. If low-income and first-generation students don't know much about college and these are the schools they see advertised, perhaps it's for that reason that those are the schools in which they enroll. We know information is an important part of the choice process for traditional students. In this case, perhaps it is lack of information that leads to enrollment for these particular types of students.

My final potential explanation is one that I will explore in paper 2. As noted above, the information a student receives both about and from an institution influences whether or not they choose to enroll. I am suggesting that the importance of this particular factor is increased for first-generation college students. If we think of parental education level as a proxy for knowledge of the higher education system, first-generation students necessarily have less information about the higher education system in general. If for-profit institutions conduct admissions in such a way that it fills this gap in experience, perhaps through more detailed guidance or assistance (including in the financial aid process), this may explain the high incidence of first-generation college students in for-profits.

Quantitative studies like this one can only tell us what is happening; they cannot offer an explanation as to why. As we move from asking what to asking why, qualitative studies like the small-scale one conducted in paper 2 are needed to parse out the reasons for enrollment of these specific groups. If policy makers want to encourage college enrollment, especially by those from

underrepresented groups who might otherwise not attend, they need to know how these students make decisions and what factors they deem important in choice. Furthermore, as the number of students choosing for-profits grows, traditional institutions can benefit from understanding why students are opting for those schools. They can use this information to better determine what if any changes they should make to attract these students.

My second research question asked if the characteristics predictive of enrollment differed by race, delayed enrollment status, or for students over 30. As anticipated by the literature on college choice, student background characteristics and their impact on enrollment do differ across racial groups. By running the models separately for each race rather than controlling for it, I was able to discern in what ways this was true. Although the magnitude of the impact did differ somewhat by race in the full model, the variables that were statistically significant did not. However, in the models run on the subpopulations, this was not the case. Black students specifically differed from their white and Hispanic counterparts in a couple of respects. For example, in model 2, age was statistically significant only for black students. Conversely, in model 4, being a first-generation college student was not statistically significant for black students while it was for the other two groups. Again, this warrants further exploration. Why is first-generation status not important for black students? Are there other factors that take precedence over parents' education level, which we've seen as so important in traditional models of college choice? What might they be? These are research questions that again lend themselves to qualitative study, perhaps via semi-structured interviews, to delve into the choice mechanism for different racial groups.

In both the full model and the model run just for those students for whom achievement data was available, first-generation status was statistically significant in predicting enrollment in

for-profit higher education. In the case of students over the age of 30, first-generation status was not significant. However, with the exception of black students, first-generation status was still statistically significant for those who delay enrollment. As age and delayed enrollment status are necessarily highly correlated (.94 across the entire sample), these findings require further teasing out to determine the relationship between these variables and enrollment in for-profit higher education.

Additionally, although the variables included for institutional and interaction characteristics were not of primary interest in terms of my research questions, the fact that very few of the variables were significant in the model for students over age 30 warrants mentioning. Graduation rate and coursework were significant, offering support for the contention from for-profits that their business model with quick time to degree appeals to students. However, the insignificance of the majority of the variables speaks to a larger objective of this volume, which is to determine the degree to which traditional models of choice are applicable to these students. The majority of students in for-profits are over the age of 30. What these findings suggest are that traditional models don't tell us very much about these students. This is potentially an important finding for students in traditional institutions as well. As the number of older adults in college increases, understanding how these non-traditional students make choices about college is of increasing importance. Again, if traditional institutions want to attract non-traditional students, they need information about what is important to these students in determining where to enroll.

In sum, the landscape of higher education is changing. College is no longer solely for those fresh out of high school, living on campus, and living off their parents. Instead, the students that we term "non-traditional" are now increasingly the norm. Similarly, the options for

those wanting to enter higher education have expanded greatly. For-profit institutions, once enrolling an insignificant portion of higher education students, have grown exponentially and continue to be the fastest growing sector in higher education today. For these reasons, it's important that we understand the students who choose these schools. Low-income and first-generation students have a higher probability of enrollment. The current models of college choice do not fit well with older students. Why is this the case and what does it mean for higher education institutions themselves, for the students that attend them, and for the larger policy environment?

Figures and Tables
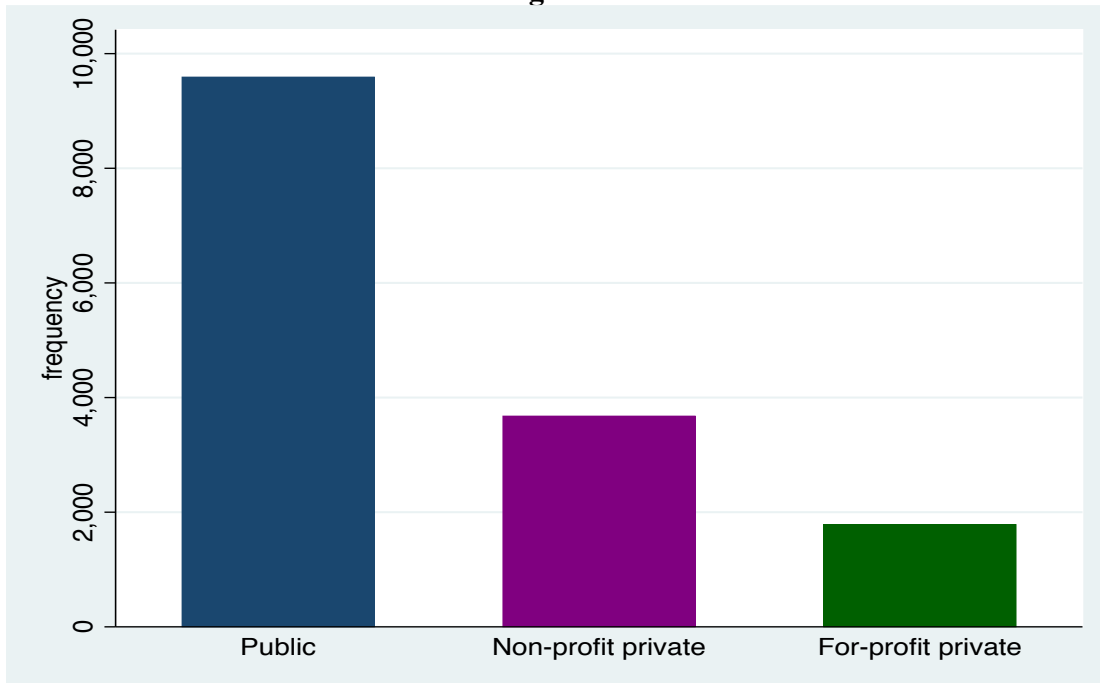
Figure 1. Enrollment by School Type
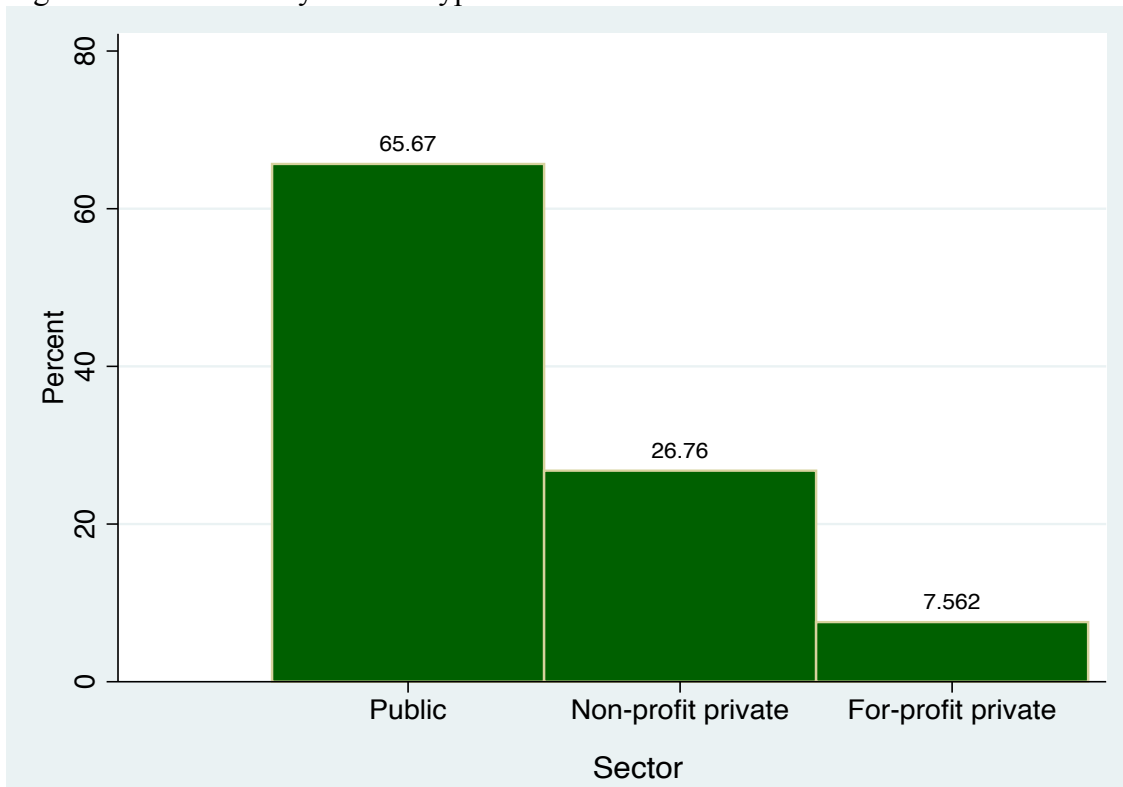
Figure 2. Enrollment by Race (White Students)[2]

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[2] Note that for Figures 2-4, the percentages will differ slightly from those reflected in the descriptive statistics. This is because the survey set command was used for generating descriptive statistics in order to account for the complex sampling design.
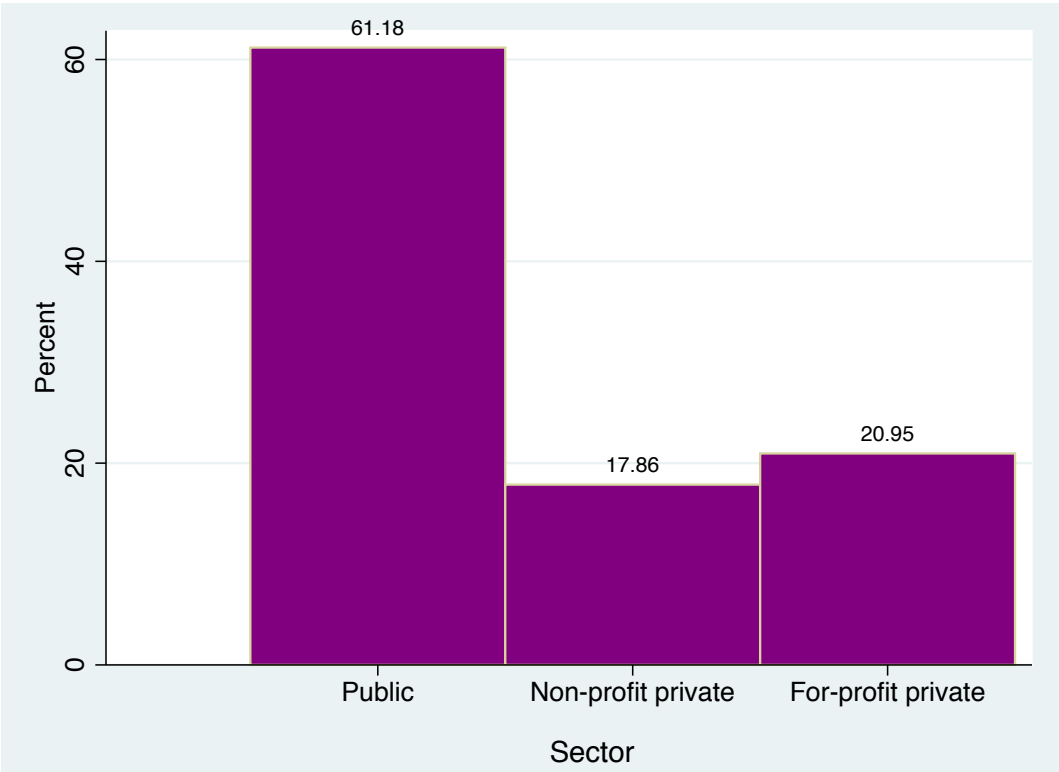
Figure 3. Enrollment by Race (Black Students)
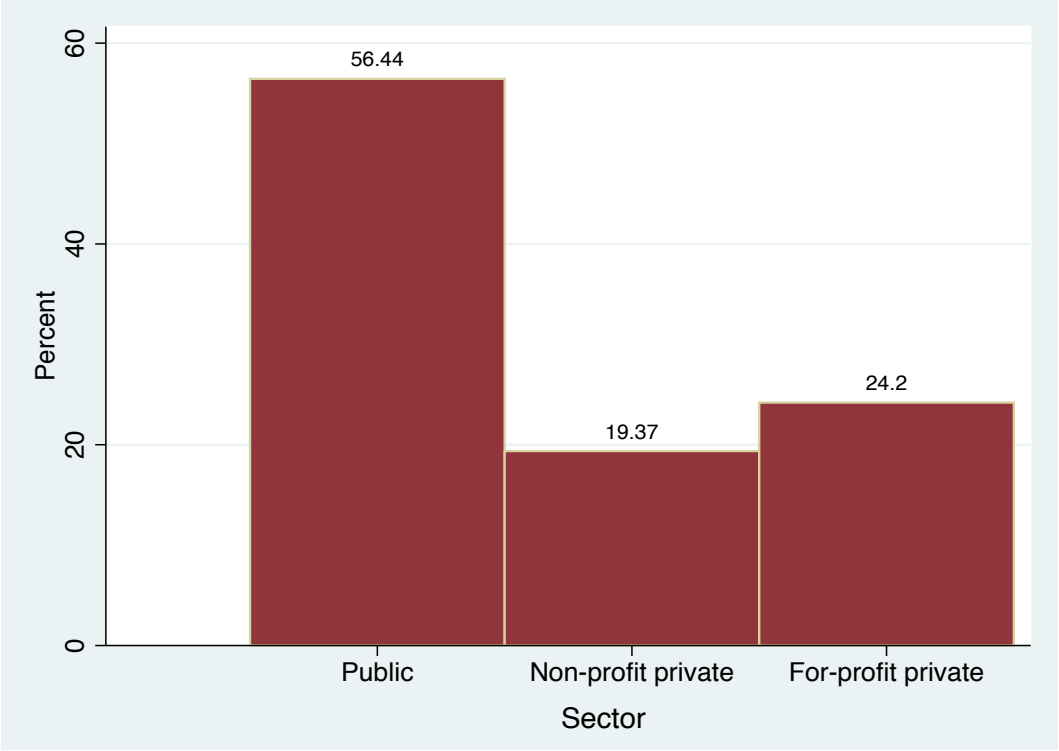
Figure 4. Enrollment by Race (Hispanic Students)
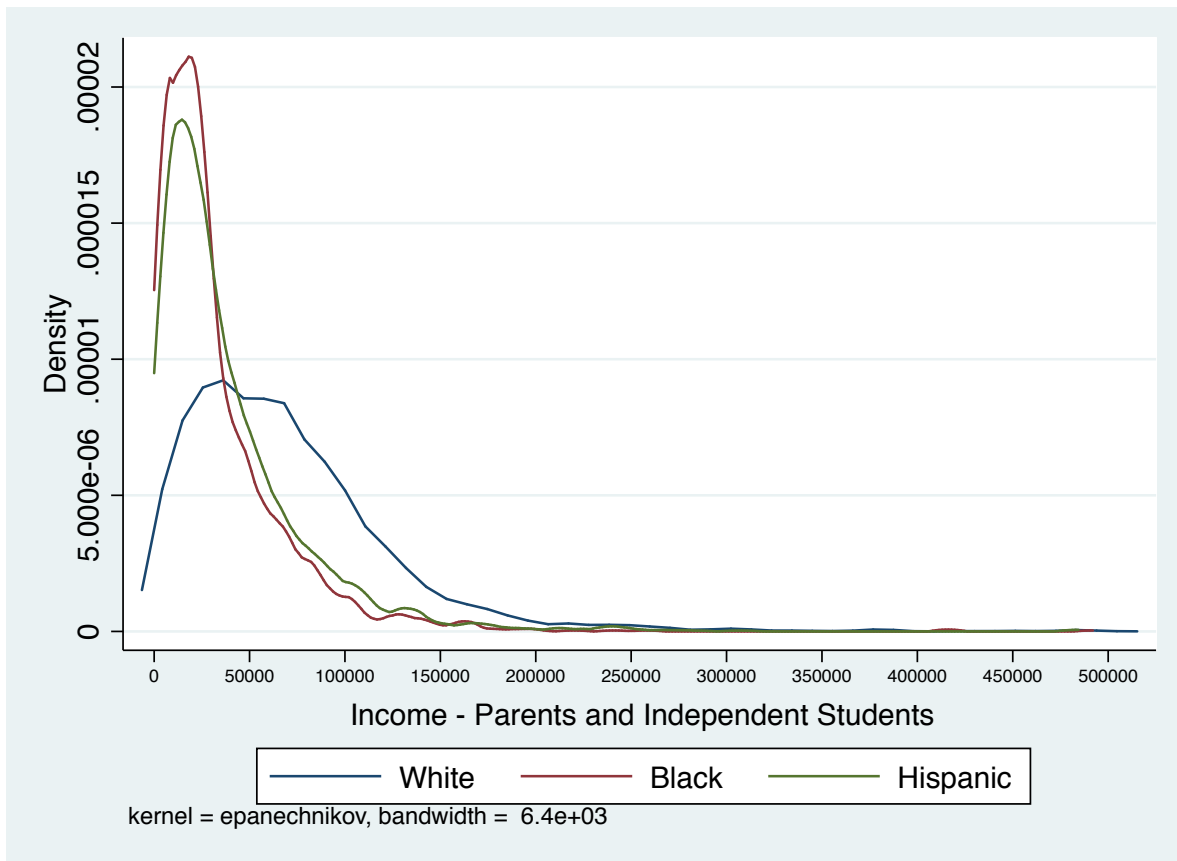
Figure 5. Kernel Density of Income by Race
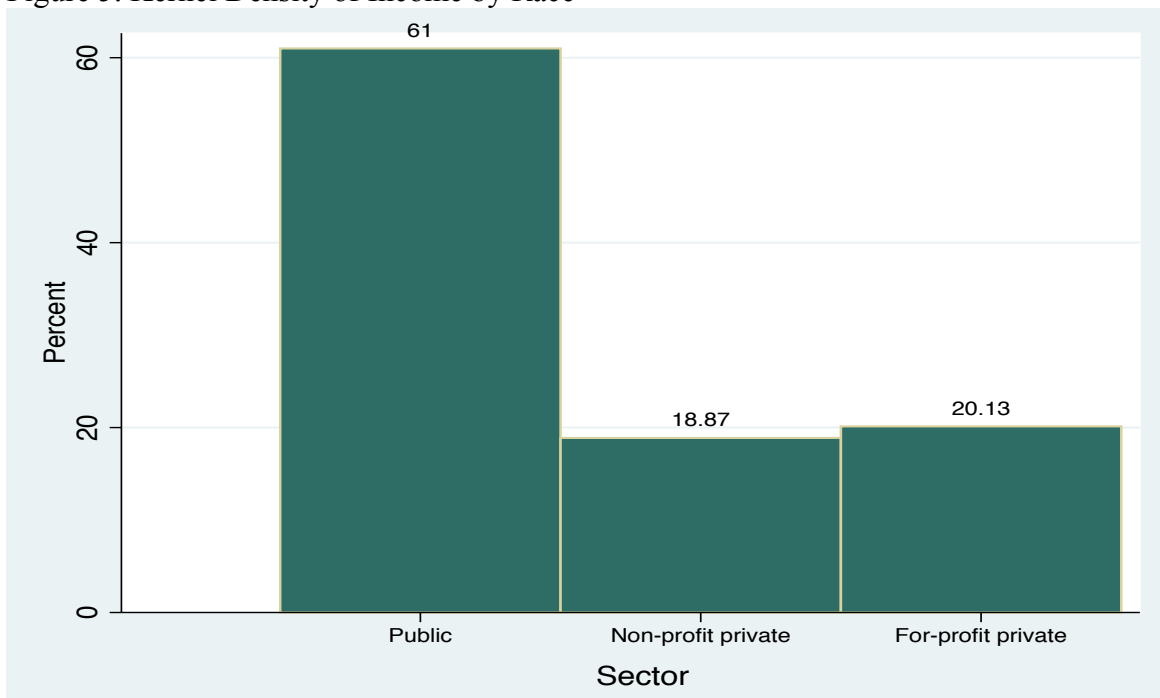
Figure 6. Institution Type by Income Level (1st Quartile)
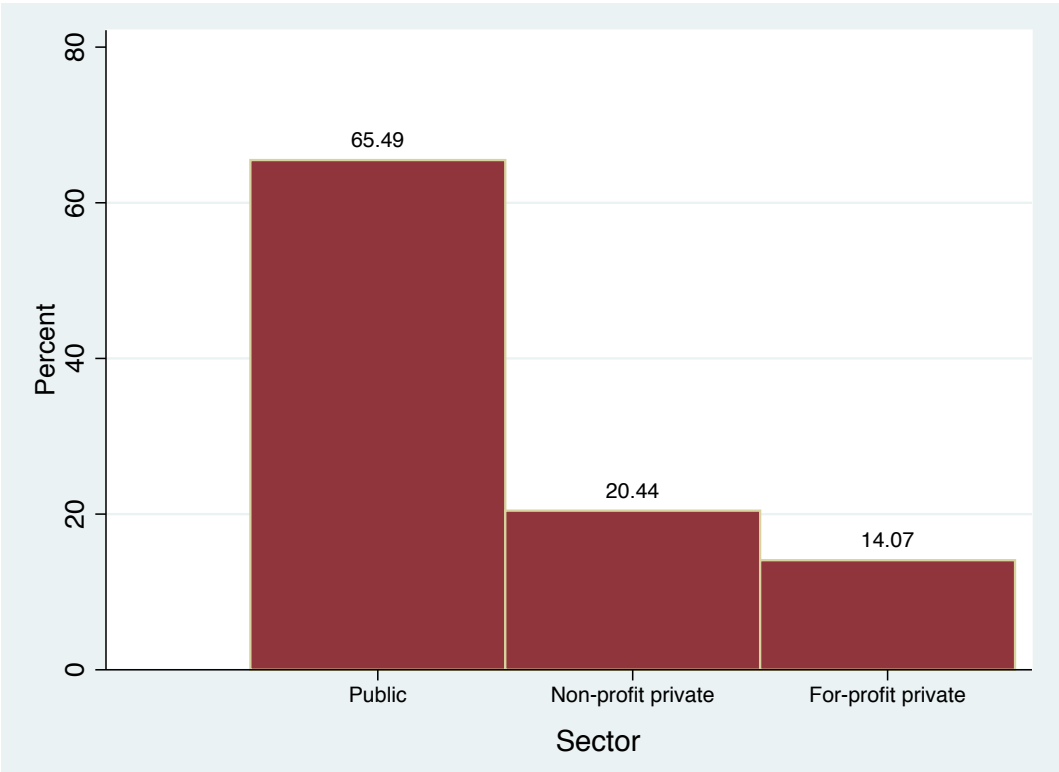
Figure 7. Institution Type by Income Level (2nd Quartile)
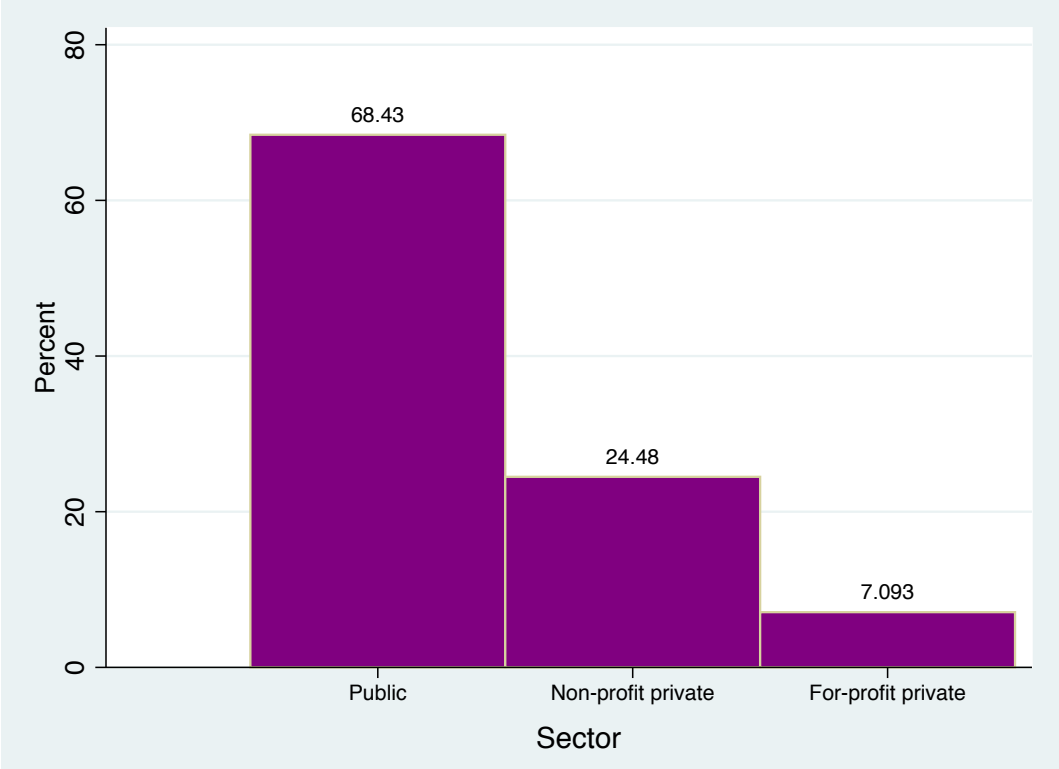
Figure 8. Institution Type by Income Level (3rd Quartile)
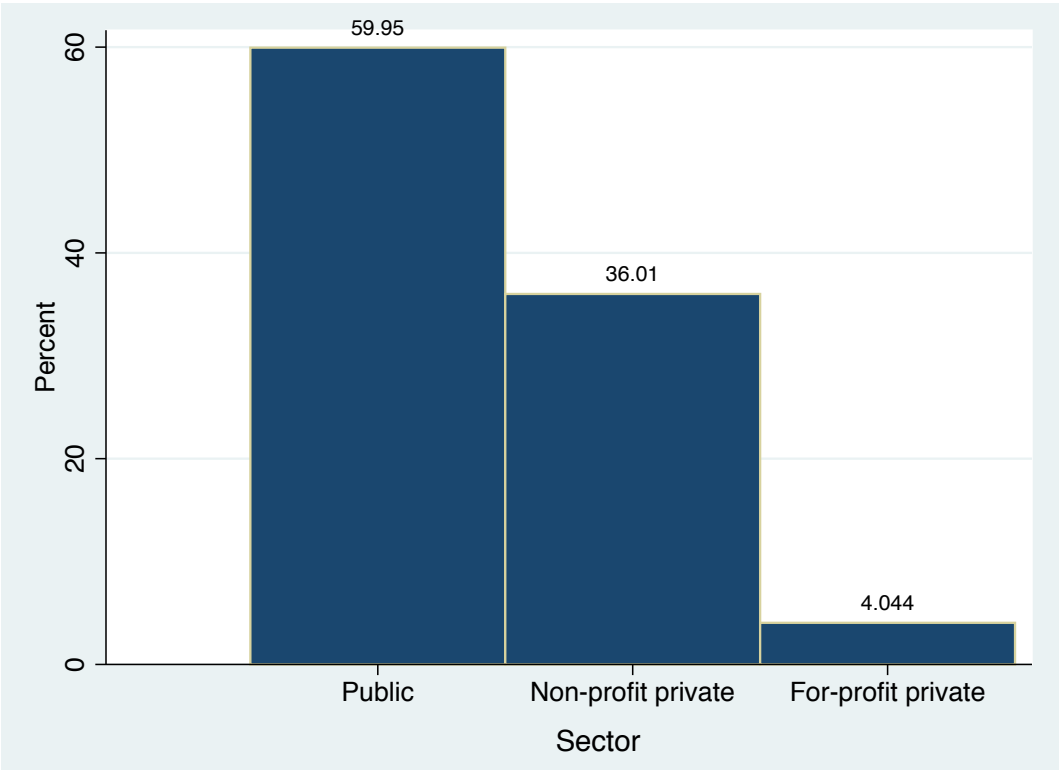
Figure 9. Institution Type by Income Level (Highest Quartile)

