

## CHAPTER 7

# Access of Disadvantaged Students to Higher Education in Chile: Current Scenarios and Challenges

Oscar Espinoza<sup>1</sup> and Luis González<sup>2</sup>

<sup>1</sup>Programa Interdisciplinario de Investigaciones en Educación (PIIE) and Facultad de Educación, Universidad San Sebastián, Santiago, Chile and Centro de Investigación en Educación Superior (CIES), Universidad San Sebastián

<sup>2</sup>Centro Interuniversitario de Desarrollo (CINDA), Santiago, Chile

### 7.1 INTRODUCTION

The purpose of this chapter is to analyze how the Chilean postsecondary system has faced the challenge of equity in access to higher education and the impact of some institutional initiatives on inclusion.

Equitable access to higher education institutions (HEIs) depends on two key actors: applicants and institutions. The relationship between access and equity is analyzed from six perspectives, four of which are linked to applicant's attributes, including: family income level, secondary schooling background, gender, and ethnicity. The other two perspectives are the kind of institution chosen by students and access according to ownership (public/private).

The chapter is organized into three sections: the first describes the purpose of the study, the methodology, the background, and provides a brief theoretical framework that will guide the analysis. This framework is based on the Multidimensional Equity Goal Oriented Model (Espinoza, 2002, 2007, 2014). The second section discusses some results derived from implemented equity policies. The last part concludes with some recommendations for policy and strategies to improve equity in access to higher education by disadvantaged students.

### 7.2 BACKGROUND

As stated by the United Nations for Education and Culture Organization (UNESCO) (2005), the right of each person to have access to tertiary

education in democratic societies is based on the recognition of diversity in human rights. In this perspective, higher education must be conceived as a social public good, a human and universal right, and a duty of the state (UNESCO/IESALC, 2008). Even more, in the statement of the Regional Conference of Higher Education in Latin America and the Caribbean (UNESCO/IESALC, 2008), as well as in the World Conference (UNESCO, 2009), the challenges and opportunities raised in higher education in the region are established, in prospective terms, in light of regional integration and changes in the global context. The aim is to set up a scenario that allows articulating, in a creative and sustainable way, policies that strengthen the social commitment of higher education, its quality and relevance, and the autonomy of institutions. Such policies should aim at the horizon of a higher education for everyone, with the goal of achieving greater social coverage with quality, equity, and commitment to our people (Espinoza, 2013).

Since the 1980s, higher education systems, both public and private around the world, and especially in Latin America, have changed tremendously as the result of increased demand (Albornoz, 1993; Altbach, 1996; Brunner, 2000; González & Espinoza, 2006; Neave & van Vught, 1994) and funding policies backed both by governments and international funding agencies including the World Bank, the Inter-American Development Bank, and the International Monetary Fund (Espinoza, 2002, 2005). These changes in higher education are reflected especially in the expansion, diversification, and privatization of the systems, and in the creation of new postsecondary institutions that try to meet the needs of society and the demands of the labor market. Ensuring that this demand is satisfied both by the state and the private sector constitutes an important challenge for governments (De Moura Castro & Navarro, 1999; World Bank, 2000).

At least three factors are associated with the expansion of higher education systems. First, contemporary societies and economies are increasingly complex, raising demand for persons with higher levels of training and education (Espinoza, 2000). As economies have demanded workers with more preparation, more persons have sought further education. Third, states have responded by strengthening student aid programs in order to attract young people who might otherwise remain out of school.

As in other societies and education systems, higher education in Chile has undergone a radical reform since the early 1980s, as part of a global liberalization policy that concluded with military government adopting a new body of legislation. Basically, the reform of the tertiary system modified its structure, coordination, and funding mechanisms. The essentially

state-controlled system was transformed into a free-market system. The changes introduced in the early 1980s were reinforced by a system that encouraged institutions to begin self-financing, by charging tuition and enrollment fees. This required a system of loans and scholarships. These changes had a direct impact on students' access to higher education, and their survival within it, a subject we focus on here. Chile today has a massive and diversified system with increased coverage and opportunities for access by students at various socioeconomic levels.