Table 4. *Descriptive Statistics for Variables in the Analysis*

	(1) White Students	(2) Black Students	(3) Hispanic Students
Female	0.56***	0.63***	0.60***
	(0.01)	(0.01)	(0.02)
Married	0.11***	0.08***	0.14***
	(0.01)	(0.01)	(0.01)
GED	0.07***	0.09***	0.09***
	(0.00)	(0.01)	(0.01)
First generation college student	0.57***	0.74***	0.78***
	(0.01)	(0.01)	(0.01)
Dependent children: Any 2003-04	0.15***	0.29***	0.24***
	(0.01)	(0.01)	(0.02)
Age	21.89	23.18	22.44
	(.13)	(.25)	(.30)
Low income	0.21***	0.57***	0.47***
	(0.01)	(0.02)	(0.02)
For-profit	0.09***	0.24***	0.24***
	(0.00)	(0.01)	(0.01)
Graduation rate considered in school choice	0.38***	0.37***	0.35***
	(0.01)	(0.01)	(0.01)
Reason attended: Affordable	0.60***	0.46***	0.53***
	(0.01)	(0.02)	(0.02)
Reason attended: coursework	0.54***	0.56***	0.57***
	(0.01)	(0.02)	(0.02)
Reason attended: Reputation	0.51***	0.42***	0.43***
	(0.01)	(0.02)	(0.02)

Reason attended: Location	0.80***	0.73***	0.74***
	(0.01)	(0.01)	(0.01)
Distance from home to first institution: 2003-04	137.13***	112.32***	93.19***
	(5.58)	(15.63)	(13.67)
Student budget minus all aid (net cost): 2003-04	7488.72***	5548.54***	6002.50***
	(78.24)	(134.23)	(137.40)
Observations	10738	2200	2112

Standard errors in parentheses
$^{*} p < 0.05$, $^{**} p < 0.01$, $^{***} p < 0.001$

Table 5. *Results of Logistic Regression on Full Model, Dependent Variable= Enrollment in For-Profit Higher Education*

	(1) White Students	(2) Black Students	(3) Hispanic Students
For-profit			
Female	0.08	-0.04	0.18
	(0.12)	(0.21)	(0.18)
Married	-0.17	-0.63	-0.25
	(0.20)	(0.30)	(0.29)
GED	0.72***	0.18	0.57*
	(0.18)	(0.29)	(0.26)
Low income	1.15***	1.03***	1.03***
	(0.13)	(0.22)	(0.17)
Dependent children: Any 2003-04	0.85***	0.88***	1.12***
	(0.17)	(0.20)	(0.25)
Age first year enrolled	0.01	0.01	-0.01
	(0.01)	(0.01)	(0.01)
First generation college student	0.97***	0.50*	1.35***
	(0.16)	(0.25)	(0.24)
Graduation rate considered in school choice	0.56***	0.35	0.51**
	(0.13)	(0.18)	(0.17)
Reason attended: Affordable	-1.08***	-1.04***	-1.05***
	(0.12)	(0.20)	(0.17)
Reason attended: coursework	1.31***	0.83***	1.59***
	(0.15)	(0.20)	(0.20)
Reason attended: Reputation	0.14	-0.16	0.20
	(0.14)	(0.20)	(0.19)

Reason attended: Location	-1.00***	-0.66***	-0.94***
	(0.13)	(0.19)	(0.18)
Distance from home to first institution 2003-04	-0.00	-0.00	-0.00*
	(0.00)	(0.00)	(0.00)
Student budget minus all aid (net cost): 2003-04	0.00	0.00***	0.00***
	(0.00)	(0.00)	(0.00)
Constant	-3.77***	-2.90***	-3.82***
	(0.26)	(0.37)	(0.46)
Observations	10738	2200	2112
df_m	14.00	14.00	14.00
df_r	10737	2199	2111
F	36.76	15.36	19.02
% Correctly predicted (lroc)	83.12%	80.49%	82.24%

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

Table 6. *Results of Logistic Regression on Students with Data on Achievement, Dependent Variable= Enrollment in For-Profit Higher Education*

	(1) White Students	(2) Black Students	(3) Hispanic Students
For-profit			
Female	-0.35	0.12	0.23
	(0.20)	(0.31)	(0.29)
Married	-0.31	-1.33	1.17
	(0.60)	(0.74)	(0.81)
GED	1.30**	-0.39	-0.07
	(0.41)	(0.73)	(0.70)
Low income	0.74***	0.77*	0.60*
	(0.22)	(0.31)	(0.30)
Age first year enrolled	0.15	0.52***	0.10
	(0.08)	(0.10)	(0.14)
Dependent children: Any 2003-04	0.70	0.12	0.48
	(0.46)	(0.40)	(0.66)
First generation college student	0.84***	0.86*	2.86***
	(0.23)	(0.33)	(0.54)
ACT/SAT score	-0.00***	-0.00*	-0.00***
	(0.00)	(0.00)	(0.00)
Graduation rate considered in school choice	0.55*	-0.42	0.59*
	(0.22)	(0.28)	(0.30)
Reason attended: Affordable	-1.31***	-1.24***	-1.75***
	(0.22)	(0.31)	(0.31)
Reason attended: coursework	1.74***	1.37***	1.64***
	(0.27)	(0.32)	(0.35)

Reason attended: Reputation	-0.08	-0.48	-0.05
	(0.23)	(0.33)	(0.33)
Distance from home to first institution 2003-04	-0.00	-0.00	-0.00
	(0.00)	(0.00)	(0.00)
Reason attended: Location	-0.71**	-0.49	-0.90**
	(0.22)	(0.30)	(0.33)
Student budget minus all aid (net cost): 2003-04	0.00	0.00***	0.00*
	(0.00)	(0.00)	(0.00)
Constant	-3.43	-11.88***	-4.39
	(1.77)	(2.21)	(2.65)
Observations	8074	1307	1168
df_m	15.00	15.00	15.00
df_r	8073	1306	1167
F	17.03	7.32	7.95

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

Table 7. *Results of Logistic Regression on Students Over Age 30, Dependent Variable= Enrollment in For-Profit Higher Education*

	(1) White Students	(2) Black Students	(3) Hispanic Students
For-profit			
Female	0.49	-0.54	0.26
	(0.29)	(0.43)	(0.54)
Married	-0.70	-0.93	-0.56
	(0.32)	(0.49)	(0.65)
GED	0.20	-0.03	0.37
	(0.28)	(0.46)	(0.66)
Low income	0.68*	1.03*	1.59**
	(0.30)	(0.46)	(0.59)
Dependent children: Any 2003-04	0.02	0.68	0.69
	(0.28)	(0.43)	(0.62)
First generation college student	-0.52	-0.18	-0.76
	(0.36)	(0.51)	(0.91)
Graduation rate considered in school choice	1.33***	1.19***	1.06*
	(0.27)	(0.35)	(0.51)
Reason attended: Affordable	-0.63*	-0.67	0.04
	(0.27)	(0.37)	(0.53)
Reason attended: Coursework	1.88***	0.37	2.06***
	(0.35)	(0.40)	(0.53)
Reason attended: Reputation	0.16	0.53	-0.19
	(0.29)	(0.40)	(0.58)
Reason attended: Location	-0.62	-0.84*	-1.31*
	(0.33)	(0.39)	(0.64)

Distance from home to first institution 2003-04	0.00*	0.00	-0.00
	(0.00)	(0.00)	(0.00)
Student budget minus all aid (net cost): 2003-04	0.00**	0.00**	0.00**
	(0.00)	(0.00)	(0.00)
Constant	-3.29***	-2.06*	-3.01*
	(0.66)	(0.84)	(1.21)
Observations	965	324	205
df_m	13.00	13.00	13.00
df_r	964	323	204
F	8.47	3.00	4.25

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

Table 8. *Results of Logistic Regression on Students with who delay enrollment, Dependent Variable= Enrollment in For-Profit Higher Education*

	(1) White Students	(2) Black Students	(3) Hispanic Students
For-profit			
Female	0.49**	-0.16	0.31
	(0.18)	(0.29)	(0.28)
Married	-0.37	-0.73	-0.35
	(0.19)	(0.32)	(0.31)
GED	0.24	0.01	0.51
	(0.19)	(0.35)	(0.33)
Low income	1.05***	1.02***	1.19***
	(0.17)	(0.28)	(0.26)
Dependent children: Any 2003-04	0.56**	0.47*	1.53***
	(0.18)	(0.24)	(0.29)
First generation college student	0.52*	0.13	0.79*
	(0.23)	(0.33)	(0.36)
Graduation rate considered in school choice	0.72***	0.69**	0.77**
	(0.17)	(0.23)	(0.27)
Reason attended: Affordable	-0.91***	-0.97***	-0.91***
	(0.16)	(0.24)	(0.26)
Reason attended: coursework	1.30***	0.70**	1.20***
	(0.18)	(0.25)	(0.27)
Reason attended: Reputation	0.19	0.18	0.57*
	(0.17)	(0.24)	(0.27)
Reason attended: Location	-1.02***	-0.85***	-0.91**
	(0.19)	(0.25)	(0.29)

Distance from home to first institution 2003-04	-0.00	-0.00	-0.00**
	(0.00)	(0.00)	(0.00)
Student budget minus all aid (net cost): 2003-04	0.00***	0.00***	0.00***
	(0.00)	(0.00)	(0.00)
Constant	-3.45***	-2.22***	-4.40***
	(0.35)	(0.46)	(0.55)
Observations	2698	934	742
df_m	13.00	13.00	13.00
df_r	2697	933	741
F	20.32	9.48	11.83

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

CHAPTER III

THE IMPORTANCE OF VARIOUS FACTORS IN COLLEGE ENROLLMENT DECISIONS
FOR STUDENTS ENROLLED IN INSTITUTIONS IN THE FOR-PROFIT SECTOR

Motivation

According to the National Center for Education Statistics (2013), in the year 2000,

450,084 students were enrolled in for-profit institutions of higher education. By 2012, that

number had risen to 1,808,898 (ibid). That is an increase of over 400%, or an average of 33% per

year. Over the same time period, enrollment in public and non-profit institutions increased by

only 26% and 21% respectively (ibid). For-profit higher education, once a small part of the

higher education landscape, is now the fastest growing sector in all of higher education.

Depending on the metric used, these institutions enroll between 10 and 13% of all students

(Health Education, Labor, and Pensions Committee, 2012).

The growth of for-profit higher education, however, has not occurred without incident. For-

profits are frequently criticized for overly aggressive recruitment of unqualified students, for the

lack of professionalism and curricular authority in academic staff, and for what are sometimes

viewed as excessive profits to owners and management—especially when some or even most of

the revenue taken as profit is actually from taxpayers (via student loans) (Sanyal & Johnstone,

2011). Moreover, high debt burden and default rates (Futures Project, 2000) combined with high

costs and growing awareness of the significant involvement of for profits in federal and state

financial aid programs has attracted skepticism and scrutiny (Clowes, 1995; Beaver, 2009).

For profits satisfy a growing demand for their services, as evidenced by their continually

increasing market share (Bennett et al., 2010) For profits enroll large proportions of low-income

and minority students and this raises serious equity concerns over fair treatment of the students. It

is vital that we understand more about the students in for-profit institutions, why they chose to attend, and how they were recruited.

The question as to who attends for profits is easily answered. The success of the for-profit model can be attributed in large part to their ability to enroll students from groups traditionally underrepresented in higher education. These include both minority (Bailey et al., 2001) and low-income students (Choy, 2000) as well as students who hold a GED rather than a traditional high school diploma (Chung, 2008). Students in for-profit institutions are also more likely to be the first in their families to attend college (Lee & Topper, 2006). However, how and why these particular types of students choose these institutions (the process that the literature terms college choice) is unclear. In the case of first-generation college students, perhaps a possible explanation lies in the nature of for-profit admissions.

The college choice literature tells us that sources of information, categorized as interactions between students and institutions, influence students' college choice (Bonnema & van der Welt, 2008). Put simply, the information a student receives both about and from an institution influences whether or not they choose to enroll. I am suggesting that the importance of this particular factor is increased for first-generation college students. If we think of parental education level as a proxy for knowledge of the higher education system, first-generation students necessarily have less information about the higher education system in general. If for-profit institutions conduct admissions in such a way that it fills this gap in experience, perhaps through more detailed guidance or assistance (including in the financial aid process), this may explain the high incidence of first-generation college students in for-profits.

Furthermore, the literature on complexity as it relates to the financial aid process supports this possibility. Bettinger et al. (2012) conducted a randomized field experiment aimed at testing

the effect of FAFSA assistance on application for aid and college enrollment among low-income students. The FAFSA treatment considerably increased college financial aid applications, improved the timeliness of aid application submission, increased the receipt of need-based grant aid, and ultimately increased the likelihood of college attendance.

In order to explore the possibility of this link between enrollment of first-generation students and admissions procedures, my study was conducted in two parts. First, in-depth qualitative interviews were conducted with individuals formerly working in admissions and financial aid at for-profit institutions. The primary goal of these interviews was to confirm the notion that admissions and financial aid processes at for-profits do offer significant assistance and guidance to potential students. A secondary goal was to provide another source of data for questions asked to students in the survey portion of the study.

After confirming how admissions are conducted, students were surveyed regarding the degree to which admissions were important in their choice. They were also asked about other aspects of their choice process in order to examine whether existing models of college choice can be applied to students in for-profits or if a separate model of college choice should be considered for these students. The following brief review of the literature on college choice will outline scholarship in the field and underscore the necessity for additional research.

Literature Review

Hossler & Gallagher's (1987) three-stage model of the college choice process is the most widely used in attempting to understand how students decide if and where to go to college. It has been modified to explore the choice process specifically for both students of color (Solorzano, 1992; Mickelson, 1990; Kao & Tienda, 1998) and students from low-socioeconomic backgrounds (Conley, 2001; Keane, 2002; Kaufman & Gabler, 2004). However, the model is

designed to understand the choice process for the "traditional" college student, one entering postsecondary education directly after high school. The three phases of the model-predisposition, search, and choice- are often assigned age ranges by researchers. Cabrera & LaNasa (2000) described the process as beginning in 7th grade with predisposition and ending in 12th grade with choice. This model does not apply to students entering higher education later in life. Many students attending for profits fit into this category.

Predisposition

Although students attending for profits necessarily go through a choice process when deciding to attend these institutions, the factors that play into each phase as delineated by Hossler & Gallagher are likely different. According to Perna & Titus (2004), many factors influence students' college predisposition, including family SES, teachers, peers, interactions with institutions of higher education, etc. Parental influences have also been found to be one of the strongest predictors of students enrolling in college (Hossler, Schmit, & Vesper, 1999; Hamrick & Stage, 2004).

However, for students entering for profits who are not coming straight from high school (which are most students in for profits), the factors affecting their decision to go to college are undoubtedly different. They are likely related to the economic benefit or, in many in cases, the economic imperative for obtaining higher skill levels.

Search

The second phase of the college choice process, according to Hossler & Gallagher, is the search phase, in which students determine which characteristics of institutions are important (Bergerson, 2009). Students seek information and use it to develop institutional choice sets. As in the predisposition phase, parental influence and encouragement play a role (Hossler, Schmit,

& Vesper, 1999; Martin & Dixon, 1991; Galotti & Mark, 1994) as does knowledge regarding costs of college and availability of financial aid (Cabrera & LaNasa, 2000; Desjardins, Ahlburg, & McCall, 2006). Gathering information is an important part of this phase.

Choice

In the choice process, students choose an institution and enroll. Hossler, Schmit, & Vesper (1999) contend that institutional characteristics play an important role in this phase. Cabrera & LaNasa (2000) also listed institutional factors among several that play into the final enrollment decision along with student academic ability, parental encouragement, and financial considerations. Research has also shown that students weigh location (DesJardins, Dundar, & Hendel, 1999; Goener & Pauls, 2006; Stewart & Post, 1990) and course program offerings (DesJardins, Dundar, & Hendel, 1999; Johnson & Stewart, 1991; Sanders, 1990) in their enrollment decisions. I feel that this may be the part of the choice process for for-profit students that most mirrors that of traditional students. They are surely looking for institutions that fit their needs and desires (location, course offerings, flexibility in scheduling), just as traditional students are. These needs and desires are undoubtedly different than those experiencing choice as high school seniors, but are they similarly important in determining which institution in which to enroll?

Contribution of the Present Study

Considerable information exists on the types of students that attend for-profits; however, there is little information about whether the "normal" college choice process applies to these students. This study explores this question by examining the reasons behind the disproportional representation of particular types of students in this sector.

Design

The nature of the questions being asked required the use of both qualitative and quantitative methods. Phase I of the study utilized semi-structured interviews to explore the admissions process in for-profit institutions. This phase of the study lent itself to a qualitative approach, as its goal was to explore how admissions work, a topic not well understood or addressed in the literature. As little is known about the topic, a quantitative study that required the researcher to make predetermined choices regarding potential findings and outcomes would be inappropriate. Phase I of the study instead makes use of the naturalistic paradigm[3] by allowing each participant to lead the researcher, within a defined context[4], to discover the depth and breadth of their experience.

Phase II of the study, on the other hand, utilizes a survey design to ask students about their own experience with college choice, including but not limited to, the importance of the admissions process. Literature on the college choice process for students in traditional institutions is robust. Using this literature, I constructed a survey designed to explore the degree to which the choice process for students in for-profits is consistent with that of students in non-profit or public institutions. It also asks about the importance of assistance with the admissions process, testing the hypothesis that the difference in how admissions are conducted in for-profits helps to explain why first-generation students are overrepresented.

Phase I: Admissions

Site selection. Gaining access to employees at for-profit institutions is exceedingly

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[3] This paradigm assumes that there are multiple interpretations of reality and the goal of the researchers working within this perspective is to understand how individuals construct their own reality within a given social context.

[4] In this case, the context was defined by the semi-structured interviews, which asked respondents specifically about their experiences in for-profit admissions and/or financial aid and their observation of the college choice process as it was experienced by potential students.

difficult. Because of recent bad press regarding the nature of operations at for-profits, many schools are leery of researchers. Due to this fact, I decided to contact individuals that used to be but were no longer employed at for-profit institutions in Tennessee. I chose to limit the scope of my research to the state of Tennessee in order to make conducting in-person interviews feasible and to maintain a study the size of which is manageable for a single researcher.

Using information from the Tennessee Higher Education Commission (THEC), I created a list of 20 institutions that are accredited (important due to its requirement for students to receive Title IV funds) and licensed to operate in the state of Tennessee. I did not include institutions with only 1 program (for example, the Nashville auction school) or with very small numbers of students (<500). There are many for-profit schools that are operated by families and enroll few students. I'm assuming that admissions in those cases are systematically different than admissions in larger schools with multiple locations and larger student bodies, so I did not include those institutions on my list. Since most students in the for-profit sector are enrolled at large institutions with multiple campuses (the largest 15 firms in the industry enroll nearly 60 percent of all students) (Bennett et al., 2010), focusing on these types of schools will allow me to explore admissions as it is experienced by the majority of students in the sector.

Field entry. I used the "past company" search parameter on Linkedin to search for individuals that previously worked in admissions or financial aid in the aforementioned institutions in Tennessee. I identified 40 individuals. I then sent them an email via Linkedin and asked them to participate in the study. 14 people agreed to be interviewed. Of the 14, I successfully conducted interviews with 10 individuals. These individuals collectively worked at 7 different for-profit institutions in Tennessee.

Data collection and recording. Interviews with participants were a combination of in-

person meetings and phone interviews, when scheduling issues or distance necessitated or when requested by a participant. With the participants' permission, all interviews were audio recorded. The interviews ranged in duration from 22 to 41 minutes, with a typical interview lasting approximately 25 minutes.

I used a semi-structured interview protocol, asking participants to describe the admissions and financial aid processes in the schools in the for-profit sector at which they were employed. For example, I asked, "Can you describe the admissions process?" and "What are the steps involved in applying for financial aid? " Additionally, I asked participants questions related to how the students they've come in contact with have experienced the college choice process. For example, I asked, "In your experience, what were students' main reasons for going to college?" and "How did students find out about the school? Where do they get their information?" (See Appendix A for interview protocol). The protocols were informed by the college choice frameworks that guide this study. Their semi-structured nature allowed me the flexibility to explore unanticipated areas that surfaced during the conversations. Interviews were recorded and transcribed verbatim.

Data analysis. Qualitative research is by nature fluid and dynamic. The researcher must remain open to changing directions or making modifications based on new information. In keeping with this, data collection and analysis occurred simultaneously (Corbin & Strauss, 2008; Patton, 2002). This method allowed me to modify my protocol in response to emerging themes. I took detailed field notes during and following each interview, paying attention to moments where participants disputed (or echoed) what others had said, or when they suggested a new line of inquiry. I also made note of times when I felt a participant might not have been completely forthright in his responses. In preparation for data analysis, interviews were transcribed verbatim

and all data were uploaded to Nvivo, a software program for analyzing qualitative data.

My initial coding procedure for each component applied grounded theory (Glaser & Strauss, 1967). Grounded theory allows categories and properties of categories to develop from the data rather than fitting data to pre-existing classifications (Lincoln & Guba, 1985; Glaser & Strauss, 1967). I began my analysis with a careful reading of each of the interviews. I searched for recurrent themes, especially as they related to the admissions process. After my initial review, I constructed a loose framework consisting of 4 broad categories for examining the data related to admissions: assistance, customer service, information, and persuasion. After creating this framework, I returned to the data and analyzed it based on the categories I had constructed.

After completing the data analysis for the admissions data, I repeated the same procedure for the questions asked surrounding college choice. I re-read the transcripts and saw that the general process of college choice falls into a predictable and fairly self-explanatory time-dependent process. I could see this in the extant models of college choice.

I then decided on three broad categories through which I would examine the data: predisposition, search, and choice. I returned to the data and coded it based on those broad categories, constructing additional sub-categories as appropriate.

Trustworthiness. There are four aspects of trustworthiness: credibility, applicability, dependability, and neutrality The first is credibility, which requires that I represent multiple constructions of reality rather than attempting to construct one definitive truth and that the report of my findings is credible to my informants. I have been careful to ensure that I present the multiple realities experienced by my subjects, and I emphasize that what I report here is specific to the context and people with whom I interacted. Although I sampled in such a way as to gain information with the greatest probability of generalizability, I cannot assume that the experiences

of my interviewees represent the realities of all for-profit admissions personnel everywhere, or even to all admissions personnel at the schools represented in the sample. The narratives and truths that I present here are only true for the individuals I describe, but they are valuable as a jumping off point for further investigations of the for-profit admissions process.

Because of the time constraints inherent in this project, I have been unable to practice many of the other methods of safeguarding credibility. Prolonged engagement and persistent observation were not an option, nor, as a solo researcher, was I able to engage in peer debriefing. However, I was able to triangulate sources and methods. I had access to multiple sources—administrators and other staff, as well as admissions materials. I was also afforded the opportunity to be a participant observer during a conference attended by administrators from these schools. I utilized these multiple methods so that my information came from more than one source.

Another aspect of trustworthiness is applicability, also called transferability, meaning that the findings have applicability in other contexts. Through thick description and purposive sampling, I believe I have accomplished that here.

The triangulation described above, along with the natural history of research methodology provided in this report contribute to the third aspect of trustworthiness—dependability. Finally, I worked hard to achieve neutrality in my work but recognize the difficulty of that given my extensive research on for-profit education and knowledge related to possible abuses in the sector, especially as related to enrollment of students. However, through reflexive journaling in the field, I attempted to be as up front about these issues as possible. Additionally, I present raw data in this report so that the readers can see my conclusions

illustrated in black and white and assess for themselves whether or not they reach the same conclusions.

Strengths and limitations. This project has both strengths and limitations, which stem from the nature of the sample. One strength concerns the variety in my sample in regards to the experiences of my participants in terms of their roles in FPHE. Many of the interviewees had held multiple jobs in the sector, moving from admissions to financial aid to student services and often back again. There were also numerous subjects that had worked at more than 1 institution and thus could speak to the differences that existed between the schools. I also had a couple of interviewees who had worked in for profit higher education and now work in the not for profit or public sector. They were able to offer a comparison of the processes in the two sectors. Ideally I would have had representatives from all of the 20 schools on my list. It would give me a better picture of the degree to which my findings are valid across Tennessee schools. This is an issue to consider when designing future studies.

Another strength was my ability to gain considerable detail on my questions of highest interest. Because I was very focused on certain topics, namely the processes of admissions and financial aid, I was able to gather data rich in detail. The way in which I collected my data, presenting interviewees with broad questions to allow them to tell their stories and then following up with additional questions of interest, ensured I gathered data from all participants on all topics.

The study also had limitations. The first limitation was that it was a one-shot case study. I only met with the interviewees once. That was all that was possible given the nature of the time constraints for this project. However, I corresponded via email and spoke with interviewees over the phone numerous times before actually meeting with them. Because of this, we felt less like

strangers. This made the interviews more comfortable than they may have otherwise been.

Additionally, although there is always a concern with the extent of the rapport possible when

conducting only one interview with a subject, I felt that my interviewees were quite open and

candid in their responses. This is perhaps because I chose to speak with former rather than

current employees, and thus the nature of the questions was not sensitive. Additionally, the

participants seemed happy to have the opportunity to talk about their experiences as no one had

ever really asked.

   Findings & conclusions. In this section I will detail my findings regarding the nature of

admissions in for-profit higher education. Rather than going interview by interview, I will

instead discuss each of the four themes that emerged in turn.

   Assistance. Each of the individuals I spoke with underscored the significant amount of

assistance that was offered to students attempting to enroll at their institutions. Of the 10 people

interviewed, 5 used some variant of the term "hand holding" when describing the process.

> "We would basically hand-walk them through the process. A lot of hand-holding involved . . ."

> "At our school we held their hand. They came back in for a second appointment, and we filled out everything for them."

> "It's hand-holding, hand-holding in admissions."

> "With Dumbledore University (pseudonym), it's great to have someone hand hold you through those processes and just pick your classes for you and you know it's going to apply to the program you're in."

> "It's a way more hands on approach then trying to get into a public university or community college."

Interviewees also described at length the various services both admissions and financial aid

personnel would provide to potential students.

> "You do walk them through step by step every process of admissions and financial aid, paperwork, or whatever their payment option is."

> "It's really walking them through the process as far as 'This is what this means. This is what this means.' I would walk through the entire process with the application, explaining everything . . . running them through what things mean and what they need to do."

"Sitting with them or on the phone with them, just walking them through the process and just explaining things as we go, all the way through the FAFSA, as well as the master promissory note."

"Admissions counselors would work with them to get any admissions documentation they needed. High school diplomas, any documentation that was required for admission."

" . . . there was a form in the enrollment packet for high school transcripts or GEDs. They would put all the information at the top and sign at the bottom saying they give us permission to go and get that faxed over. Sometimes it would cost. We would use money from our petty cash . . . we did that whole process for them."

"We packaged it for them and everything. They didn't have to fill it out, they didn't have to do anything. We filled out the FAFSA, everything."

Information. Closely linked to the theme of assistance with the admissions process was the idea of providing information to the potential students. Interview subjects discussed at length how students were provided with copious amounts of information about the process of enrolling in college. They were then walked step-by-step through each part. Again, we know information asymmetry plays a role in student decision-making with regards to college choice. If for-profits are filling that information gap, it may be an important factor in enrollment of students with limited knowledge of the system.

> "Spelling it out to the student what the program was about, showing him the classes, going over the financing, what it is for tuition, things like that. Just spelling it out for him."

> "We told people about what loans would be like, the amount, Pell Grants, any other scholarships that they're looking for. "

> "They would meet them in their home along with their families. They would answer

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questions. They would then start being the liaison between the student and the financial aid office to see that all the documentation got taken care of. They would set the student up with taking entrance exams."

"We would send packets with step-by-step information. It did have to be very simplified. A lot of times we would still get a lot of questions."

"We saw a lot of first generation college students. The parents didn't go to college and really had no clue where to even begin. Then we saw some students that parents just didn't bother to help at all, students out there on their own. "

Customer service. The third theme that emerged regarding admissions in the for-profit sector was the idea of customer service. Students are viewed as customers and as such staff are focused on "selling" their product to the customer. Often times this means going the extra mile or putting forth extra effort to please the customer.

"That's what students are to us. They're our customers."

"One of the things that private schools have figured out is that customer service takes effort. You've got to be willing to go that extra little bit of hand-holding in order to please the customer."

"I think they expect as consumers, they expect that level of customer service. Being willing to put that extra time and effort into providing that customer service I think is invaluable."

"I think it goes all the way through and it starts at the beginning and it's an expectation from the beginning to the end."

Related to this idea of students expecting a high level of service, I probed the degree to which my subjects felt that the students needed the help. In other words, I was interested in the likelihood of students making it through the process without assistance. If there is a large number of students who would not be able to complete the enrollment process without the significant help offered in for-profits, that means that many students would not be served at all if not served in the for-profit sector. As we think about policy implications, this fact is an important one to consider.

"Yes. I think there was a certain percentage of students that needed the help through the process.

"They needed hand-holding. A lot of them did."

"They didn't really know. They depended on you."

"A lot of them had no idea about the process."

"They didn't have a clue."

"The majority of students could have went to a state-funded school. They just did not know how to fill out the paperwork and that's where a for-profit, you know . . ."

"These are students that would not even know what to do to start to try to get into a regular school."

"I would say like 80%, maybe even higher than that, would not be able to complete the process on their own."

Persuasion. Related to the idea of the student as customer is that of admissions as sales and the admissions counselor as salesman. As such, part of the job of the admissions staff is to sell the student on the school and persuade them to enroll.

"After the tour is when you'd bring the student back and talk about their 'hot buttons,' overcoming any objections, and then get them to sign the enrollment agreement and pay the $50 application fee."

"It's basically sales, what I do now. I think that's why I'm so good at this. That's what I had to do. People think you're an admissions counselor, and you're just checking people's ACT scores and things like that. That's not what a for-profit school does."

"A lot of these people didn't want to go to school. It's totally sales 100%."

" It's a really cut-throat sales environment. The more people you get, the more deals you close, the more people that start, the more money the school's going to make."

I found especially interesting the idea that many of the students didn't actually want to go to school and had inadvertently requested information. This implies an imposed conversion on

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the grounds that they would not have attended at all had it not been for pressure from recruiters. Over the course of conducting these interviews, the nature of the lead generation and how students were contacted was brought to light.

> "They click on a link and then, you know how, like the little education ads pop up? They don't realize if you scroll down, there's a 'no thank you.' They just start filling in their information. So, when we call them, a lot of times the people have no idea what they've clicked on. We still run through the script and try to get them to set up an appointment."

Although the primary purpose of these interviews was to establish the nature of for-profit admissions, over the course of the interviews, it became clear that how admissions is conducted is tightly linked to marketing and recruitment efforts. Admissions personnel do not conduct the marketing campaigns, but those campaigns directly affect how those in admissions approach their jobs due to the type of potential student to whom the ads appeal.

Reported abuses in the sector in relation to recruitment efforts have resulted in attempts in recent years to create policy aimed at consumer protection (such as the Gainful Employment Rule of 2012). However, the enacted legislation is often much weaker than originally intended due to extensive lobbying efforts by these institutions. Although it may be difficult if not entirely impossible to pass regulations regarding marketing efforts, future policy should more directly address the "hard sell" nature of admissions perhaps by instituting a waiting period between when a student first requests information or makes contact with an institution and when they may enroll. This would offer the student a chance to seriously consider his or her options before making a significant and potentially very costly decision.

Phase II. Surveying Students

After conducting interviews on admissions procedures, I wished to survey students in for-profits on the degree to which assistance with admissions was or was not important in their

enrollment decision. Attempting to gain access to students in for-profits in any systematic way presented much the same dilemma as that encountered with admissions personnel. I approached this in two different ways.

First, using the list I mentioned above, I contacted schools in the area directly and asked for their participation. I initially heard back from two of those schools but was unable to finalize an agreement for participation with either. Secondly, I contacted two individuals associated with the Tennessee Association of Independent Colleges and Schools (TAICS). They both work for American College (pseudonym), a school with 6 locations in Tennessee. With their help, I was given permission to survey the students at all campuses in Tennessee.

Site

American College was founded in the late 1800s in order to bring career-based education to the southeastern United States. It was founded for the purpose of training business, banking, accounting, administrative, and other professionals. Over time, programs in computers and healthcare supplemented the business curricula. It originally primarily offered certificates but has expanded its programs to offer both Associate's and Bachelor's degrees. Students at American are largely non-traditional. Many are working adults, with most being over the age of 25. They are often married and in many cases are low-income as determined by Pell eligibility. In terms of both the students it serves and the courses it offers, American College is typical of other career and technical colleges.

Population

American College has 6 locations in Tennessee enrolling approximately 2,200 students. The make-up of the student body varies somewhat depending on the location of the school. For example, one campus is located in an urban area with a high proportion of African-Americans.

This is reflected in the racial make-up of its student body; it is 95% African-American. On the other hand, one location is 90% Caucasian, again reflective of its surrounding community. In order to determine the degree to which the respondents were representative of the larger student body at each campus, student background characteristics were collected as part of the survey. Administrators at each location provided me with demographics on the student body as a source of comparison. See Appendix A for full descriptive characteristics for each campus.

Sampling

Rather than sample from the larger population, I provided all students with the opportunity to complete the survey. I provided the text of an email to be sent to students on my behalf by administration at each location. The email provided a brief synopsis of my project and asked students to complete the online survey, a link to which was included in the email. Students were then able to complete the survey at their convenience.

The email was sent to all students. The final sample consisted of 206 responses. Of the 206 responses, only 164 were used in the analysis. The sample sizes for two of the campuses were too small, and, based on data collected, not representative of the larger populations at those locations. Also, several students listed their schools as ones other than American College. I can only speculate that a student at one of the locations of American forwarded the survey to them. I eliminated those responses from the data. Descriptives of the respondents will be offered below.

Instrument

I designed the survey instrument used in the study (See Appendix). The college choice literature, specifically Hossler and Gallagher's 3-stage model of college choice, informed the questions asked. In addition to asking specific questions about each of the 3 stages of choice, I explicitly asked about the importance of help in the admissions process. I also included questions

on demographic variables in order to test the representativeness of the sample.

I went through several drafts of the survey. After my initial draft, I shared the survey with administrators at American College to assure the clarity of the questions. I made a few changes to some of my word choices based on their feedback. I then conducted a focus group with current students at one of the campuses. I had them complete the survey and then we talked through each question, making sure that their understanding of the questions and my intended meaning were one in the same. Again, I made slight changes based on feedback. Draft 3 of the survey was loaded on to Survey Monkey to be sent out to the students.

I attempted to ensure both face and content validity of my instrument. As previously stated, the questions were informed by the literature, leading to its content validity. Both students and administrators also reviewed the questions and agreed that the questions were valid on their face.

For this type of survey, reliability was harder to test. I was not using multiple items to test a larger construct so items like inter-item reliability were not relevant. However, I did pre-test the instrument using a focus group, which helps to increase both reliability and validity.

Table 1: *Descriptives*

	Campus 1 N=28	Campus 2 N=38	Campus 3 N=50	Campus 4 N=48	Overall Sample: 164
Race	100% Caucasian	58% - Caucasian 32% - AA 5% - Hispanic	24% - Caucasian 60% - AA 4% - Hispanic	25% - Caucasian 58% - AA 4% - Hispanic	46% - Caucasian 48% -AA 4% - Hispanic 2% - Other
Gender	79% - Female 21% - Male	87% - Female 13% - Male	84% - Female 16% - Male	63%-Female 37% - Male	79% - Female 21%- Male
Age	18-25: 21% 25 and up – 78%	18-30: 64% 31 and up: 30%	18-30: 36% 31-39: 38% 40 and up – 36%	18-30: 46% 31-39: 29% 41 and up: 17%	-----

The above table provides descriptive statistics for each of the locations that were surveyed and whose data was included in the final analysis. Comparison of this table to the table in the Appendix with demographic information for each of the campuses will show that the respondents were generally representative of the overall populations at each location. The numbers are not perfectly aligned but are close. The main issue was with age, as different locations provided different age ranges for their students. My survey requested a numerical age, allowing me to categorize an individual as I see fit. However, this difference in reporting from the different campuses doesn't allow for uniformity in the categories presented above. I was also given information on Pell grant eligibility (a measure of SES) but do not have enough information from the survey to determine eligibility among respondents and thus have not included that here. Additionally, I did collect information from respondents on parental education, allowing me to extrapolate the percentage of first-generation students. Of the students responding, approximately 50% had mothers with a high school education or less; that figure stood at 57% for fathers. This information was not available from campuses, which would have allowed for a comparison of the sample group with the overall student body at each location.

The findings below are presented with the understanding of the limitations of self-report data. There is the possibility that respondents have not been completely honest or forthright when answering the questions. However, the survey questions are not sensitive in nature and thus less susceptible to issues related to social desirability. There is no obvious reason why respondents would intentionally mislead in their responses.

Findings and conclusions

The primary purpose of the student survey was to ask about the importance of assistance

with the admissions process, testing the hypothesis that the difference in how admissions are conducted in for-profits helps to explain why first-generation students are overrepresented in the sector. The most startling and potentially revealing finding comes from the question intended to explore this idea. The survey asked students "Was it important to you that you had help getting through the admissions and financial aid process (had someone that could walk you through the process and let you know what had to be done, forms completed, etc.)?" Of the 164 responses, 163 answered, "Yes." Although this isn't definitive given the limitations of the scope of the project, it certainly lends support to my hypothesis and suggests the need for further exploration.

The secondary purpose of the survey was to explore the degree to which the college process for students in for-profits mirrors that of students in traditional private and public institutions. The survey consisted of questions designed to explore the three stages of choice put forth in the literature: predisposition, search, and choice. The findings from each stage will be discussed in turn. Note that the responses for each location were analyzed separately but results were consistent across locations and thus the sample as a whole will be discussed below.