The reform of 1981 created three kinds of institutions: universities that offer programs lasting 5 or more years; professional institutes (PIs) (colleges) that offer shorter programs, and centers for technical training (similar to community colleges) that offer 2-year programs. There are two kinds of universities: those (public and private in existence at that time of the reform) that receive a subsidy from the state and are overseen by a Council of Rectors (CRUCH). These include 16 public and 9 private universities that receive no financial support from the state. All the PIs and technical training centers (TTCs) are private.

Admission to the CRUCH universities is determined in part by scores on the National University Selection Test (PSU), and by secondary school grade point averages. A number of private universities require only high school graduation, as do the PIs and TTCs.

Access to higher education is constrained by economic, social, and cultural factors (Crossland, 1976). These include lack of financial resources (socioeconomic discrimination); the long distance between young people's homes and higher education campuses; discrimination based on gender and on age; inadequate academic preparation at both primary and secondary levels; prejudices against certain ethnic, religious, or political minorities; culturally biased standardized entrance examinations; and physical disabilities that hamper mobility.

Enrollments in higher education have grown as a result of the combined effect of greater demand for higher education, greater supply and diversity, and higher household incomes or borrowing capacity. Education plays an important role in socioeconomic mobility (Aldridge, 2001; Goldthorpe, 2003). For a household with scant resources, the fact of "placing" one of its members in the tertiary education system constitutes a good proxy for achieving what is known as intergenerational mobility, in this case, upwards (Espinoza, González, & Uribe, 2009).

However, available studies show that where students enroll is primarily conditioned by the socioeconomic origin of applicants (Donoso &

Cancino, 2007; Espinoza, 2002, 2008; Espinoza & González, 2007, 2013, 2015a, 2015b). Larrañaga (2002) found a high correlation between the socioeconomic status (SES) of students and their scores on selection tests. In Chile, students from high SES groups are more likely to score high on the PSU and therefore to obtain admission to less expensive (as well as more prestigious) universities. Students from lower SES groups are more likely, given their lower PSU scores, to have to apply to non-CRUCH private universities that charge higher tuitions (Bravo & Manzi, 2002).

In 2011 university students mobilized to protest (among other things) the inequitable cost of higher education. They continue in protest to date. Their actions have prompted the current government (President Michelle Bachelet) to propose substantive changes in both selection procedures and institutional financial structures. In addition, the government has proposed a gradual move to make higher education free for all students. Programs have been created to raise the rate of transition from secondary to higher education, with the objective of improving equity of access and greater inclusiveness, directly benefitting those students currently most disadvantaged. These measures challenge basic elements in the neoliberal economic model that has dominated in Chile since 1981 (Espinoza & González, 2015a, 2015b).

It is important to point out that access to the various institutions of higher education has fared unevenly in recent decades; this may be explained in part by the profile of the institutions and by the availability of student aid in scholarship and loan programs. In 2013, a total of 705,000 undergraduate students received some form of student aid to totally or partially finance postsecondary studies; this represents 59% of all students enrolled in the system (SIES, 2014).

### **7.3 THEORETICAL FRAMEWORK**

The transition from secondary to postsecondary education involves two actors. On the one hand are the postulants, who define their postsecondary option on the basis of their vocational interests and academic capacities. These are conditioned by their: family cultural capital; socio-economic level; geographic location; type of secondary education received; ethnicity; and other factors. The second actor includes institutions of higher education, universities and nonuniversities, which differ in terms of selectivity, some being highly selective and others recruiting

postulants on the basis of their ability to pay. In the Chilean case, the behavior of both actors (applicants and institutions) is strongly conditioned by the social inequality that exists. For this reason we analyze the theme of access from the perspective of equity.

The Organisation for Economic Cooperation and Development (OECD, 2007) has defined the concept of equity as ensuring equal opportunities for participation, regardless of gender, ethnicity, and family SES. The OECD argues that education plays a major role in intergenerational mobility and that tertiary education policies need to ensure that higher education systems do not inhibit such mobility but rather favor it (d'Addio, 2007).

### 7.3.1 The Equity Model

The equity goal-oriented model represents our understanding of educational “equity” goals and facilitates efforts to critically examine and synthesize equity-based research. Table 7.1 portrays the model in a matrix format. The columns of the matrix are defined by resources (financial, social, and cultural) and by the main facets of the educational process, i.e.: access; survival (educational attainment); performance (educational achievement based on test performance); and outcome (occupational status, income, and political power). The rows of the matrix distinguish three equity dimensions, at the individual and group level: (1) “equity for equal needs”; (2) “equity for equal potential”; and (3) “equity for equal achievement.”

## 7.4 METHODOLOGY

The study described in this chapter was descriptive and exploratory in nature and relied on descriptive statistics. Data analysis was based on primary and secondary sources including household surveys (1990–2011 CASEN databases), the Higher Education Information System (SIES) databases of the Ministry of Education (Mineduc, 2010), national and regional reports, academic reports, previous studies by the authors, and data bases provided by national and international agencies. (The National Socioeconomic Characterization Survey (CASEN) is a household survey of probabilistic character and national coverage that is applied by the Ministry of Planning every 2 years since 1987.)

**Table 7.1** The equity model: a multidimensional approach  
**Features or stages of the educational process**

Dimensions	Resources	Access	Survival (educational attainment)	Performance	Outcomes
Equity for equal needs	Guarantee that all people who have same needs have same amount of resources ( <i>the reasonable classification definition</i> , Carlson, 1983)	Provide access at the individual and group level on the basis of need (i.e., the same level of access to quality education for those with same needs and different level of access for those with different needs ( <i>the goal-oriented definition</i> , Harvey & Klein, 1985)	Ensure that those with equal needs gain equal level of educational attainment	Ensure that every individual should be able to obtain a minimal needed achievement level ( <i>the minimum achievement definition</i> , Gordon, 1972) and that differences in achievement beyond that are based on need	Ensure that those with equal needs obtain equal jobs, income, and/or political power
Equity for equal potential (abilities)	Ensure that all individuals with certain potential have the same amount of resources ( <i>the full opportunity definition</i> , Tumin, 1965)	Guarantee that all individuals having equal abilities will gain access to quality education	Ensure that students with equal potential realize equal educational attainment	Ensure that students with similar abilities will have similar academic performance	Ensure that those with equal potential obtain equal jobs, income, and/or political power

Equity for equal achievement	Ensure that people whose parents achieve the same level would have equal resources	Provide equal access to quality education for students having equal past achievements	Ensure that students with similar qualifications will stay in the system ( <i>the competition definition</i> , Warner, Havighurst & Loeb 1944)	Equal achievement for those who have achieved the same academic performance in the past	Ensure that individuals with similar academic achievement will obtain similar job statuses, incomes, and political power
------------------------------	--	---	--	---	--

Source: Espinoza, O. (2002). *The global and national rhetoric of educational reform and the practice of (in) equity in access to the Chilean higher education system, 1981–1998*. Unpublished doctoral dissertation, School of Education, University of Pittsburgh, Pittsburgh, O. (2007). Solving the equity/equality conceptual dilemma: A new model for analysis of the educational process. Educational Research, 49(4), 343–363; Espinoza, O. (2014). The equity goal oriented model revisited. In A. Teodoro & M. Guilherme (Eds.), *European and Latin American higher education between mirrors* (pp. 155–167). Rotterdam: Sense Publishers.

## 7.5 RESULTS

Access to higher education in Chile has mushroomed over the past few decades. To a large extent the increased enrollment has been absorbed by (newly formed) private HEIs: universities, PIs, and TTCs. This growth became visible in the mid-1990s when the enrollments in private HEIs began to equal those in CRUCH universities. The result was a gradual rise in the percentage of professional and technical graduates trained in the new private institutions.

It is important to point out that the universities continue to admit a privileged segment of the population, and that the great majority of students who begin in the formal education system do not go on to university. As Table 7.2 shows, out of the approximately 300,000 children entering the first year of primary school, around 200,000 completed the upper secondary level. Of these, only 38,000 enroll at CRUCH universities: the equivalent of 10% of those who begin primary school. To this figure we must add the 45,000 young persons of the 1995 cohort who enrolled in other third-level institutions, including the new private universities, PIs, and TTCs. This indicates that of the total number of children entering the school system in 1995, approximately 25% succeeded in accessing one or another kind of HEI in the officially stipulated time. As most students from upper-income families enter higher education, the low percentage of students entering reflects the segregation and inequity in access to tertiary education.

In the next section we detail patterns of access from the six perspectives listed above.