Predisposition. Survey respondents were asked the open-ended question, "What was your main reason for going to college?" Their responses were then separated into various categories. The most significant finding was the number of respondents that listed children or grandchildren as their impetus for enrolling in school. Over 30% mentioned children in their response, often citing that they wanted a better life for their children or to be a good example for their children. When we think about the predisposition phase with traditional students, we often discuss the influence of parents on their children's desire to attend college. For many of these students, the reverse appears to be true.

A significant proportion, slightly less than 37%, stated career advancement as their

reason for enrolling. Given the career-oriented nature of the curriculum, this is not surprising.

Respondents offered reasons such as "I wanted a career, not just a job" or "I wanted a better job

where I wasn't living paycheck to paycheck." "I'm tired of low-paying jobs and going from job

to job."

Approximately 14% of respondents cited "having a better life" as reason for enrolling.

Many of the answers were relatively similar. "I wanted to better myself." "I wanted to provide a

better future." However, some were more detailed and personal.

> "My life sucked. I need to improve on something so I signed on to a web site
> that would help find a college for me and then Joe called and I just knew that
> this was the place for me."

> "I have been homeless before and I am a recovering alcoholic/drug addict. I
> am trying to better myself and become financial independent. I don't want to
> have to depend on anyone else for my survival and I don't want to be in a
> position to where I could become homeless, ever again."

It is likely that having a better life for many of these respondents is tied to having a better job

with better income, and thus this category is likely linked to the previous one.

Finally, a small percentage (5%) of respondents cited a particular life event as their

impetus for enrollment. These included divorce, loss of job, death of parent, and children leaving

for college. In a previous study conducted with a colleague on non-traditional college student

choice, we found that the students we interviewed often spoke of a particular life event as reason

for their enrollment. These findings support the idea that, for older students, life events may

trigger their decision to enroll in college.

As part of the questions related to the predisposition phase, I asked respondents if there

were people in their lives who influenced their decision to return to school. 78% said "yes." I

then asked them which people were influential (more than one answer was allowable). 54% cited

parents as playing an important role with that response being more common among younger

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respondents (< age 30). 48% said that children were important, echoing the findings discussed above. Both spouses/partners (40%) and friends (46%) were also cited as being influential.

Search. In this section of the survey, I asked questions about how the respondents found out about their school, where they got their information, and if they considered attending other institutions. During my interviews with admissions personnel, I asked if students were looking at other schools and if so, were they other for-profits. Admissions personnel suggested that most were not looking at other schools and if they were, they were only looking at other for-profits (as opposed to community colleges or other public or non-profit private schools). I wished to explore this idea in the student survey to see if it echoed the responses from admissions personnel. This would be a significant departure from the larger choice literature, which states that students gather information about multiple institutions and form "choice sets" before entering the final stage of the process in which they choose a school.

A significant portion of students surveyed found out about their current school from a friend or family member (38%). This is in keeping with reports from admissions personnel that many students were referred to their institution by former students. Respondents also reported finding out about the school from the Internet (28%), advertisements (18%), and from driving by the campus (14%). In terms of where potential students got their information about the school, they most often came to the school itself, gathering information from phone calls with staff or in-person visits. 52% of respondents got their information in this manner. 33% used the Internet and 14% turned to friends, family, or colleagues.

When asked if they considered attending other schools, 60% of respondents said "No." Of those that did consider attending other schools, 39% were looking at community colleges, 18% were looking at other for-profit schools, and 25% were looking at 4-year public institutions.

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The nature of the data doesn't allow me to distinguish between respondents who merely gathered some information about other schools versus those who actually applied or more seriously considered other options. If respondents gathered information about other schools and decided against them before meeting with admissions personnel, that would explain the differences between survey responses and the experience of the admissions officers.

Choice. When asked the most important thing when choosing a school, students offered a variety of responses: accreditation, affordability, class size, flexibility, job placement, length of program, location, personalized attention, programs offered, and teaching quality. Of these, location (17%), programs offered (16%), class size (23%), and flexibility (20%) were of primary importance. Location and programs offered are often found to be important in the literature on the choice phase. However, items like flexibility of schedule and length of program are unique to this sector. It may also be that location is of greater importance as working adults with families and jobs may be unwilling or unable to relocate in order to attend school.

Students were asked what other things were important in addition to what they listed as being of primary importance in the previous question. Again, flexibility and location were most popular (78% on both). Additionally, 67% selected availability of financial aid as important and 66% noted the importance of course offerings. Other items including class size (52%), length of program (56%), teaching quality (52%), job placement rates (52%), and career-oriented curriculum (47%) were also selected. These findings are in keeping with anecdotal evidence on college choice in for-profits from those in the industry. They cite flexibility and convenience as well as career-oriented curriculum as the primary reasons students choose for-profits. Additionally, these responses mirror that of the admissions personnel who often cited program availability, time to degree, and flexibility as important in student decisions.

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Finally, I asked students if there were particular people in their lives that influenced them to choose a particular school. The traditional college choice model tells us that parents and friends can be important in the decision of a student to attend a particular institution. In this case, 74% of students said "No," suggesting that, although certain people were important in the decision to attend college in general, they were not of particular import in deciding the specific college in which they enrolled. For those that answered yes, the largest proportion (41%) said that friends were important in the decision, parents (29%) to a lesser extent.

In closing, I asked respondents if there was anything else they'd like me to know about their experience picking a school and enrolling. Several of their responses are worth mentioning in full.

"The American College representative that helped me enroll and gave me information on the school was very helpful and friendly. This did have some influence on my decision."

"It was hard had not knowing the process and how it works and where it goes."

"Even though, I knew a little about the admissions and financial aid process it is extremely important to have someone there to walk me through the process."

"The guy that showed me around campus was very knowledgeable and sold it to me in a paper bag."

"It can be a very difficult process and I'm glad that there were financial Aide representatives that specialize in it, that was able to help fill out the forms and get me enrolled here at this school"

"I felt American College had a better handle on things when it came to their enrolling process. They helped me get everything I needed ready and I was not confused about anything like I was with the other schools."

Conclusion

The purpose of this study was two fold: 1) explore the admissions process in the for-profit higher education sector to determine how it's conducted 2) survey students in for-profits

on the degree to which assistance with admissions was or was not important in their enrollment decision. In both cases, the findings are compelling.

Interviews with admissions personnel confirmed that the nature of admissions in for-profit higher education is such that students are offered a significant amount of assistance with the process. In all cases, I was told that students received as much help as they needed, up to and including staff actually completing paperwork and other requirements for them.

In phase II of the study, when students were surveyed about the importance of help with the admissions and financial aid process in enrollment decisions, 99% of students said that it was important. Again, study limitations are such that this can't be generalized to other schools; however, the overwhelming response that it was important suggests the need for additional research.

Moreover, the findings related to the different phases of the choice process suggest that current models do not tell the whole story for these students. "Gathering information" is an important part of the search phase for students in traditional schools; however, 60% of respondents did not consider schools other than the one in which they enrolled. Is this because they are not given the opportunity to do so? Staff is focused on "selling" the potential student and thus wants to close the deal as soon as possible. It appears little time is given for contemplation of a fairly major decision. Moreover, college choice as a linear process is not necessarily in keeping with my findings here. Although for some students the process may proceed along a traditional route (decide to go to college, get information about different schools and apply, choose one), for others the route to college enrollment seems less clear-cut. Perhaps for those who exit the path to college enrollment after high school, deciding not to enroll or to delay enrollment, an event must occur that leads them back onto the path. This could be a large

event such as a job loss or divorce, or it could be as simple as responding (perhaps unwittingly) to an ad on the Internet. At that point, the importance of various factors may shift or disappear altogether. These findings lend support to the idea that the general models of college choice are largely inapplicable to students in for-profit schools.

CHAPTER IV

PREDICTING ENROLLMENT IN BRAZILIAN HIGHER EDUCATION:
PRE- AND POST- PROUNI

Motivation

With a GDP in 2013 of $2.246 trillion, Brazil is now the world's 7th largest economy
(World Bank, 2014). It is grouped along with Russia, India, and China (otherwise known as the
BRIC countries) as one of the most important emerging markets, deemed as such due to its
economic and demographic potential to rank among the world's largest and most influential
economies.

Brazil is now considered an upper-middle income country, having experienced
significant economic growth in recent years. GNI per capita (PPP) in 1990 was $6300 (World
Bank, 2014). That figure increased by more than 200% in 20 years, standing at $13,510 in 2010
and continuing to rise with the most recent figures from 2013 putting it at $14,750, an increase of
nearly 10% in only 3 years (ibid).

Economic development in Brazil has brought with it an increased demand for access to
higher education, as more students seek post-secondary education as a means for acquiring the
skills necessary to compete in the new economy. In 1990, only 1.5 million students were enrolled
in higher education in Brazil. That number had doubled by the year 2000 but still amounted to
only 9.8% of the population in the 18-24 age group (Durham, 2004). From 2002-2012 the
number of students attending college in Brazil doubled from 3.5 to 7 million, or 17% of the age
cohort (Horch, 2014). The government has pledged to raise that percentage to 33% by the year
2020. This push for access combined with limited public resources has resulted in the
privatization of higher education, with the Brazilian government turning to the private sector to
open access.

There are numerous types of private higher education including religious, elite and semi-elite, and demand absorbing. However, it is the demand-absorbing sector that is responsible for significant growth in enrollment in private higher education. In every country in which private higher education has become the majority sector, it is this demand-absorbing subsector that has been numerically significant. It tends to be both the largest private subsector and the fastest-growing one (UNESCO, 2009). The Brazilian case is no exception. In 2013, 5.3 million, or 75%, of Brazil's 7 million college students were enrolled in private institutions (Horch, 2014). Of that 5.3 million, 2 million were enrolled in the 10 largest for-profits. Moreover, of the approximately 2,400 universities or colleges of further education, only a tenth are public. Some of the rest are charitable, mostly Catholic, but three-quarters or 1,800 are run for-profit, including the biggest five (*The Economist,* 2012).

As discussed in previous chapters, for-profits in the U.S have come under scrutiny for being high cost and low quality and exploiting the already disadvantaged students that are disproportionately represented in the sector. Although for-profits are not entirely without controversy in Brazil, the Brazilian government has elected to adopt policies designed to leverage the for-profits to open access to low-income students specifically. In its attempt to increase enrollment to aid economic development, beginning in 2004, the Brazilian government introduced ProUni (Programa Universidade Para Todos) in the private sector to encourage enrollment in higher education by those traditionally underrepresented. This paper will examine if and in what ways this policy has affected choice of a for-profit college in Brazil. Are the factors found to be important in the choice to attend a for-profit institution in the U.S echoed in the Brazilian context?

Conceptual Framework and Literature Review

This study explores the effects of a policy meant to influence student college choice, defined as the process by which students determine if and where to go to college. By offering scholarships to low-income students to study in private universities, the hope is that those who otherwise may not attend college will enroll. There is little to no research in this area in Brazil. Therefore, I will rely heavily on the extensive body available from the United States. I will then review the limited literature that is available from Brazil. First, I will contextualize the discussion by briefly describing inequality and race in Brazil in addition to the nature of the higher education system. Understanding the important similarities and differences between the U.S. and Brazilian context will help us not only to understand the degree to which Brazilian policy may translate to the U.S. context but also potential modifications to the model developed in the previous chapter so that it may be appropriate for understanding the Brazilian case.

Background and Context

      Race and Inequality in Brazil. Although strides have been made in decreasing poverty in recent years, Brazil is still marked by high income inequality. In 2005, 21% of the country lived below the poverty line; that number had fallen to 8.9% in 2013 (World Bank, 2014). However, this figure masks the concentration of poverty in rural areas and the North and Northeast regions of the country (Ferreira, Lanjouw, & Neri, 2003) where the numbers are much higher. Additionally, wealth is still concentrated at the top of the income distribution. The highest 10% of the population hold approximately 42% of the income; the lowest 10% hold only 1% (World Bank, 2014). This is a figure that has seen little to no movement in the last 10 years.

      Race and class are closely intertwined in the Brazilian context. Similar to the situation seen in the United States, economic opportunities differ greatly across racial and ethnic lines

with non-whites being much more likely to live in poverty. In terms of the racial distribution of wealth, it is at the top rungs of the income ladder that racial inequality is most apparent. According to Telles (2004), "whites are about five times as likely as non-whites to be in the top income bracket in Brazil" (p.110). Non-whites are almost entirely absent from the middle class and above. At the other end of the spectrum, the lowest rungs of the ladder (those earning less than $200 per month) represent 52% of non-whites and only 29% of whites (ibid). These numbers point to the existence of a large underclass in Brazilian society, one made up of all skin tones, but with an overrepresentation of non-whites (Slocum, 2008). This disparity is underscored in higher education where non-whites make up 50% of the population but only 2% hold college degrees (Schwartzmann, 2004).

Historically, Brazil has been seen as a multiracial country. Colonized by the Portuguese, Brazil was originally inhabited by indigenous populations and later built from the labor of over 4 million slaves brought to the country from Africa. Today, Brazil has the largest population of African-descendants in the world, outside of the African continent (Htun, 2004).

In contrast to the segregated post-abolition United States, Brazil intellectuals encouraged racial mixing or "whitening" between the indigenous peoples, Europeans, and Africans as a solution to slavery's legacy (Skidmore, 1974; Moffet, 1996). Consequently, a population comprised of all different skin shades, phenotypes, and hair textures created the multiracial Brazilian "race" (Skidmore, 1974). The strict observation of color-based endogamy, required by law as late as 1967 in some states in the United States, never existed in Brazil (ibid).

Years of racial blending gave birth to the idea of racial democracy, defined as a society free of racism. In the early 20th century, Brazilian social scientist Gilberto Freyre introduced this idea, claiming that miscegenation between the three races (European, indigenous, and African)

created the "Brazilian race": the ambiguously brown *mestizo* (Bailey, 2009; Sansone, 2003). He

argued that because of the mixing of the races, Brazilian society consisted of all the good traits

from each of the groups and was absent of racism. Freyre idealized this notion, making racial

mixture a proud point of Brazilian history and culture. From racial democracy a new Brazilian

identity was born, encompassing people of all skin colors, all equally Brazilian (Bailey, 2009).

Rather than strict categories of white, brown, black, or indigenous, race in Brazil operates on a

spectrum with one census using 135 different racial descriptions to categorize respondents

(Moffet, 1996).

Prior to the 1950s, this idea that the existence of a large mixed race population in Brazil

meant that race relations were more harmonious and absent of racial discrimination was widely

accepted among Brazilian and foreign social scientists. However, this belief was negated through

a series of studies supported by UNESCO in the 1950s. Rather than providing an example of a

racial democracy, a contrast to the bi-racial, segregated, xenophobic U.S., these studies

highlighted the existence of racial prejudices and impediments to social mobility for non-whites

(Slocum, 2008).

Since the 1950s pressure has mounted within the "racial democracy" from international

organizations, US businesses, social scientists, and Brazilian black activists as they began to

notice the extreme inequalities between the white and nonwhite populations and question the

idea of racial democracy (Bailey, 2009; Moffet, 1996). The black and feminist social movements

gained momentum and prominence following the end of the military dictatorship in the early

1980s (Crook & Johnson, 1999). According to Telles (2004), the emergence of these movements

coincided with the availability of sociological research indicating that in every sociological

category, individuals classifying themselves as *preto* (black) and *pardo* (brown) were at the bottom with regard to education, health, and employment.

Armed with irrefutable evidence of racial inequality, the black and feminist movements gained political traction in the late 1990s. It took recognition from the international community of the existence of racial inequality and racism in Brazil for the movement to gain momentum domestically. "Black movement leaders were beginning to gain national and international attention through campaigns highlighting that blacks were the primary victims of Brazil's poverty and human-rights abuses, which included street children, trafficking in women, and the violence from the growing drug trade" (Telles, 2004, p.51).

Up to this point, there was a great deal of resistance both from the government and the public to implementing policies that address racial inequality. However, it was at the World Conference on Racism, held in Durban, South Africa, in September 2001 that President Fernando Henrique Cardoso began to heed the concerns of the international community (Bailey, 2009). It was at this international conference among heated debate that it was recommended to the government that they should use racial quotas as a means to increase the access of blacks to public universities (Htun, 2004). Shortly thereafter, racial quotas for public higher education were initiated by the Rio de Janeiro state legislature, requiring the State University of Rio de Janeiro and University of Brasilia to have a 40% minimum quota for brown and black students. Individual universities continued to adopt quota systems in the following years and in August of 2012, approximately a decade after the first racial quota implementation, the Brazilian president signed, after an almost unanimous vote, the Law of Social Quotas requiring 50% of all placements at federal public universities be held for underrepresented students (Romero, 2012).

Policies related to education are always constructed within a given economic, political, and social context. The adoption of quotas and affirmative action in Brazil is no exception. The introduction of racial quotas and affirmative action in Brazilian universities was situated within an overall push to improve, reform, and democratize education as well as a climate of political activism and racial consciousness.

Higher Education System. Prior to the early 1800s, the only higher education institutions in Brazil were private, associated with a religious order such as the Jesuits or the Benedictines. According to Schwartzman (2004) this is due primarily to the reluctance of the Portuguese to invest in the educational system of Brazil prior to the relocation of the royal family during the Napoleonic war for fear of revolts by an educated populace (Cunha, 2000).

The first publicly funded institutions were constructed in the southern part of the territory, in Sao Paulo and Rio de Janeiro. Until 1889, only 24 higher education institutions existed; over the next 30 years, 56 new, mostly private schools were established. These were largely professional schools offering degrees in areas such as law and medicine (Schwartzman, 2004). The first federal university was established in 1939 in Rio de Janeiro, along with a number of Catholic universities (ibid). Because higher education developed late in Brazil, the wealthy sent their children to Portugal and other European nations for university. This resulted in the perception that only children from the upper class should attend college, a view of higher education with implications for the structuring of access to universities.

The idea that higher education is an endeavor of the elite is one that has influenced and continues to influence the structuring of access to higher education (Slocum, 2008). Today, Brazil's higher education system is made up of a variety of public and private institutions (Neves, 2009). Brazil's public universities (categorized as federal, state, or municipal), are supported by

state and federal funding, are academically competitive, contain the least amount of seats, and are by law tuition free. Schwartzman (2004) states that, "the federal universities that exist today in all state capitals are natural passage points for the local elites" (p.3). The structuring of access in this manner begins at the primary and secondary level where a divide has been created between public and private, with the majority of students relegated to the low quality public sphere and the right to high quality education reserved for a small elite who can afford private schooling and then gain access to the prestigious public institutions of higher education.

Public schools in Brazil serve only a small portion of students. The higher education landscape in Brazil is dominated by private universities, which enroll as much as 80% of students. Private schools are less competitive and offer access to students that are unable to gain entrance to public institutions. However, fees are beyond the reach of many students and are higher for better institutions and more rewarding majors, a fact that suggests the private sector may actually be contributing to an increase in inequity (McCowan, 2007).

Table 1. *Number of Institutions of Higher Education in Brazil by Administrative Category*

Year	Total	Administrative Category			
		Federal	State	Municipal	Private
2012	2,416	103	116	85	2,112

Source: MEC/INEP

Before entering higher education in Brazil, students must have already selected their field of study, and they must apply to specific programs. Admission is linked to a high stakes test required of all high school graduates wishing to enter a particular program at a specific university. Until recently, all applicants to Brazil's public universities had to choose their desired major and desired school and take that school's specific *vestibular,* a test that differed by each

program. Students applying to multiple schools had to take the vestibular at each institution. This level of competition favors those privileged enough to better prepare for the entrance exam both by attending a high quality secondary school and often by taking a preparation course. For example, the 2011 *vestibular* held at the University of Campinas (Unicamp), one of the most important public research universities in Brazil, had approximately 57,000 candidates for slightly more than 3,300 spots, meaning only 6% of the applicants received a spot (Knobel, 2011).

More recently, universities have standardized their exams in the form of the ENEM (National high school exam), resulting in cost savings for both students and universities (Downie, 2010). However, this change continues to be controversial, and the most prestigious universities such as the University of Sao Paulo (USP) and the University of Campinas still prefer their own tests.

Public Policy Solutions. The idea of the university as being reserved for elites is in conflict with the more democratic view of education that has developed over the past several decades (Galdino & Pereira, 2004). Because higher education is seen as a means of social mobility and economic advancement, efforts to expand access to the poor and racially underrepresented segments of society are challenging the historical notion of who should go to college in Brazil.

One of the major issues in Brazilian higher education has always been the lack of available spaces in public institutions. Brazilian public schools maintain strict control over the number of admissions spots available in a given year. Brazil has never been able to meet demand, and thus, since the 1930s, the private sector has filled much of the need.

A presidential decree released in April of 2007 called for drastic university reform. The decree is known as the Program of Support and Plans for Restructuring and Expansion of the

Federal Universities (REUNI). REUNI requires an expansion of student capacity in the federal university system by increasing student-professor ratios from 12:1 to 18:1 and increasing university persistence and graduation rates. It also calls for the restructuring of undergraduate programs to be more general and flexible and to allow movement between both majors and institutions; the current structure is extremely rigid (MEC, 2007). Those who oppose the plan say that it necessarily entails increased teaching loads, and there is fear that this will lead to more part-time teaching staff and a simultaneous de-emphasis on research. There are also concerns that the mandates won't be funded adequately, affecting quality, and that the decree encroaches on university autonomy (Slocum, 2008).

Another significant challenge in Brazilian public higher education is the under-representation of non-whites and low SES students within universities. As noted in the previous discussion of race and inequality, race and social class are tightly intertwined in Brazil. Entrance into public universities is linked to social status and thus the majority of students are both white and from higher SES groups. The racial representation of university students does not match the racial representation of the overall population. The white population, which makes up the overwhelming majority of the university population, is only 53.7% of the overall population in Brazil (Petruccelli, 2004). The numbers for those who complete university degrees are even more striking. Of those who finish, 83% are white; the remainder are black, mestizo, Asian, or indigenous (ibid).

To address these concerns, affirmative action based quotas and scholarships have been implemented in various forms across Brazil at both public and private institutions. Prior to the early 2000s, the majority of policy was focused on addressing these discrepancies via class-based policies only. As the climate shifted and there was an increasing recognition of and desire to

decrease racial inequality, conflict erupted over how to address both race and class issues. Some

programs attended to racial inequality exclusive of class issues, while others attempted to tackle

both by creating quotas for non-whites and those attending public schools as well as by placing

income limits on those who benefit from said policies (Slocum, 2008). These policies were also

instituted at different institutional and governmental levels, including universities, university

systems, states, and the federal level. This remains the case even after the introduction of the

Law of Social Quotas in 2012, as it deals only with federal universities. The attempt by most

schools to employ affirmative action policies speaks to both the underrepresentation of certain

racial groups and to issues of class.

The national scholarship program aimed at increasing the number of both racially and

economically underrepresented students attending private universities in Brazil known as

University Program for All (ProUni) was implemented in 2005 and distributes scholarships

based on race and income criteria as well as type of secondary school attended. The scholarship

is awarded based on a student's score on the ENEM. Students that meet a designated score are

offered a full or partial scholarship (based on family income as a portion of the minimum wage)

to attend an approved private university where the ENEM is accepted in lieu of a campus

vestibular exam. ProUni scholarships are awarded based on family income and racial

representation in each state according to the Brazilian census. For example, if the state in

question is 35% white, 30% black, 25%, mestizo, and 10% indigenous, the distribution of

scholarships would mirror those percentages. Students must also have attended a public

secondary school or a private school on full scholarship.[5] This a good deal for both the students

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[5] For a more detailed description of the functioning of the ProUni program, please refer to the program
website, http://siteprouni.mec.gov.br/.

that benefit and the institutions they attend. In exchange for granting a certain number of scholarships to low-income students, institutions are granted tax exemptions from certain federal taxes, an important factor driving growth in the private postsecondary education sector.

In addition to the ProUni program, the Financing Fund for Postsecondary Students (FIES) is a program of the Ministry of Education that provides financing to students enrolled in private institutions. It is akin to both the Pell Grant and subsidized Stafford loan programs in the U.S. that offer financing for low-income students. Students enrolled in approved on-campus programs may apply for funding. The program finances 50 to 100% of the tuition fees based on a student's gross monthly income. During the program and grace period students pay no more than R$50 per quarter. There is a grace period of 18 months and students have a repayment period of up to three times the length of the program plus 1 year. FIES was first created in 1999 but has since undergone significant changes including a reduction in the interest rate to 3.4%, further facilitating student access to financing.[6] The largest for-profit institutions in Brazil such as Kroton Educacional SA and Ser Educacional SA receive roughly 50% of their revenue from FIES; this does not include revenue from the ProUni program, which would increase that figure. This is reminiscent of the U.S case in which many for-profits receive as much as 90% of their revenue from Title IV federal financial aid.

College Choice in the U.S. and Brazil

United States college choice literature. The college choice literature is robust. In addition to the large literature in education examining college choice and enrollment, a large body of work on college choice exists across the social science disciplines. Much of the research

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[6] For more information on the FIES program, please refer to the program website, http://sisfiesportal.mec.gov.br/fies.html.

on college enrollment patterns is founded upon the "human capital" model advanced by Gary Becker (1993). According to human capital theory, one decides to enroll in college as an investment in future earning power. Individuals calculate the value of attending college by comparing costs with expected income gains, and they make the decision that will maximize their utility over the long term. To understand enrollment behavior according to this model, one must look at factors such as tuition levels, student financial aid, average wages for high school graduates, and the difference in lifetime earnings between high school and college graduates.

Economists agree, however, that non-pecuniary factors also play a major role in the college enrollment decision. Sociologists' models of status attainment have suggested a number of student background variables that join with economic factors to influence college decisions (Jackson, 1982). These include both personal traits (e.g., academic ability) and interpersonal factors, such as the level of encouragement a student receives from parents and teachers.

Within the economic and sociological models outlined above, the factors affecting enrollment in college can be divided into three general types: (i) those specific to individual students, such as academic achievement and parental education levels, (ii) those specific to a given institution such as size and reputation, and (iii) those best categorized as an interaction between a student and a given institution (i.e., school location). Students' enrollment decisions can be viewed as jointly determined by their individual characteristics and the institutional or societal conditions that prevail.

Within the education literature, models of college choice incorporate these concepts from both economics and sociology. Hossler & Gallagher's (1987) three-stage model of the college choice process is the most widely used in attempting to understand how students decide if and where to go to college. It includes the phases of predisposition, search, and choice. It has been

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modified to explore the choice process specifically for both students of color (Solorzano, 1992; Mickelson, 1990; Kao & Tienda, 1998) and students from low-socioeconomic backgrounds (Conley, 2001; Keane, 2002; Kaufman & Gabler, 2004). However, research on the college decision-making process focuses almost exclusively on traditional students in non-profit private or public 4-year colleges and universities. No attempts have been made to use the existing models to determine whether the factors influencing the college choice of students attending traditional institutions also pertain to students in for-profits. Thus, although the literature related to college choice will be reviewed in order to inform the models used in this study, no studies that explicitly explore college choice in for-profits currently exist. This is an important caveat for this study, as the large majority of Brazilian private institutions operate as for-profit entities.

Individual factors

Individual factors most commonly associated with comprehensive models of college choice include student background characteristics (Hanson & Litten, 1982; Jackson, 1982; Callender & Jackson, 2008; Cho et al, 2008; Harker, Slade, & Harker, 2001; Perna & Titus, 2004), aspirations (Chapman, 1981; Hossler, Braxton, & Coopersmith, 1989; Jackson, 1982) and educational achievement (Hanson & Litten, 1982; Jackson, 1982). More specifically, student background characteristics include family income, parental education level, gender, age, race/ethnicity, and socioeconomic status (often a combined measure consisting of both income and parental education level). Measures of aspirations may include both student aspirations in terms of highest degree achieved as well as parental education aspirations with regards to their children. Educational achievement can be measured in various ways. High school GPA and test scores from college entrance exams (SAT or ACT) are frequently used. Also, some nationally representative data sets include scores from achievement tests, usually in math and language arts.

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These may be used as indicators of achievement in high school; however, because they are not considered in the college admissions process, they are less useful than alternative measures such as GPA.

Institutional factors

The second group of factors important in student college choice is institutional characteristics. According to Hossler & Gallagher (1987), it is during the search phase that students determine which characteristics of institutions are important. Students seek information and use it to develop institutional choice sets. These may include items such as entrance standards (Callender & Jackson, 2008), course program offerings (Desjardins, Ahlburg, & McCall, 2006; Johnson & Stewart, 1991; Sanders, 1990), quality (Cabrera & LaNasa, 2000), majors (Callender & Jackson, 2008), size, etc. Although no empirical evidence exists to support why students choose for-profit colleges, scholars and practitioners in for-profit post-secondary education suggest that it is due to specific institutional characteristics that set these schools apart from their non-profit and public counterparts. Specifically, they cite flexibility (Traub, 1997; Soley, 1998; Blumenstyk, 2000; Bailey, Badway, & Gumport, 2001; Lee & Topper, 2006), convenience (Traub, 1997; Soley, 1998; ECS, 2001), high level of customer service (Traub, 1997; Soley, 1998; ECS, 2001), decreased time to degree (Bailey et al, 2001), and relevant curriculum (Bailey et al, 2001; Zamani-Gallaher, 2004).

In Brazil, specifically, course offerings are of particular importance. For-profits in Brazil have traditionally offered technically and vocationally oriented majors not found in the public sector. However, as is the case in the U.S., the for-profits in Brazil continue to expand course offerings to look more like those of a public institution. Similarly, public schools now offer courses once found only in for-profits. This again raises the importance of entrance exam scores

for determining choice of institution as more and more majors are offered at both types of schools.

Interaction

In addition to characteristics of individual students and particular institutions, items that can be characterized as an interaction between the student and a given institution are important in college choice. Location would be a chief example, as students may desire to stay within a certain distance from home (Callender & Jackson, 2008; DesJardins, Dundar, & Hendel, 1999; Goenner & Pauls, 2006; Reay, Davies, David, & Ball, 2001; Stewart & Post, 1990).

In addition to location, financial variables such as net cost (St. John, 1990; 1991) and receipt of financial aid (Chapman, 1984; St. John & Starkey, 1995) play a role in student decisions. Depending on the level of resources of a given student, the cost of a given institution may play a lesser role in their decision-making. Moreover, the impact of costs and aid are more deeply felt by students from low socioeconomic backgrounds and students of color (Dynarski, 2003; Ikenberry & Hartle, 1998; Lillis, 2008; McPherson & Shapiro, 1998; Paulsen & St. John, 2002).

Although the U.S. literature provides an overview of the process, it is also important to examine the scant literature available on Brazilian college choice as it provides a picture of the unique aspects of access to university in Brazil.

Brazilian college choice literature. Very little research specifically explores or focuses on any portion of the college choice process in Brazil. However, there are a few studies focused on other aspects of university education that include some questions pertaining to the college choice process. Much of the literature surrounding university students looks at the experiences of students already in the system in terms of racial atmosphere (Contins, 2004; Marchado &

Barcelos, 2001), implementation of affirmative action policies (Emerson dos Santos, 2006; Teles dos Santos, 2006), and university response to the needs of quota students once they enroll (Emerson dos Santos, 2006). This study, conversely, focuses on the factors that lead students to enroll in the first place.

Research in Brazil shows that many of the factors that are important in cultivating the predisposition to enroll in college are similar to those found in the U.S. However, because of the way admissions are conducted in Brazil, there are differences in how students experience the choice process.

One study that is particularly helpful in exploring the college choice process in Brazilian university students is Contins' (2004) study of current university students. The focus of the study is on financial challenges, race relations, and perceived difficulties in staying enrolled for students entering their university on affirmative action or quota scholarships. However, she does ask a series of questions about student backgrounds, how many vestibular exams they attempted, and why they chose their university or major.

Contins finds that most students are first-generation college students and that most of their parents did not finish secondary school. They came to university in order to be able to get a better job and hence better income and a better life. The majority of students attempted at least two vestibular exams but got into their first choice. Prestige, name recognition, proximity to home, and scholarship availability were cited as reasons for attending a particular school. They cited the choice of a particular major as due to interest in the subject, importance of professionals in a particular field, and encouragement of friends. Additionally, participants stated that at the time of application they thought they had a better chance of acceptance.

Another study that does not focus on college choice specifically but that asks questions about students' educational trajectories is Machado's (2004) study of students at a public state university from 1997-2001. Students in this study spoke of the importance of families, good teachers, and mentors in developing and supporting educational trajectories that lead to college. These findings are in line with the literature in the United States, which has repeatedly found both parents and teachers/guidance counselors to be important in students' decisions to go to college.

Finally, De Souza e Silva's (2003) study focuses on the educational and life experiences that lead to college attendance among residents of a slum in Rio de Janeiro who went on to graduate from Brazilian universities. The majority of his interview subjects indicate that significant individuals, experiences, and organizations played a role in their educational career; he also reiterates the importance of personal determination and having an education plan. Although this study was published relatively recently, the interview subjects attended college in the late 1970s and early 1980s, decades before implementation of quotas or affirmative action based scholarships.

Unlike the aforementioned literature, which is concerned primarily with outcomes in terms of access and student experiences once they are in college, my study aims to explore the degree to which these policies designed to affect the choice process of students, specifically by encouraging enrollment by those who otherwise would not enroll, are actually effective. Historically, enrollment in higher education in Brazil has been tightly tied to family income, race, and private secondary school attendance. Have these policies designed to break that tie been successful in doing so? The confidential data, which allows for the tracking of Brazilian students from high school into university using ENEM and ENADE scores, although limited in

terms of the number of years available, offer the opportunity for a preliminary look at the impact of the policy.

Research Questions

In my study I use a unique dataset to explore the variables that predict enrollment in for-profit Brazilian higher education both before and after the implementation of the ProUni program. Historically, enrollment in higher education in Brazil has been tightly tied to income, race, and private secondary school attendance. Students from (largely white) wealthy families attended private secondary schools and then went on to public universities free of charge. Those from low-income families attended under-resourced public secondary schools; they were then unable to gain admission to the free public universities and had to turn to the private fee-paying sector or opt out of higher education altogether. The introduction of the ProUni program was meant to overcome this financial barrier to college access by providing these students with either a 50% or 100% scholarship, depending on family income. However, we know the process of college choice to be a complex one, as evidenced by the previous chapters. Financial concerns are only one of the elements that factor into a student's decision whether or not to attend college. Thus, it's important to explore the degree to which this policy is actually mitigating the influence of the above-mentioned factors on likelihood of enrollment. The questions I ask here, then, are as follows:

- Prior to the introduction of ProUni, what student level factors predicted enrollment in for-profit private higher education in Brazil?

- After the introduction of ProUni, are the same factors (specifically those related to student background) still predictive of enrollment?

Hypotheses

I hypothesize that the introduction of the ProUni program will not lessen the effect of student level factors predicting enrollment in higher education. Because of the multi-faceted nature of college choice, simply making college more affordable without addressing systemic issues in K-12 education which result in lack of academic preparedness for post-secondary education, will not lessen the effect of race and income on the likelihood of student enrollment.

Methods

Data

I am working with three merged datasets that combine information from both the ENEM and the ENADE exams. These datasets allow for one pre-ProUni observation and two post-ProUni observations. The ENADE data are gathered yearly for a representative sample of students in selected institutions in the first and last year of a selected program (First years have completed 7-22% of coursework while final years have completed at least 80% [MEC, 2007]). The ENADE assesses both general knowledge, such as Brazilian history, and subject-specific knowledge questions for students in a given major. Additionally, inspectors visit schools to collect information on physical, pedagogical, and human resources. Students also provide background information.

The ENEM or National Assessment of Secondary Education is a non-mandatory, standardized exam administered to high school students in Brazil. The examination covers the humanities, natural sciences, language, and mathematics. It was originally introduced in 1998 as a means to evaluate the quality of Brazilian education. However, it has since come to be used both as a national evaluation exam and an admissions test for entrance into university. In addition to the portion of the exam that covers specific subject matter, ENEM data includes a

socioeconomic questionnaire that provides extensive background information on each student. The ENEM is also used to determine eligibility for scholarships through the ProUni program. In 2013, 7.1 million Brazilians sat for the exam.

This data allows me to track students from high school into college. It does not allow me to determine the path of students not in the ENADE dataset. Because the ENADE data is comprised of a representative sample, students not in the ENADE data may have enrolled in college but not be in the sample. For this reason, my findings are limited only to the students for whom I have information and cannot be generalized to all Brazilian students. This analysis serves as a starting point for further exploration only.

Variables

My dependent variable is student enrollment in a for-profit institution. Using a variable included in each dataset, I have created a binary variable, enrolled in a for-profit or not. Students who enrolled in a for-profit institution are coded as 1. Everyone else is coded as zero (public and non-profit). As was the case in paper 1, for the purposes of this study, I am only interested in whether a student enrolls in any for-profit institution. I am not interested in exploring the nuances between a for-profit versus a public as opposed to a for-profit versus a non-profit or the different variations of each. The reason for this is due to a larger goal of this volume: to compare the findings in papers 1 & 3 and suggest the degree to which a universal model of college choice is appropriate. The grouping of institutions in the United States (2-year, 4-year, public, private, etc.) is not the same as how universities are categorized in Brazil (federal, state, municipal, non-profit, for-profit) and thus performing a probit analysis on a categorical dependent variable would disallow me from comparing the two studies. In future iterations of the paper, I intend to perform probit analyses in order to further probe

the predictors of enrollment in a for-profit school versus various alternatives.

My primary independent variables of interest are those that have traditionally been tied to enrollment in higher education in Brazil: race and income. Public secondary school status is also an important variable to consider. However, because eligibility for ProUni is dependent on enrollment in a public high school, rather than controlling for high school type, I have limited the analysis to those who attended a public high school. Due to the eligibility requirements for ProUni with regards to ENEM score (must get 45% or more correct and not score a zero on essay), this was also included as a binary variable, coded 1 if the student was eligible and zero if not. The income variable has also been recoded to reflect the cutoff points for eligibility for the program (1.5 times minimum wage or less for full scholarship, 3 times or less for half). The variable is categorical and does not exactly match these specifications. Instead, there will be two categories that include eligible students (1-2 times and 2-5 times) and one that doesn't (5 times or more). If the program is working as intended we would expect to see differences at both income and score cutoffs pre- and post- ProUni. Additionally, I have recoded the race variables as binary for inclusion in a logistic regression. They are as follows: white, black, brown, Asian, and indigenous. I have omitted black as the comparison category.

In addition to these variables of primary interest, I will also include additional student background variables. These include female, household size, both mother's and father's level of education, home ownership as additional wealth indicator, high school degree type, and major. I have also included an interaction term, interacting Black (the largest minority group) and overall ENEM score in order to explore what part of the black distribution is more likely to go private. Female is binary, coded 1 if a student is female and 0 otherwise. Household size is categorical but has been treated as continuous. For both mother's and father's education level, I have

condensed the categories so that high school graduate and above is the highest category and has been omitted as the comparison group. Home ownership is binary, coded 1 if the student's family owns its home and 0 otherwise. The remaining variables are categorical; all categories have been converted to individual binary variables so that they can be included in a logistic regression. Traditional high school diploma has been omitted as the comparison group in high school degree type and administration (a major with low costs of delivery often offered by for-profits) was omitted as the comparison group for major.

Limitations of the data are such that institutional variables and variables I have previously described as those that are an interaction between a student and an institution are largely not included in the models. However, I am able to include dummy variables for the state each institution is located in, which is important due to the uneven nature of availability of higher education across Brazil. Although the omission of these variables limits our picture of the overall importance of various factors in college choice in Brazil, if the relative importance of these factors has not changed greatly over the time period under study, it should not affect our interpretation of the differences in the size of the effect of student level characteristics prior to and following the implementation of the ProUni program.

Statistical Models

My dependent variable of interest is binary (enrolled in a for-profit institution or not) and thus I utilized logistic regression for all models. The data consists of students who sat for the ENEM both while they were in high school and after they had already graduated. It is reasonable to assume that certain variables may impact students differently based on this fact, hence why I ran the models in Paper 1 separately for those who delay enrollment. With this in mind, I subset the data into these two groups. I originally intended to present both the full model and the two sub

models for each time period. However, the third dataset only includes the variable for public high school for those in high school at the time of the test. Again, this is important because it is required for determining eligibility for the ProUni program. Therefore, in terms of comparison, I can only present the results for students in high school at the time of the ENEM exam. I have run one model for these students for each time period available. The model is presented below. It is identical for each period with the exception of the inclusion of some majors and states due to omission for small numbers of observations that perfectly predict success or failure or differences in majors present in the data across time periods (see Table 2). $P\ (y=1|x) = P\ (y=1|X_1, X_2, X_3, X_4, X_5\ X_6\ X_7, X_8, X_9, X_{10}, X_{11}, X_{12}, X_{13}, X_{14}, X_{15}, X_{16}, X_{17}, X_{18}, X_{19}, X_{20}, X_{21}, X_{22}, X_{23}\ X_{24}, X_{25}, X_{26}, X_{27}, X_{28}, X_{29}, X_{30}, X_{31}, X_{32}, X_{33}, X_{34}, X_{35}, X_{36}\ X_{37}\ X_{38}, X_{39}, X_{40}, X_{41}, X_{42}, X_{43}, X_{44}, X_{45}, X_{46}, X_{47}, X_{48}, X_{49}, X_{50}, X_{51}, X_{52}, X_{53}, X_{54}, X_{55}, X_{56}, X_{57}, X_{58}, X_{59}, X_{60}, X_{61}, X_{62}\ X_{63}, X_{64}, X_{65}, X_{66}, X_{67}, X_{68}, X_{69}, X_{70}, X_{71}, X_{72}\ X_{73}, X_{74}, X_{75}, X_{76}, X_{77}, X_{78}, X_{79}, X_{80}, X_{81}, X_{82}\ X_{83}, X_{84}, X_{85}\ X_{86}, X_{87}, X_{88}, X_{89}, X_{90}, X_{91}, X_{92}\ X_{93}, X_{94}, X_{95}, X_{96}, X_{97}, X_{98}, X_{99}, X_{100}, X_{101}, X_{102}\ X_{103})$, where $X_1 - X_3$ are income categories, X_4-X_7 are racial categories, X_8 is female, X_9 is ENEM eligibility, X_{10} is household size, X_{11}-X_{16} are mom's education, $X_{17} - X_{22}$ are Dad's education, X_{23} is own home, X_{24}-X_{25} are diploma types, X_{26}-X_{75} are majors, X_{76}-X_{102} are states, and X_{103} is the race and ENEM score interaction term.

Descriptive Statistics

Table 2 provides descriptive statistics for variables used in the study including the dependent and independent variables of interest. The statistics are presented for each time period. Below, I will further describe the sample in terms of variables of interest by addressing each in turn.

Enrollment in a For-Profit School

The samples varied in terms of size, the first being nearly 6,500 and the final more than 47,000. Regardless of sample size, however, the majority of students were enrolled in for-profit institutions (Figure 1). The exact proportion varied from 62% of the sample in 2003, up to 69 % in 2004, and down to 44% in the 2005-06 data. These numbers, together with the portion of students in the non-profit private sector, are in line with figures that put the percentage of students in Brazil's higher education system that are in private institutions at greater than 70%.

Race

Although there were slight changes in the racial makeup of the samples over time, they remained relatively stable. Whites made up the majority of the sample in each year, actually increasing their representation from 54% in 2003 to 60% in 2005-06. Of the minority groups, those categorized as brown seemed to fair the best, increasing their share from 20% in 2003 to 29% in 2005-06. The representation of Black and Asian students rose by 1% and 2% respectively; Indigenous students held steady at 1% of the sample each time. Again, these numbers are reflective of the underrepresentation of minorities in higher education in Brazil.

Income

The representation of students from different income groups is perhaps where the most interesting change took place across the samples. Students from the lowest income group (up to 2 times the minimum wage) saw their representation increase from 27% to 31% of the sample. Those from the highest income group (5 times the minimum wage and above) simultaneously saw their portion of the sample increase from 27% to 35%. However, those in the middle group saw their portion of the sample drop from almost half in 2003 (46%) to only 34% of the sample in 2005-06.

Results and Analysis

Prior to running the full models for each year of data, I ran simple models using just the primary variables of interest, income and race. I have presented the results of those regressions in Table 3. The income categories are significant but not across the board. Generally speaking, those in the middle-income group are more likely to enroll than the comparison group (those with the highest income). Conversely, those in the lowest income group are less likely to enroll.

In terms of the effect of race, in the simple models being white is a highly significant predictor of enrollment in the first two years but is no longer significant in the third. On the other hand, the other racial groups are largely insignificant in the first two years but being categorized as Brown or Asian results in a decreased likelihood of enrollment in the third year of data.

What is most interesting, however, is the small amount of explanatory power of the simple model. All three explain a very small portion of the variance in enrollment (<5%) with the greatest explanatory power coming from the third year of data. This suggests that perhaps the historical connection between race and income and entrance into higher education is perhaps driven by something other than those factors. In the following analysis I further specify the model to see what those might be.

Impact of Student Characteristics on Enrollment in a For-Profit Institution before ProUni

I only had one year of data prior to the implementation of the ProUni program. Although the program was not rolled out until 2005, 2004 ENEM scores could be used to apply for the program, making my second two datasets post-ProUni. My first research question asked what student characteristics were predictive of enrollment in a for-profit institution prior to this policy going into effect. I was specifically interested in the findings for both race and income due to their historical significance in Brazil (See Table 3). Surprisingly, in the ENEM 2003 data,

income is not a statistically significant predictor of enrollment in a for-profit institution. Although the sign on the coefficients is negative, suggesting the lower income groups are less likely to enroll than their high-income counterparts, the effects are not statistically different from zero.

The findings for race were also interesting if not as surprising. In the pre-ProUni data, being categorized as White made a person more likely than their Black counterpart to enroll in a for-profit. This was highly statistically significant at the .001 level. Being Brown also made one more likely to enroll. Asian and indigenous were not found to be significant.

Given the limited explanatory power of the simple model along with the lack of significance of income, it is worth mentioning the variables that proved to be highly significant in the model. The first of these is major. Of the 50 majors in the data, 39 of them were statistically significant predictors that a student was less likely to enroll in a for-profit versus an administration major (the omitted category). It is also worth mentioning that the coefficients on major are all relatively large. As mentioned previously, for-profits in Brazil often offer majors that are less expensive to deliver (such as administration) and this fact coupled with the system of college admission in Brazil in which one must apply to a particular course of study likely result in major choice playing a significant role in enrollment behavior.

Additionally, state in which an institution was located played a significant role. Of the 26 states included in the model, 16 proved to be statistically significant. Much like major, the coefficients were relatively large and negative. Significant disparities exist in access to higher education institutions based on location in Brazil. For example, most public institutions are in large urban centers. Therefore, if a student is from a rural state and unable to move to pursue higher education, a for-profit may be their only option. This is the opposite of the situation in the

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U.S. in which for-profits locate themselves in cities in order to attract urban dwellers that are seeking convenience. Large public universities in the U.S. are often located in small college towns.

Finally, ENEM score was included, constructed as a binary variable, ProUni eligible or not, as we would expect to a see a difference in significance of the cutoff point prior to and after the program's implementation. In 2003, a statistically significant relationship existed between eligibility for ProUni based on test score and probability of enrollment; those that scored highly enough to be eligible for the program had in been in effect at the time were more likely than those below the cutoff to enroll in a for-profit.

It's also worth mentioning what is not significant as it sits in direct contrast to the U.S. findings. Parental education is not a significant predictor of enrollment in a for-profit institution at any level for either parent.

Impact of Student Characteristics on Enrollment in a For-Profit Institution after ProUni

At this point, I only have data for two years after the implementation of ProUni. Therefore, I discuss these findings with the caveat that they are very preliminary and only designed to offer an initial look at the results of the program. Additionally, the Law of Social Quotas affecting federal universities in Brazil was passed in 2012 and will certainly interact with ProUni in affecting college choice for racial minorities. As more data becomes available, these findings should be revisited.

In the ENEM data from 2004 and 2005-06, income became a significant predictor of enrollment in for-profit institution. In 2004, both groups with students eligible for ProUni based on family income were more likely than their counterparts from the highest income group to enroll in a for-profit. In 2005-06, only the middle-income group (2 to 5 times the minimum

wage) was statistically significant. This is an encouraging finding, suggesting that ProUni is working as designed and is resulting in more low-income students enrolling in for-profit institutions.

Similarly to results on income, the results for race are mixed in the years post ProUni but encouraging. In the 2004 data, being White is no longer a statistically significant predictor of enrollment, meaning that white students are not more likely than Black students to enroll in a for-profit (ceterus paribus). Similarly, being Brown is still statistically significant but the size of the effect is smaller. In 2005-06 data, White is again statistically significant and only slightly smaller in its effect than in 2003. However, Brown is no longer a significant predictor. Again, these results are encouraging. They suggest that, for Black students especially who are woefully underrepresented in Brazilian higher education when compared with their overall proportion of the population, ProUni is helping to encourage their enrollment.

Post –ProUni, the variables that did play a large role in explaining enrollment behavior remained the same. Both major and state were highly significant with relatively large coefficients. Again, this points to important elements of the higher education landscape in Brazil that affect college choice in a way not present in the U.S. case. This is something to keep in mind as we attempt to develop a more universal model of college choice as these differences, especially in relation to admission to particular majors, hold true for many countries.

Finally, the variable constructed to signify eligibility for ProUni based on ENEM score remained highly statistically significant but it increased in terms of the size. It increased steadily from .44 in 2003 to .49 in 2004 .50 in 2005-06. This is further evidence that ProUni is driving eligible students into the for-profits.

Discussion and Implications

In answer to my first research question, I found that race was a statistically significant predictor of enrollment in for-profit higher education. Both White and Brown students were more likely than their Black counterparts to enroll in for-profits. This is not exactly as anticipated, as I expected White students to be less likely to enroll than their Black peers. Additionally, I found that income was not a significant predictor. It was significant for the most part in the simple regressions, but once additional variables were added, income no longer mattered. This is an unexpected and important finding given the perceived historical relationship between income and college enrollment in Brazil.

What I did find to be important prior to implementation were both major and state. These variables were both highly significant and relatively large in terms of size. Unless the ProUni program is changing both what students choose to major in (as well as what program they score well enough in to qualify for admission) and location, we would expect these relationships to remain after the implementation.

The eligibility variable was also important prior to the implementation. Those who scored above the cutoff were more likely to enroll than those who didn't. Post-ProUni we would hope to see a stronger effect of scoring above the eligibility cutoff, indicating a positive effect of the program.

My second research question asked if these relationships changed after the implementation of the ProUni program. The answer was yes - and no. Income became a highly statistically significant predictor of enrollment, with those in income groups eligible for the program becoming more likely to enroll in a for-profit than their higher income counterparts. The next logical question is what might this mean? If ProUni were working as intended, we

would hope to see a positive relationship between being in an income group eligible for the program and enrollment, with lower income students who are eligible for the program taking advantage of it and enrolling in a for-profit. This is a positive finding that supports the idea that the program is working as intended.

The relationship between income and enrollment changed after the implementation and the same was true for race. Although White students in 2005-06 were still more likely than their Black peers to enroll in for-profits, the size of the effect was lessened if only slightly. However, Brown students in 2005-06 were no longer more likely than their Black peers to enroll in a for-profit, suggesting that ProUni was at a minimum helping Black students catch up to other minority groups if not Whites. Perhaps this is due to more knowledge about the program on the part of White students. If White students in the sample are more likely to be in better-resourced public schools, perhaps they are more likely to know about and take advantage of the program.

Finally, post-ProUni the variables that were important remained the same. College major and state were both highly significant predictors of enrollment in a for-profit. In fact, these two items seem to account for most of the explanatory power of the model. Moreover, eligibility for the program based on ENEM score did make a student more likely to enroll in a for-profit. This was true both before and after the program rollout, but the size effect increased afterwards.

These findings stand in stark contrast to the findings from paper 1 and suggest that significant differences exist between college choice as we understand it in the U.S. context and the process as it is experienced by students in Brazil. Although institutional isomorphism does exist and certain countries and regions (the European Union, specifically) are moving towards a more Americanized version of higher education, it is not yet appropriate to develop a universal model of college choice.

In sum, ProUni is a program designed to lessen the historical relationship in Brazil between college attendance, race, income, and secondary school type. However, analysis of data prior to ProUni suggests that, at least for public high school students, these relationships are not exactly what they may seem, with income being an insignificant predictor of enrollment. That said, an initial look at the results one and two years after its implementation does suggest that it is resulting in an increase of low-income students in the for-profit sector. Those from lower income groups become more likely than their higher income peers to enroll. Much like the concept of race in Brazilian culture, the relationship between race and enrollment in for-profits is complicated. White students remain more likely to enroll than their Black counterparts, albeit to a slightly lesser extent. However, these results are preliminary and limited and should be viewed as such. The nature of the data does not allow for the full specification of the model, including secondary school and financial characteristics, which may give us a better picture of how the program is working. As Brazil continues its attempt to broaden educational access and correct disparities in the representation of minority and low-income groups in higher education, it will be exceedingly important that more analysis be completed as data becomes available.
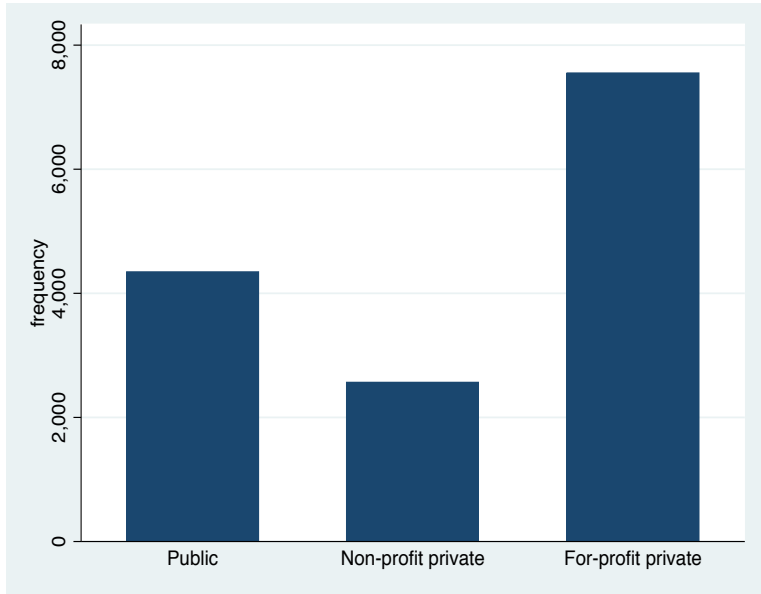
ENEM 2003
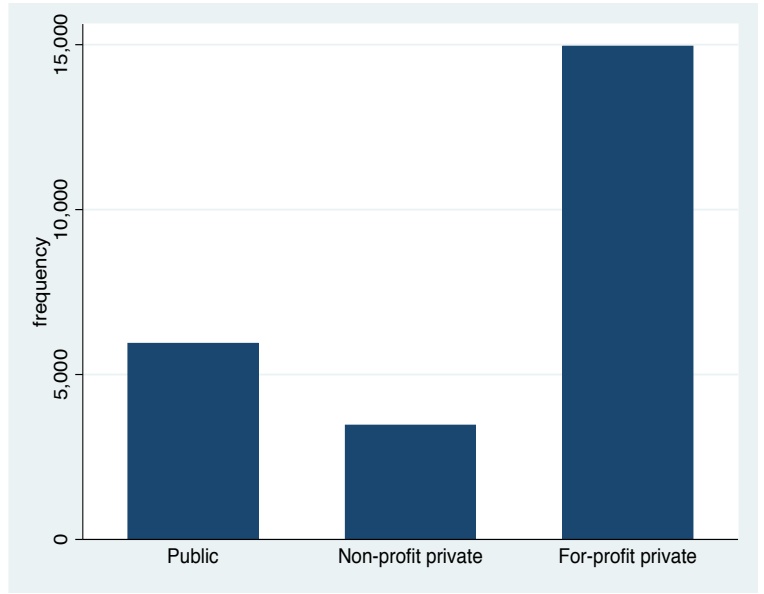
ENEM 2004
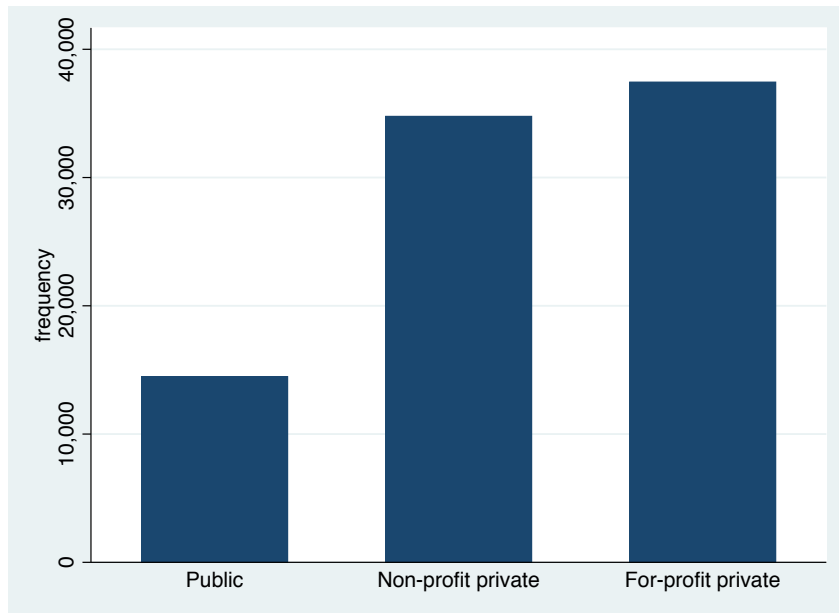
ENEM 2005-06

Figure 1. Enrollment by sector across time periods

Table 2: *Descriptive Statistics of Variables in Analysis*

	(1) ENEM 2003	(2) ENEM 2004	(3) ENEM 2005-06
Income up to 2 times minimum wage	0.27*** (0.01)	0.29*** (0.00)	0.31*** (0.00)
Income 2 to 5 times minimum wage	0.46*** (0.01)	0.44*** (0.00)	0.34*** (0.00)
Income 5 times or more than minimum wage	0.27*** (0.01)	0.27*** (0.00)	0.35*** (0.00)
White	0.54*** (0.01)	0.52*** (0.00)	0.60*** (0.00)
Black	0.06*** (0.00)	0.06*** (0.00)	0.07*** (0.00)
Brown	0.20*** (0.01)	0.21*** (0.00)	0.29*** (0.00)
Asian	0.01*** (0.00)	0.01*** (0.00)	0.03*** (0.00)
Indigenous	0.01*** (0.00)	0.01*** (0.00)	0.01*** (0.00)
Female	0.68*** (0.01)	0.67*** (0.00)	0.69*** (0.00)
ENEMelig	0.64*** (0.01)	0.50*** (0.00)	0.43*** (0.00)

Household Size

1	0.00***	0.00***	0.08***
	(0.00)	(0.00)	(0.00)
2	0.05***	0.06***	0.21***
	(0.00)	(0.00)	(0.00)
3	0.17***	0.19***	0.40***
	(0.00)	(0.00)	(0.00)
4	0.36***	0.36***	0.23***
	(0.01)	(0.00)	(0.00)
5	0.25***	0.24***	0.08***
	(0.01)	(0.00)	(0.00)
6	0.09***	0.08***	------
	(0.00)	(0.00)	
7	0.06***	0.06***	--------
	(0.00)	(0.00)	
Owns home	0.83***	0.81***	0.80***
	(0.00)	(0.00)	(0.00)

Father's Education

No Study	0.03***	0.03***	0.03***
	(0.00)	(0.00)	(0.00)
Lower Primary	0.30***	0.30***	0.22***
	(0.01)	(0.00)	(0.00)
Upper Primary	0.19***	0.20***	0.15***
	(0.00)	(0.00)	(0.00)
Some High School	0.08***	0.08***	0.07***
	(0.00)	(0.00)	(0.00)
High School Graduate & >	0.35***	0.34***	0.49***
	(0.01)	(0.00)	(0.00)
Unknown	0.05***	0.05***	0.04***
	(0.00)	(0.00)	(0.00)

Mother's Education			
No Study	0.03***	0.03***	0.03***
	(0.00)	(0.00)	(0.00)
Lower Primary	0.26***	0.26***	0.19***
	(0.01)	(0.00)	(0.00)
Upper Primary	0.20***	0.21***	0.15***
	(0.00)	(0.00)	(0.00)
Some High School	0.08***	0.08***	0.07***
	(0.00)	(0.00)	(0.00)
High School Graduate & >	0.42***	0.41***	0.56***
	(0.01)	(0.00)	(0.00)
Unknown	0.01***	0.01***	0.01***
	(0.00)	(0.00)	(0.00)
High School Degree Type			
Regular	0.89***	0.89***	0.90***
	(0.00)	(0.00)	(0.00)
Technical	0.11***	0.11***	0.10***
	(0.00)	(0.00)	(0.00)
Major			
Administration	0.14***	0.16***	0.17***
	(0.00)	(0.00)	(0.00)
Law	0.04***	0.05***	0.10***
	(0.00)	(0.00)	(0.00)
Vet Medicine	0.01***	0.01***	0.02***
	(0.00)	(0.00)	(0.00)
Dentistry	0.01***	0.00***	0.03***
	(0.00)	(0.00)	(0.00)
Math	0.03***	0.05***	---
	(0.00)	(0.00)	--
Media	0.04***	0.05***	0.08***
	(0.00)	(0.00)	(0.00)

Languages	0.07***	0.09***	----
	(0.00)	(0.00)	----
Medicine	0.01***	0.01***	0.04***
	(0.00)	(0.00)	(0.00)
Economics	0.01***	0.01***	0.01***
	(0.00)	(0.00)	(0.00)
Physics	0.00***	0.01***	---
	(0.00)	(0.00)	----
Chemistry	0.01***	0.02***	---
	(0.00)	(0.00)	---
Biology	0.05***	0.06***	-----
	(0.00)	(0.00)	----
Agronomy	0.02***	0.01***	0.03***
	(0.00)	(0.00)	(0.00)
Pharmacy	0.02***	0.02***	0.03***
	(0.00)	(0.00)	(0.00)
Psychology	0.03***	0.01***	0.05***
	(0.00)	(0.00)	(0.00)
Pedagogy	0.08***	0.08***	---
	(0.00)	(0.00)	---
Architecture	0.01***	0.01***	----
	(0.00)	(0.00)	----
Accounting	0.01***	0.02***	0.02***
	(0.00)	(0.00)	(0.00)
Nursing	0.05***	0.03***	0.09***
	(0.00)	(0.00)	(0.00)
History	0.03***	0.03***	----
	(0.00)	(0.00)	-----
Design	0.01***	0.01***	0.02***
	(0.00)	(0.00)	(0.00)

Audiology	0.00***	0.00***	0.01***
	(0.00)	(0.00)	(0.00)
Nutrition	0.02***	0.01***	0.04***
	(0.00)	(0.00)	(0.00)
Tourism	0.02***	0.02***	0.03***
	(0.00)	(0.00)	(0.00)
Geography	0.02***	0.02***	----
	(0.00)	(0.00)	----
Philosophy	0.00***	0.00***	-----
	(0.00)	(0.00)	-----
Physical Education	0.08***	0.03***	0.09***
	(0.00)	(0.00)	(0.00)
Physical Therapy	0.03***	0.01***	0.05***
	(0.00)	(0.00)	(0.00)
Social Work	0.02***	0.01***	0.02***
	(0.00)	(0.00)	(0.00)
Theatre	0.00*	0.00***	0.00***
	(0.00)	(0.00)	(0.00)
Computer Science	0.04***	0.06***	-----
	(0.00)	(0.00)	-----
Music	0.00***	0.00***	0.00***
	(0.00)	(0.00)	(0.00)
Zoology	0.01***	0.00***	0.01***
	(0.00)	(0.00)	(0.00)
Occupational Therapy	0.00***	0.00***	0.01***
	(0.00)	(0.00)	(0.00)
Social Sciences	0.00***	0.00***	----
	(0.00)	(0.00)	----
Biomedical	0.01***	0.01***	0.03***
	(0.00)	(0.00)	(0.00)

Engineering 1	0.00***	0.00***	---
	(0.00)	(0.00)	---
Engineering 2	0.01***	0.01***	----
	(0.00)	(0.00)	---
Engineering 3	0.00***	0.00***	---
	(0.00)	(0.00)	---
Engineering 4	0.01***	0.01***	----
	(0.00)	(0.00)	----
Engineering 5	0.00**	0.00**	----
	(0.00)	(0.00)	----
Engineering 6	0.01***	0.01***	----
	(0.00)	(0.00)	----
Engineering 7	0.01***	0.01***	-----
	(0.00)	(0.00)	-----
Engineering 8	0.00***	0.00***	------
	(0.00)	(0.00)	-----
Archivology	0.00*	0.00**	0.00***
	(0.00)	(0.00)	(0.00)
Library	0.00***	0.00***	0.00***
	(0.00)	(0.00)	(0.00)
Executive Secretary	0.00***	0.01***	0.00***
	(0.00)	(0.00)	(0.00)
Normal	0.02***	0.02***	0.02***
	(0.00)	(0.00)	(0.00)
Rad tech	0.00***	0.00***	0.01***
	(0.00)	(0.00)	(0.00)
Agritech	0.00	0.00*	0.00***
	(0.00)	(0.00)	(0.00)
State			
Rondonia	0.01***	0.01***	0.01***
	(0.00)	(0.00)	(0.00)

Acre	0.00**	0.00***	0.00***
	(0.00)	(0.00)	(0.00)
Amazonas	0.01***	0.01***	0.01***
	(0.00)	(0.00)	(0.00)
Roraima	0.00***	0.00***	0.00***
	(0.00)	(0.00)	(0.00)
Para	0.01***	0.01***	0.01***
	(0.00)	(0.00)	(0.00)
Amapa	0.00***	0.00***	0.00***
	(0.00)	(0.00)	(0.00)
Tocantins	0.01***	0.01***	0.01***
	(0.00)	(0.00)	(0.00)
Maranhao	0.01***	0.00***	0.01***
	(0.00)	(0.00)	(0.00)
Piaui	0.00***	0.00***	0.01***
	(0.00)	(0.00)	(0.00)
Ceara	0.02***	0.01***	0.01***
	(0.00)	(0.00)	(0.00)
Rio Grande do Norte	0.01***	0.01***	0.01***
	(0.00)	(0.00)	(0.00)
Paraiba	0.01***	0.01***	0.01***
	(0.00)	(0.00)	(0.00)
Pernambuco	0.02***	0.03***	0.02***
	(0.00)	(0.00)	(0.00)
Alagoas	0.00***	0.00***	0.00***
	(0.00)	(0.00)	(0.00)
Sergipe	0.00***	0.00***	0.00***
	(0.00)	(0.00)	(0.00)
Bahia	0.04***	0.04***	0.04***
	(0.00)	(0.00)	(0.00)

Minas Gerais	0.13***	0.14***	0.15***
	(0.00)	(0.00)	(0.00)
Espirito Santo	0.02***	0.02***	0.03***
	(0.00)	(0.00)	(0.00)
Rio de Janeiro	0.07***	0.07***	0.07***
	(0.00)	(0.00)	(0.00)
Sao Paulo	0.33***	0.33***	0.32***
	(0.01)	(0.00)	(0.00)
Parana	0.09***	0.10***	0.10***
	(0.00)	(0.00)	(0.00)
Santa Catarina	0.03***	0.05***	0.04***
	(0.00)	(0.00)	(0.00)
Rio Grande do Sul	0.07***	0.06***	0.05***
	(0.00)	(0.00)	(0.00)
Mato Grosso do Sul	0.03***	0.02***	0.02***
	(0.00)	(0.00)	(0.00)
Mato Grosso	0.02***	0.02***	0.02***
	(0.00)	(0.00)	(0.00)
Goias	0.03***	0.03***	0.03***
	(0.00)	(0.00)	(0.00)
Distrito Federal	0.01***	0.01***	0.01***
	(0.00)	(0.00)	(0.00)
For-profit Private			
	0.62***	0.69***	0.44***
	(0.01)	(0.00)	(0.00)
Observations	6497	14194	46791
df_m			
df_r	6496	14193	46790
F			

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

*Note:** In the data for ENEM 05-06, household size has 5 only categories. The last is 5 or greater. Some majors are not present in ENEM 2005-06. They are denoted with ----.

Table 3: *Results of Simple Regression on Income and Race*

	(1) ENEM 2003	(2) ENEM 2004	(3) ENEM 05-06
Income up to 2 times minimum wage	-0.25***	0.08	-0.25***
	(0.07)	(0.05)	(0.03)
Income 2 to 5 times minimum wage	-0.02	0.11*	0.14***
	(0.06)	(0.04)	(0.03)
White	0.49***	0.14***	0.01
	(0.06)	(0.04)	(0.04)
Brown	0.08	0.03	-0.10*
	(0.07)	(0.05)	(0.04)
Asian	0.10	0.04	-0.21**
	(0.21)	(0.16)	(0.07)
Indigenous	0.25	0.57*	0.04
	(0.31)	(0.24)	(0.15)
Constant	0.29***	0.63***	-0.10*
	(0.07)	(0.05)	(0.04)
Observations	6657	14537	29888
df_m	6.00	6.00	6.00
F			

Table 4. *Results of Logistic Regression on Dependent Variable= Enrollment in For-Profit Higher Education*

	(1) ENEM 2003	(2) ENEM 2004	(3 ENEM 05-06
Income up to 2 times minimum wage	-0.22	0.30***	-0.003
	(0.11)	(0.09)	(0.08)
Income 2 to 5 times minimum wage	-0.12	0.24**	0.16**
	(0.08)	(0.07)	(0.06)
White	0.55***	0.07	0.52*
	(0.09)	(0.08)	(0.23)
Brown	0.26*	0.20**	0.44
	(0.10)	(0.09)	(0.23)
Asian	0.35	0.03	0.56*
	(0.28)	(0.26)	(0.26)
Indigenous	0.43	0.76	0.56
	(0.38)	(0.39)	(0.41)
Black=0 # ENEMScore	-0.05***	-0.06***	-0.05***
	(0.00)	(0.00)	(0.00)
Black=1 # ENEMScore	-0.04***	-0.05***	-0.04***
	(0.00)	(0.00)	(0.01)
Female	0.05	-0.13*	-0.10*
	(0.07)	(0.06)	(0.05)
ENEMelig	0.44***	0.49***	0.50***
	(0.10)	(0.08)	(0.07)
Household Size	-0.04	-0.006	-0.05*
	(0.03)	(0.02)	(0.02)
Owns home	0.09	0.04	-0.02
	(0.08)	(0.07)	(0.06)
Law	-0.13	0.24	0.23***

	(0.20)	(0.15)	(0.07)
Vet Medicine	-2.61***	---	---
	(0.28)	----	-----
Dentistry	-2.83***	----	----
	(0.33)	----	----
Math	-1.60***	-1.44***	----
	(0.20)	(0.13)	----
Media	0.25	-0.04	0.42***
	(0.24)	(0.16)	(0.08)
Languages	-1.31***	-1.13***	----
	(0.16)	(0.11)	----
Medicine	-3.80***	----	---
	(0.65)	----	----
Economics	-1.41***	-1.85***	-1.19
	(0.37)	(0.25)	(.12)
Physics	-2.54***	-2.29***	-----
	(0.48)	(0.26)	----
Chemistry	-2.05***	-1.55***	----
	(0.26)	(0.19)	----
Biology	-1.30***	-0.77***	----
	(0.17)	(0.12)	----
Agronomy	-3.24***	-----	----
	(0.29)	-----	----
Pharmacy	-2.45***	----	----
	(0.19)	-----	----
Psychology	-0.87***	-0.13***	-0.19
	(0.26)	(0.20)	(.10)
Pedagogy	-1.14***	-0.75**	----
	(0.16)	(0.11)	----
Architecture	-0.99*	1.19***	----
	(0.42)	(0.46)	----

Accounting	-0.47	-1.27***	-0.73
	(0.30)	(.18)	(0.10)
Nursing	-2.97***	----	----
	(0.17)	-----	----
History	-1.31***	-1.50	----
	(0.20)	(0.14)	----
Design	0.38	-0.47	-0.27
	(0.56)	(.30)	(0.11)
Audiology	-3.40***	------	----
	(0.50)	------	----
Nutrition	-2.83***	-----	----
	(0.22)	-----	----
Tourism	-0.76**	-0.46***	-0.48
	(0.28)	(0.22)	(0.10)
Geography	-1.77***	-1.54***	----
	(0.23)	(0.16)	----
Philosophy	-1.01*	-1.3***	----
	(0.43)	(.32)	----
Physical Education	-2.83***	-----	----
	(0.15)	-----	----
Physical Therapy	-1.93***	----	----
	(0.19)	----	----
Social Work	-3.55***	----	----
	(0.26)	----	----
Theatre	-2.76*	-2.21	-2.39*
	(1.31)	(0.47)	(0.27)
Computer Science	-0.52**	-.02	----
	(0.21)	(0.14)	----
Music	-3.63***	-3.41***	-3.14
	(0.66)	(.41)	(.20)

Zoology	-3.96***	----	----
	(0.50)	----	----
Occupational Therapy	-2.48***	-----	----
	(0.60)	----	----
Social Sciences	-1.86***	-1.39***	----
	(0.50)	(0.39)	----
Biomedical	-2.06***	-3.01***	-3.43**
	(0.29)	(0.19)	(0.08)
Engineering 1	-2.06***	-0.44	----
	(0.43)	(0.40)	----
Engineering 2	-1.14**	-0.35	----
	(0.38)	(0.30)	----
Engineering 3	-1.40**	-0.38***	-----
	(0.48)	(0.46)	----
Engineering 4	-1.94***	-1.22***	----
	(0.30)	(0.24)	----
Engineering 5	-3.98***	-1.7*	----
	(1.10)	(0.82)	----
Engineering 6	-0.75	0.23	----
	(0.43)	(0.35)	----
Engineering 7	-1.30***	-.21	----
	(0.36)	(0.29)	----
Engineering 8	-2.41***	-2.00***	----
	(0.49)	(.33)	----
Archivology	----	-----	----
	-----	-----	----
Library	-4.57***	-3.8***	-3.30***
	(1.08)	(0.41)	(0.25)
Executive Secretary	-0.82	-1.22***	-1.21 ***
	(0.46)	(0.29)	(0.17)
Normal	-0.13	.02	-0.11

	(0.32)	(0.25)	(0.15)
Rad tech	----	----	----
	----	----	----
Agritech	----	-----	----
	----	-----	----
Rondonia	-0.13	-1.51***	-0.17
	(0.46)	(0.42)	(0.28)
Acre	-2.01*	-2.72***	0.00
	(0.86)	(0.50)	(.)
Amazonas	-1.15*	-2.19***	-0.54
	(0.49)	(0.44)	(0.31)
Roraima	-0.81	-1.70***	-1.07**
	(0.76)	(0.51)	(0.36)
Para	-1.46***	-2.21***	0.63*
	(0.41)	(0.38)	(0.29)
Amapa	-0.44	-0.40	2.24**
	(0.72)	(0.72)	(0.83)
Tocantins	-2.42***	-3.31***	-0.95**
	(0.47)	(0.40)	(0.33)
Maranhao	-3.30**	-2.28***	0.71
	(0.45)	(0.54)	(0.49)
Piaui	-2.26***	-3.09***	-0.35
	(0.72)	(0.48)	(0.30)
Ceara	-2.62***	-3.23***	-0.18
	(0.40)	(0.39)	(0.28)
Rio Grande do Norte	-2.45***	-3.23***	-0.83**
	(0.45)	(0.38)	(0.27)
Paraiba	-2.12***	-2.54***	-1.16***
	(0.54)	(0.41)	(0.29)
Pernambuco	-2.70***	-3.13***	-0.26
	(0.37)	(0.34)	(0.23)

Alagoas	-2.51***	-4.26***	0.18
	(0.68)	(0.59)	(0.50)
Sergipe	-0.33	0.08	1.14
	(0.58)	(0.87)	(0.60)
Bahia	-0.94**	-0.99**	0.57*
	(0.34)	(0.35)	(0.24)
Minas Gerais	-0.02	-0.32	0.97***
	(0.32)	(0.33)	(0.21)
Espirito Santo	0.05	-0.62	0.57*
	(0.39)	(0.37)	(0.25)
Rio de Janeiro	-0.35	-0.30	0.74***
	(0.33)	(0.34)	(0.22)
Sao Paulo	0.44	0.01	0.80***
	(0.31)	(0.32)	(0.20)
Parana	-0.79*	-2.10***	-0.82***
	(0.32)	(0.32)	(0.21)
Santa Catarina	-0.26	-1.38***	-0.42
	(0.35)	(0.34)	(0.22)
Rio Grande do Sul	0.38	0.18	0.61**
	(0.33)	(0.35)	(0.23)
Mato Grosso do Sul	-1.22***	-2.34***	-1.00***
	(0.35)	(0.35)	(0.23)
Mato Grosso	-1.22**	-2.65***	-0.43
	(0.37)	(0.35)	(0.23)
Goias	-1.26***	-2.57***	-0.95***
	(0.35)	(0.34)	(0.22)
Mother had no formal schooling	-0.04	0.14	-0.15
	(0.22)	(0.18)	(0.19)
Mother finished lower primary	-0.10	0.08	-0.09

	(0.09)	(0.08)	(0.07)
Mother finished upper primary	0.10	0.10	0.04
	(0.09)	(0.08)	(0.07)
Mother had some high school	0.10	0.10	-0.03
	(0.12)	(0.11)	(0.09)
Don't know Mother's education level	-0.36	-0.24	-0.23
	(0.30)	(0.26)	(0.24)
Father had no formal schooling	-0.14	0.05	-0.13
	(0.20)	(0.17)	(0.16)
Father finished lower primary	0.09	0.09	-0.04
	(0.09)	(0.08)	(0.07)
Father finished upper primary	0.03	0.18*	0.15*
	(0.09)	(0.08)	(0.07)
Father had some high school	-0.02	0.10	0.14
	(0.12)	(0.11)	(0.09)
Don't know Father's education level	0.03	0.23	0.01
	(0.17)	(0.15)	(0.12)
Technical HS Diploma	0.03	-0.12	0.19
	(0.10)	(0.10)	(0.11)
Constant	3.92***	5.94***	3.73***
	(0.47)	(0.44)	(0.38)
Observations	6462	12072	24155
df_m	103.00	89.00	69.00
df_r			
F			

Standard errors in parentheses $p < 0.05$, ** $p < 0.01$, *** $p < 0.00$
Note: --- denotes dropped from model due to perfect prediction

CHAPTER V

CONCLUSION

More students than ever are going to college. The change in the nature of the global

economy has made post-secondary education an economic imperative in most cases. The public

sector cannot absorb all the demand, and thus, most countries have turned to the private, and

often largely for-profit, sector to open access. Although certain regions/countries have seen more

growth than others, almost none have been immune to this shift in the higher education

landscape.

The papers in this volume have focused on the students that have chosen to access a

college education in this way. As more choose to do so, even amongst a climate of growing

controversy regarding the for-profit model, it is important that we understand how and why they

have made this decision and the degree to which this process aligns with traditional models of

college choice. Given that traditional models are based on students entering college directly after

high school and attending public or non-profit private institutions, it's naïve to assume that the

non-traditional students that make up the vast majority of for-profit schools' student bodies

experience choice in the same way.

The goal of this volume, then, has been to gain a preliminary understanding of the choice

process for this group of students in order to serve as a starting point for further exploration. The

specific takeaways from each of the papers will be addressed in turn.

Paper 1 identified the student characteristics that are predictive of enrollment in for-profit

higher education. It found that being categorized as low-income and having first-generation

status both predict enrollment in for-profit higher education. This finding holds true across racial

groups. However, it did identify differences in predictors for the sub-populations under study.

Specifically, it found that first-generation status is not significant for those who are >30 or who delay enrollment (two items which are necessarily highly correlated). In fact, for those who are over 30, which is the large majority of students enrolled in for-profits, only low-income status is predictive of enrollment. The other variables in the model appear to have no effect on likelihood of enrolling. This speaks to a larger question about the degree to which traditional models can be used to understand college choice in this context. They appear to tell us very little.

Paper 2 explored a potential explanation for one of the findings in Paper 1. It sought to determine both what admissions processes are like in for-profits and the degree to which they play an important role in student decisions to enroll. Although a small-scale study, the findings were compelling. First, admissions and financial aid personnel in for-profits confirmed that they offered as much assistance and/or information as necessary to potential students. In some cases, this went as far as completing the paperwork for them. Furthermore, in the student survey 99% of respondents answered "yes" in response to whether or not help with admissions was important in their decision to enroll. Moreover, when asked about other elements of the choice process, the findings in terms of what students stated was of importance differed significantly from the understanding offered by traditional models. This supports findings from Paper 1, which suggest that, specifically for older students, current models of college choice offer little in the way of understanding the process as experienced by these students.

Finally, Paper 3 looked at this same phenomenon but in the Brazilian context. Prior to the ProUni program, for students in public schools, income was not a significant and positive predictor of enrollment in higher education. This relationship changed after the implementation of the ProUni program, with those eligible based on income becoming more likely to enroll. Race was somewhat significant prior to implementation and remained so afterwards but to a

lesser extent. Although this is a very preliminary look at the effect of the policy, it is encouraging. More recent data may offer a better picture of the success of the program. Moreover, certain variables such as major and state, which were not relevant in the U.S. context, were found to be important in modeling college choice in Brazil. These differences suggest that a universal model of college choice is not yet appropriate.

Although the individual findings of each paper are interesting, there are several broader takeaways from this volume that I find to be of a greater importance. First, discussions with both students and those working in the for-profit sector suggest that many would not attend college at all if they did not attend a for-profit institution. In some cases, because admissions representatives are focused on "selling" a student rather than advising them, it's likely that a number of students are railroaded into enrolling. This likely contributes to some of the bad outcomes (drop out rates, loan defaults, etc.) for students in for-profits. I think we can agree that it would be better that these students never enrolled in the first place. But, for students where this is not the case, the question then becomes not only one of access but access to what. As a society, would we prefer that they forego college rather than attend a for-profit school? Maybe so. What does that mean for national campaigns designed to increase the number of individuals with college degrees given the fact that there is limited public capacity?

Furthermore, my findings suggest some validity to the ideas of those in the for-profit sector regarding why students choose them. They are attracted to the characteristics of for-profits, many of which do not exist in traditional institutions. If we do want these students to go to college, but we don't want them in the for-profit sector, doesn't this necessarily suggest changes be made in non-profit private and public schools to accommodate these students? Institutional inertia in higher education is a very real thing and it seems unlikely that we will

witness an overhaul to the traditional model to accommodate non-traditional students; even if this were possible, I'm not sure that it would be desirable. We have seen an increase in distance learning, often as a cost-saving measure as funding to higher education has decreased, but is this something we want implemented on a large scale? Will that not result in a separate set of issues related to quality?

Additionally, when we consider the public vs. private dichotomy as it relates to regulation, we must take into account the fact that these *private* institutions get up to (and in most cases, as much as the law allows) 90% of their income from Title IV financial aid. Shouldn't that dictate an increased level of oversight? How does this affect our ideas of the privatization of higher education? What does it mean when the private sector is almost entirely publicly funded? What exactly constitutes a *private* institution?

Furthermore, a discussion about consumer protection for students considering or currently enrolled in for-profits is needed. In other markets such as mortgages, automobile sales, etc. regulations dictate that the buyer be warned of the dangers and be given an acceptable amount of time to change his/her mind without penalty. For-profits are educational institutions but since they behave like traditional businesses, why shouldn't they be subject to the same regulations, especially given the scope of their participation in federal financial aid programs? If not for the good of the students accruing substantial debt in order to attend these schools, then for the public good, as it is the taxpayers who are left holding the bag when students default on their loans.

Finally, information matters. Students that know little to nothing about navigating the college admissions process are at an extreme disadvantage. Our system is a complex one and admissions and financial aid personnel at for-profits are all too happy to fill that information

void. For-profits that operate in a predatory manner do so by capitalizing on the lack of knowledge on the part of potential students. I'm not sure what the answer is to this particular problem. When we are dealing with lack of knowledge with high school students, we have the option to implement campaigns and workshops, etc. at the school or district level; this doesn't work with the students drawn to for-profits as most have long since left high school. How then do we go about educating a disparate group of people on their educational options?

Looking forward, we must ask different questions. The focus has been on outcomes, with attention paid to high dropout rates, etc. among students in for-profits. However, students in for-profits are more likely from the outset to be at risk for failure than their peers in non-profit privates or public institutions. Shouldn't we then focus on the degree to which these institutions serve these at risk students better (or worse) than their traditional counterparts? Rather than comparing these institutions more generally, we should think about the success rate of similar students in traditional institutions.

The for-profit model has been around for hundreds of years and is unlikely to go anywhere. With that in mind, we must make smart policy, designed to serve both the students that attend these institutions and society at large. Exactly what that policy consists of remains to be seen.

APPENDIX

List of Tennessee Schools

Anthem Career College

Argosy University

Art Institute of Tennessee

Concorde Career College

Daymar Institute

DeVry University

Fortis Institute

Fountainhead College of Technology

ITT Technical Institute

International Academy of Design and Technology

Kaplan Career Institute

Lincoln College of Technology

National College of Business and Technology

North Central Institute

Remington College

Southeastern Institute

Strayer University

University of Phoenix

Virginia College

West Tennessee Business College

INTERVIEW PROTOCOL

Admissions and Financial Aid Personnel:

Thank you for participating in my study of for-profit higher education institutions in Tennessee. Just a reminder, I am interested in better understanding—from your experience and perspective the processes involved in….
And I am happy to pause at any time during the interview. Stop the interview, if you like, and of course you can decline to answer a question at any time.

This should take about 45 minutes.

No school names or individual names from this study will be used or shared, ever. All your answers will be completely anonymous.

I. Initial Questions (individual's role and responsibilities, length of time at institution):

We'll begin by talking generally about your roles and responsibilities when working in a for-profit school or schools.

- How many FP colleges or schools have you worked in? (If more than 1, the following questions will need to be asked for each institution)
- What were the approximate years that you worked at (insert institution name)?
- Did you move positions within the school while you were there? What was each of your job titles? Start with the first one you held.
- Please tell me a bit about your job responsibilities beginning with your first position at (insert institution name here)?
- What would a typical day in each position look like? Walk me through the tasks you would complete on any given day. May want to probe following the description of the typical day (why? How?)

II. Information about the School

      A. Mission/Market (each question will need to be asked for each school if they worked at more than one)

I want to learn a bit more about the school(s) – mission, who attends, etc.

How would you describe the mission of the school/institute you worked for? Sometimes a mission is formal—written across official documents on placed in prominent places. Was that the case in your school? If so, did you feel that the formal written statement was the same as the mission as it was presented to you as an employee? If not, what was the actual mission-- as you saw it?

      B. Demographics

Could you provide a demographic snapshot of the school? For example, how many students are white? African American? Other race?

What would you say the average age of students is? Are they of traditional college-going age (18-24) or older?

What about gender? What % of the students would you say are female?

What % of the students would you say work full-time while in school?

Is it common for the students to have children (under 18 and living at home)?

Are many of the students 1st generation college students?

How would you describe the economic backgrounds of the students?

How would you describe the academic backgrounds/abilities of the students?
How many students have a GED rather than a traditional high school diploma?

So, now, let's talk about student motivations and college interests.
III. Predisposition

In your experience, what were students' main reasons for going to college?
Did they have experience with other institutions (i.e. – were they first time enrollees in college or had they enrolled elsewhere before)?

Were there particular people (family; friends; employers; mentors) in their lives that influenced their decision *to attend college*?

IV. Search

So, how did students find out about the school? Where do they get their information? What sources?

Are there individuals (family; friends; people from their workplace; employers; mentors) in their lives who influence *which* schools they consider attending?

Does the school reach out to particular *potential* students? If so, how does the school do that? Advertising (billboard; TV; radio; bus stops; internet)? Targeted mailings? Why that group/demographic? Are those potential students a good fit for the programs at the school for some reason?

V. Choice

Students probably hear about other schools and other options. Why do you think students select *this* school? What are some specific elements that attract students to this school? Are students often considering several schools and choosing between them?

Are there individuals in the student's life who influence them to choose this specific institution?

Does knowledge of *cost* of the school and availability of financial aid play a role? Location and proximity to home or work or child care?

Does the individual student's academic ability play a role in the choice? How so?

Okay, so let's move to the admissions processes at your institution. Can you describe the admissions process? What are admissions or enrollment officers looking for, generally; specifically? How do they assess a potential enrollee? Who decides who is admitted?

Do students receive assistance with the admissions process (filling out forms, ordering transcripts, etc.)?

What are the steps involved in applying for financial aid?

In your experience, do students *need* help navigating the admissions and financial aid process? What are some areas that create confusion? Stumbling blocks?

Do students receive assistance with completing these steps? For example, with FAFSA? So, are students able to complete the process without assistance?

VI. Wrap Up
Is there anything else that I should know about admissions that I didn't ask about?

BREAKDOWN OF DEMOGRAPHICS BY CAMPUS

CAMPUS 1
79% are female.
21% are male.

8% are African-American.
90% are Caucasian.
1% are Hispanic
0% are two or more races.
1% did not respond.

18-25 – 15%
Over 25 – 85%

64% are Pell Eligible
36% are not Pell Eligible

CAMPUS 2
93% are female
7% are male

39% are African-American.
50% are Caucasian.
5% are Hispanic
3% are two or more races.
3% did not respond.
We have no international students.

70% are single.
27% are married.
3% did not respond.

89% Pell Eligible
11% Non-Pell Eligible

58% are between the ages of 18-30
42% are between the ages of 31-50

CAMPUS 3
81% are female
18% are male.
1% did not respond.

61% are African-American.

26% are Caucasian.
6% are Hispanic
2% are two or more races.
1% is Asian
4% did not respond.

30% students are 40 and over
34% students are 30-39
36% students are 18-29

88% pell eligible
12% not pell eligible

CAMPUS 4
26 % male
74 % female

57% are African-American.
22% are Caucasian.
9% are Hispanic.
1% are Native Hawaiian or Other Pacific Islander
1% are Nonresident Alien
4% are two or more races.
5% did not respond.
2% International

52% are between the ages of 18-30
23% are between the ages of 31-40
18% are between the ages of 41-50
83% Pell eligible
17% not eligible

SURVEY INSTRUMENT

Student Background Information:

School Name:
Location (city where school is located):

Degree currently pursuing:
1) Diploma or certificate
2) Associate's
3) Bachelor's
4) Master's or above

Field of Study (for example, accounting):

Race/ethnicity:
American Indian or Alaskan Native
Asian/Pacific Islander
Black or African American
Hispanic or Latino
White/Caucasian
From multiple races

Gender
Female
Male

What is your age?

Which of the following best describes your current employment status?
Employed, working 40 or more hours per week
Employed, working 20-39 hours per week
Employed, working 1-19 hours per week
Not employed, looking for work
Not employed, not looking for work

Which of the following best describes your current relationship status?

  Married
Widowed
Divorced
Separated
In a domestic partnership or civil union
Single, but living with a significant other
  Single, never married

How many children age 17 or younger live in your household?
None
1
2
3
4
More than 4

Have you ever served in any branch of the United States military?
Yes
No

What is the highest level of school your mother completed or the highest degree she received?

Less than high school degree
High school degree or equivalent (e.g., GED)
Some college but no degree
Associate degree
Bachelor degree
Graduate degree
Don't know

What is the highest level of school your father completed or the highest degree he received?

Less than high school degree
High school degree or equivalent (e.g., GED)
Some college but no degree
Associate's degree
Bachelor's degree
Graduate degree
Don't know

How much total combined money did all members of your household earn last year? (Give your best guess for last year):

$0 to $9,999
$10,000 to $24,999
$25,000 to $49,999
$50,000 to $74,999
$75,000 to $99,999
$100,000 to $124,999
$125,000 to $149,999
$150,000 to $174,999
$175,000 to $199,999
$200,000 and up

Which of the following best describes your high school credential?
Traditional high school diploma
GED

The following questions will ask about your decision to attend college. Please think specifically about the institution you are currently enrolled in.

1) What was your main reason for going to college?

2) Were there people in your life who influenced that decision?
   a) If so, who?

   Parents:
   Children:
   Spouse/Partner:
   Friends:
   Employer:
   Other (Please specify who):

3) a) Did you have experience with other institutions before enrolling here (Was this your first time enrolling in college or had you enrolled in another school before)?

   b) If you had enrolled in another school or schools before, please list the names of those schools.

4) How did you find out about your current school?

5) Where did you get your information (what sources)?

6) a) Did you consider attending other institutions?

   b) Which ones?

7) a) Were there people in your life that influenced what schools you considered?

   b) If so, who?

   Parents:
   Children:

Spouse/Partner:
Friends:
Employer:
Other (Please specify who):

8) a) What was the most important thing to you when choosing a school?

     b) What other things were important? Mark all that apply.

Course Offerings   Length of program
Location   Reputation
Cost   Teaching Quality
Availability of financial aid Job Placement Rates
Flexibility of class schedule Career-oriented Curriculum
Size   Convenience
Other (Please specify)

9) Was it important to you that you had help getting through the admissions and financial
    aid process (had someone that could walk you through the process and let you know what
    had to be done, forms completed, etc.)?

10) Were there people in your life that influenced you to choose this specific   school?

    If so, who?
    Parents:
    Children:
    Spouse/Partner:
    Friends:
    Employer:
    Other (Please specify who):

11) Thinking about the time when you were deciding to enroll in college, how would you rate
    your knowledge of the admissions and financial aid process? In other words, how much
    did you know about the steps necessary to enroll in and pay for college?

12) Is there anything else you'd like us to know about your experience picking a school and
enrolling?

REFERENCES

Bailey, S. (2009). *Legacies of Race: Identities, Attitudes, and Politics in Brazil.* Stanford, CA: Stanford University Press.

Bailey, T., Badway, N., & Gumport, P. (2001). *For-profit higher education and community colleges.* Stanford University, National Center for Postsecondary Improvement.

Beaver, W. (2009, Fall). For-profit higher education: A Social and historical analysis. *Sociological Viewpoints* , 53-73.

Becker, G. (1993). *Human Capital.* Chicago, IL, USA: University of Chicago Press.

Bennett, D., Lucchesi, A., & Vedder, R. (2010). *For-profit higher education: Growth, innovation, and regulation.* Center for College Affordability and Productivity, Washington, D.C.

Bennett, D., Lucchesi, A., & Vedder, R. (2010). *For-profit higher education: Growth, innovation, and regulation.* Center for College Affordability and Productivity, Washington, D.C.

Bergerson, A. (2009). College Choice and Access to College: Moving Policy, Research, and Practice to the 21st Century. *ASHE Higher Education Report , 5* (4).

Bettinger, E., Long, B. T., Oreopoulos, P., & Sanbonmatsu, L. (2012). The Role of Application Assistance and Information in College Decisions: Results from the H&R Block FAFSA Experiment. *Quarterly Journal of Economics , 127* (3).

Blumenstyk, G. (2000, December 8). How for-profit institutions chase community college students. *The Chronicle of Higher Education* , p. A30.

Bonnema, J., & van der Welt, D. (2008). Information and source preferences of a student market in higher education. *International Journal of Educational Management , 22* (4), 314-327.

Briggs, S., & Wilson, A. (2007). Which university? A Study of the influence of cost and information factors in Scottish undergraduate choice. *Journal of Higher Education Policy & Management , 29* (1), 57-72.

Cabrera, A., & LaNasa, S. (2000). Understanding the college choice process. *New Directions for Institutional Research , 5* (2), 79-97.

Callender, C., & Jackson, J. (2008). Does the fear of debt constrain choice of university and subject of study? *Studies in Higher Education , 33* (4), 405-429.

Chapman, D. (1981). A Model of student college choice. *Journal of Higher Education , 52*, 490-505.

Chapman, R. (1984). *Toward a Theory of College Choice: A Model of College Search and Choice Behavior.* Alberta, Canada: University of Alberta Press.

Cho, D. (2007). The Role of high school performance in explaining women's rising college enrollment. *Economics of Education Review , 26* (4), 450-462.

Cho, S., Hudley, C., Lee, S., Barry, L., & Kelly, M. (2008). Roles of gender, race, and SES in the college choice process among first-generation and non-first-generation students. *Journal of Diversity in Higher Education , 1* (2), 95-107.

Choy, S. P. (2000). Low income students: How they pay for their education. *Educational Statistics Quarterly , 2* (2).

Chung, A. (2008). *The Choice of For-Profit College.* Ann Arbor, MI: University of Michigan.

Clowes, D. (1995). Community colleges and proprietary schools: conflict or convergence? *New Directions for Community Colleges , 91* (5), 5-16.

Conley, D. (2001). Parental assets and postsecondary schooling. *Sociology of Education , 74* (1), 59-72.

Contins, M. (2004). A strategy for combating racial discrimination in the university context of Rio de Janeiro. In A. Paiva, *University Affirmative Action: Reflection on practical experiences in Brazil and the U.S.* (pp. 109-148). Rio de Janeiro, Brazil: PUC-Rio.

Corbin, J., & Strauss, A. (2008). *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory* (3rd ed.). Thousand Oaks, CA: SAGE Publications.

Cunha, L. (2000). Higher Education and the university in Brazil. In E. Lopes, L. e. Filho, & C. Veiga, *500 Years of Education in Brazil* (pp. 151-204). Autentica: Belo Horizante.

De Souza e Silva, J. (2003). *Why Some and Not Others? The Path of Poor Young People to University.* Rio de Janeiro, Brazil: Viveiros de Castro Editora Ltda.
DesJardins, S., Ahlburg, D., & McCall, B. (2006). An Integrated model of application, admission, and financial aid. *Journal of Higher Education , 77* (3), 381-429.

Downie, A. (2010, November 2). In Brazil, More Universities Make Transition to Standardized Government Entrance Exam. *The Chronicle of Higher Education .*

Durham, E. (2004). HIgher education in Brazil: Public and private. In S. Schwartzman, & C. Brock, *The Challenges of Education in Brazil.* Oxford: Symposium Books.

Dynarski, S. (2003). Does aid matter? Measuring the effect of student aid on college attendance and completion. *American Economic Review , 93* (1), 279-288.

Education Commission of the States. (2001). *Meeting the needs and making profits: The Rise of the for-profit degree-granting institutions.* FP-01-01W, Denver.

Emerson dos Santos, R. (2006). Racial quota policies in Brazilian universities: The Case of UERJ. In N. L. Gomes, *Fighting Times: Affirmative Action in the Brazilian Context* (pp. 21-39). Brasilia, Brazil: Secretary of Continuing Education, Literacy, and Diversity.

Ferreira, F., Lanjouw, P., & Neri, M. (2003). A New poverty profile for Brazil using PPV, PNAD, and census data. *Revista Brasileira de Economica , 57* (1), 59-92.

Futures Project. (2000). *A Briefing on For-Profit Higher Education.* Brown University, Providence, RI.

Galdino, D., & Pereira, L. (2004). Access to the university: Conditions of production of the deceptive discourse. In J. Bernardino, & D. Galdino, *Levando a Race a Serio: Acao afirmativa e universidade.* Rio de Janeiro: DP&A.

Galotti, K., & Mark, M. (1994). How do high school students structure an important life decision? A Short-term longitudinal study of the college decision-making process. *Research in Higher Education , 35* (5), 589-607.

Gilbert, L. (2011). *For-profit higher education under scrutiny: Issues and challenges.* Retrieved 03 15, 2012, from Back to School for Grownups: http://backtoschoolforgrownups.com/wp-content/uploads/2011/06/For-Profit-Higher-Education-Under-Scrutiny.pdf

Glaser, B., & Strauss, A. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research.* Chicago, IL: Aldine Publishing Company.

Goenner, C., & Pauls, K. (2006). A Predictive model of inquiry to enrollment. *Research in Higher Education , 47* (1), 935-956.
Guruz, K. (2008). *Higher Education and International Student Mobility in the Global Knowledge Economy.* Albany, NY: State University of New York Press.

Hagy, A., & Ordovensky-Staniec, J. (2002). Immigrant status, race, and institutional choice in higher education. *Economics of Education Review , 21* (4), 381-392.

Hamrick, F., & Stage, F. (2004). College predisposition at high-minority enrollment, low-income schools. *Review of Higher Education , 27* (2), 151-168.

Hanson, K. &. (1982). Mapping the road to academia: A Review of research on women, men, and the college selection process. In P. Perun, *The Undergraduate Woman: Issues in Education.* Lexington, MA: Lexington.

Harker, D., Slade, P., & Harker, M. (2001). Exploring the decision process of school leavers and mature students in university choice. *Journal of Marketing for Higher Education , 11* (2), 1-20.

Health Education, Labor, and Pensions Committee. (2012). *For Profit Higher Education: The Failure to Safeguard the Federal Investment and Ensure Student Success.* United States Senate. Washington, D.C.: United States Senate.

Hesketh, A., & Knight, P. (1999). Postgraduates' choice of programme: Helping universities to market and postgraduates to choose. *Studies in Higher Education , 24*, 151-163.

Horch, D. (2014, 06 20). As Demand for Education Rises in Brazil, For-Profit Colleges Fill the Gap. *The New York Times* , p. B8.

Hossler, D., & Gallagher, K. (1987). Studying student college choice: A three phase model and the implications for policymakers. *College and University , 62* (3), 207-221.

Hossler, D., Braxton, J., & Coopersmith, G. (1989). Understanding student college choice. In J. Smith, *Higher Education: Handbook of Theory and Research* (Vol. 4). New York: Agathon.

Hossler, D., Schmit, J., & Vesper, N. (1999). *Going to College: How Social, Economic, and Educational Factors Influence the Decisions Students Make.* Baltimore, MD: Johns Hopkins University Press.

Htun, M. (2004). From "racial democracy" to affirmative action: Changing state policy on race in Brazil. *Latin American Research Review , 39* (1), 60-88.

Ikenberry, S., & Hartle, T. (1998). *Too little knowledge is a dangerous thing. What the public thinks and knows about paying for college.* American Council on Education, Washington, D.C. Institute for Higher Education Policy. (2005). *The Investment Payoff: A 50 state analysis of the public and private benefits of higher education.* Washington, D.C.

Jackson, G. (1982). Public efficiency and private choice in higher education. *Educational Evaluation and Policy Analysis , 4* (2), 237-47.

Jacob, B. (2002). Where the boys aren't: Non-cognitive skills, returns to school, and the gender gap in higher education. *Economics of Education Review , 21* (6), 589-598.

Johnson, R., & Stewart, N. (1991). Counselor impact on college choice. *School Counselor , 39* (2), 84-91.

Kao, G., & Tienda, M. (1998). Educational aspirations of minority youth. *American Journal of Education , 106*, 349-384.

Kaufman, J., & Gabler, J. (2004, 32). Cultural capital and the extracurricular activitie of girls and boys in the college attainment process. *Poetics* , 145-168.

Keane, M. (2002). Financial aid, borrowing constraints, and college attendance: Evidence from structural estimates. *American Economic Association (Papers and Proceedings) , 92* (2), 293-297.

Kinser, K., & Levy, D. (2006). For-profit higher education: United States tendencies, international echoes. In J. Forest, & P. Altbach, *International Handbook of Higher Education* (pp. 107-120). Dordrecht, Netherlands: Springer.

Knobel, M. (2011). *Internationalizing Brazil's Universites: Creating Coherent National Policies Must Be a Priority.* University of California, Berkeley, Center for Studies in Higher Education.

Lee, J. B., & Topper, A. M. (2006). The Future of proprietary post-secondary education. *On the Horizon , 14* (2), 84-91.

Lee, J., & Merisotis, J. (1990). *Proprietary schools: Programs, policies, and prospects, ASHE-ERIC Higher Education Report no. 5.* The George Washington University, School of Education and Human Development, Washington, D.C.

Levy, D. (2006). The Unanticipated explosion: Private higher education's global surge. *Comparative Education Review , 50* (2), 217-240.

Lillis, M. (2008). High-tuition, high-loan financing: Economic segregation in postsecondary education. *Journal of Education Finance , 34* (1), 15-30.

Lincoln, Y., & Guba, E. (1985). *Naturalistic Inquiry.* Newbury Park, CA: Sage Publlications.

Machado, E., & Barcelos, L. (2001). Race relations among university students in Rio de Janeiro. *African-Asian Studies , 23* (2), 255-290.

Martin, N., & Dixon, P. (1991). Factors influencing students' college choice. *Journal of College Student Development , 32*, 253-257.

MathTech, Inc. (1998). *Factors Affecting College Enrollment.* Retrieved from https://www2.ed.gov/offices/OUS/PES/finaid/enroll98.pdf

McCowan, T. (2004). The growth of private higher education in Brazil: Implications for equity and quality. *Journal of Education Policy , 19* (4), 453-472.

McPherson, M., & Shapiro, M. (1991). *The Student aid game: meeting need and rewarding talent in American higher education.* Princeton, NJ: Princeton University Press.

Mickelson, R. (1990). The Attitude-achievement paradox among black adolescents. *Sociology of Education , 63* (1), 44-61.

Ministry of Education. (2007). *Plan for the Development of education: Program of support for the restructuring and expansion of the federal universities.* Retrieved 09 21, 2014, from Ministry of Education: http://reuni.mec.gov.br/

Moffett, M. (1996, August 06). Seeking equality: A Racial democracy begins painful debate on affirmative action--blacks make up 45% of Brazil but stay marginalized: Fear of a white backlash-Looking to US companies. *Wall Street Journal* .

Moore, R. (1995). The Illusion of convergence: Federal student aid policy in community colleges and proprietary schools. *New Directions for Community Colleges , 91* (5), 71-80.

National Center for Education Statistics. (2013). *Digest of Education Statistics.* United States Department of Education, Washington, D.C. .

National Consumer Law Center. (2010). *For-Profit Higher Education by the Numbers.* Student Loan Borrower Assistance Project, Boston, MA.

Neves, C. (2009). Using social inclusion policies to enhance access and equity in Brazil's higher education. In J. Knight, *Financing Access and Equity in Higher Education.* Rotterdam, Netherlands: Sense Publishers.

Patton, M. (2002). *Qualitative Research & Evaluation Methods* (3rd ed.). Thousand Oaks, CA: SAGE.

Paulsen, M., & St. John, E. (2002). Social class and college costs: Examining the financial nexus between college choice and persistence. *Journal of Higher Education , 73* (2), 189-236.

Perna, L. (2000). Differences in the decision to attend college among African Americans, hispanics, and whites. *Journal of Higher Education , 71* (2), 117-141.

Perna, L., & Titus, M. (2004). Understanding differences in the choice of college attended: The Role of state public policies. *Review of Higher Education , 27* (4), 501-525.

Petruccelli, J. (2004). *Mapping race in Brazilian higher education.* State University of Rio de Janeiro, Laboratory of Public Policies: Program on color policies in Brazilian education. Testing and Research Series No. 1, Rio de Janeiro.

Pope, J. (2009, November 30). For-profit colleges haul in government aid. *USA Today*.

Reay, D., Davies, J., David, M., & Ball, S. (2001). Choices of degree or degrees of choice? class, "race," and the higher education choice process. *Sociology , 35* (4), 855-874.

Romero, S. (2012, August 30). Brazil enacts afformative action law for universities. *The New York Times* .

Sanders, N. (1990). Understanding seniors' college choices. *Journal of College Admissions , 126*, 3-8.

Sansone, L. (2003). *Blackness Without Ethnicity: Constructing Race in Brazil.* New York, NY: Palgrave MacMillan.

Sanyal, B., & Johnstone, D. (2011). International trends in the public and private financing of higher education. *Prospects , 41* (1), 1-19.

Schwartzman, S. (2004). *The National assessment of courses in Brazil.* The Institute for the Study of Work and Society, Brasilia.

Skidmore, T. (1974). *Black Into White: Race and Nationality in Brazilian Thought.* New York, NY: Palgrave MacMillan.

Slocum, A. (2008). Accessing Brazilian Universities: A Comparison of the College Choice Processes of Students from Diverse Socioeconomic and Racial Backgrounds through a Social and Cultural Capital Lens. *Unpublished Manuscript .* University of California Los Angeles.

Soley, L. (1998). Higher education or higher profit: For-profit universities sell free enterprise. *In These Times , 22* (21), 14-17.

Solorzano, D. (1992). An Exploratory analysis of the effects of race, class, and gender on student and parent mobility aspirations. *Journal of Negro Education , 61* (1), 30-44.

St. John, E. (1990). Price response in enrollment decisions: An analysis of the high school and beyond senior cohort. *Research in Higher Education , 3* (2), 161-176.
St. John, E. (1991). The impact of student financial aid: A Review of recent research. *Journal of Student Financial Aid , 21*, 18-32.

St. John, E., & Starkey, J. (1995). An Alternative to net price: Assessing the influence of prices and subsidies on within-year persistence. *Journal of Higher Education , 66* (2), 156-86.

Stewart, M., & Post, P. (1990). Minority students' perceptions of variables affecting their selection of a large university. *Journal of Multicultural Counseling and Development , 18* (4), 154-162.

Teles dos Santos, J. (2006). Quotas at UFBA: The dilemmas and tergiversation. In N. L. Gomes, *Fighting Times: Affirmative Action in the Brazilian Context* (pp. 47-55). Brasilia, Brazil: Secretary of Continuing Education, Literacy, and Diversity.

Telles, E. (2004). *Race in another American: The Significance of skin color in Brazil.* Princeton, NJ: Princeton University Press.

The mortarboard boom; Higher education in Brazil. (2012, Sept 15). *The Economist* , p. 36.

Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management , 14* (3), 207-222.

Traub, J. (1997, October 20). Drive-thru u: HIgher education for people who mean business. *New Yorker* , pp. 117-123.

UNESCO Institute for Statistics. (2010). *Data centre, predefined tables, education.* Montreal.

UNESCO. (2009). *Trends in Global Higher Education.* Paris: UNESCO Publishing.

Verschoor, C. (2011). Do for-profit colleges deserve taxpayer support? *Strategic Finance , 92* (10), 17.

Williams, A., & Swail, W. (2005). *Is more better? The impact of post-secondary education on the economic and social well-being of Americna society.* Educational Policy Institute, Stafford, VA.
Wilson, R. (2010, February 7). For-profit colleges change higher education's landscape. *Chronicle of Higher Education*.

World Bank. (2014). World Development Indicators. Washington, D.C.

Zamani-Gallaher, E. (2004). Proprietary schools: Beyond the issue of profit. *New Directions for Institutional Research , 124*, 63-79.