### 7.5.1 Attributes of the Population Entering Tertiary Education

#### 7.5.1.1 Access to HEI by Family Income

The CASEN records the socioeconomic composition of students at Chile's HEIs. (The CASEN data refer to participation in higher education but do not permit a differentiation between enrollment and continuation once enrolled.) If we measure inequity by comparing the percentages of people in various social groups who access higher education, our analysis of the data in the CASEN surveys of 1990–2011 indicates some reduction in the severity of the problem. While students in the first (lowest-income) decile nearly quadrupled their participation in this period (from 4.1% to 27.1%), those in the tenth (highest-income) decile nearly doubled theirs, from 47.9% to 90.9%, as seen in Table 7.3. In other words, inequity in access continues despite the relative improvement.

**Table 7.2** Trajectory of students entering first-year primary education in 1995 and their inclusion in higher education  
**Students' milestones**      **Total**      **Numbers graduating in 1995**      **Numbers graduating in previous years**      **% of the year's graduates**      **% of those who entered first grade (primary) in 1995**

Students' milestones	Total	Numbers graduating in 1995	Numbers graduating in previous years	% of the year's graduates	% of those who entered first grade (primary) in 1995
Entered first grade (primary) in 1995		308,523			100.0
Completed 12th grade (secondary) in 2006	242,155	171,591	70,564	70.86	72.3
Registered for PSU exam in 2006	211,261	149,068	62,193	70.56	57.0
Took PSU exam in 2006	87,617	53,626	33,991	61.21	48.3
Applied to CRUCH universities in 2007	62,188	38,366	23,822	61.69	17.4
Admitted to CRUCH universities	48,913	30,008	18,905	61.35	12.4
Enrolled in university					9.8

Source: Latorre, C.L., González, L.E., & Espinoza, O. (2009). Equidad en Educación Superior: Evaluación de las Políticas Públicas de la Concertación [Equity in higher education: Evaluation of public policies of the Concertación de Partidos por la Democracia]. Santiago: Editorial Catalonia/ Fundación Equitas (Latorre, González, & Espinoza, 2009), using data from Mineduc [Ministry of Education]. (1995). Compendio de Información Estadística, año 1995 [Compendium of statistical information, 1995]. Santiago: Mineduc (Mineduc, 1995); Mineduc [Ministry of Education]. (2000). Compendio de Información Estadística, año 2000 [Compendium of statistical information, 2000]. Santiago: Mineduc (Mineduc, 2000); Mineduc [Ministry of Education]. (2006). Estadísticas Educativas Año 2006 [Educational statistics, 2006]. Santiago: Mineduc (Mineduc, 2006), and data from DEMRE [Department of Evaluation, Measurement and Educational Registry], University of Chile. (2007). Unpublished admissions process data for 2007. Santiago: DEMRE [Department of Evaluation, Measurement and Educational Registry], University of Chile, (2007).

**Table 7.3 Coverage in higher education by income household decile (1990–2011)**

Year	I	II	III	IV	V	VI	VII	VIII	IX	X	Total	Index of dispersion
1990	4.1	3.5	5.0	7.9	10.2	11.4	14.5	27.0	29.3	47.9	14.3	11.7
2000	7.1	9.2	12.5	18.1	23.6	34.1	38.3	48.5	67.1	99.7	30.7	14.0
2011	27.1	26.8	32.7	34.9	37.0	42.0	51.7	60.8	78.2	90.9	45.8	3.4

Source: CASEN databases (1990, 2000, 2011).

The figures suggest that student aid (scholarships and loans) introduced beginning in 1990 has had a positive effect on overall coverage but has not reduced significantly the gap between the richest and poorest deciles.

The index of dispersion between the extreme income deciles is a useful tool for interpreting the phenomenon of inequity in access. Between 1990 and 2011 this index went down from 11.7% to 3.4%. This means that a young person from a family in the tenth (wealthiest) decile had nearly three times as high a chance of entering higher education as a young person in the first (poorest) decile.

There has been a notable advance in narrowing the index of dispersion, as a result of greater access to tertiary education by the most disadvantaged sectors of Chilean society (see Table 7.3). At the same time, however, one must remember that this apparent improvement was obtained by increasing enrollment of low-income students in fee-charging institutions of doubtful quality. This includes the PIs and TTCs, which are not accredited, and the enrollment of students in university programs with low economic returns.

If we limit this analysis to enrollment by the type of institution, we can observe that in 1990 enrollments for all deciles were equally divided between CRUCH institutions and private institutions. Two decades later, enrollment in private universities had grown to twice that in CRUCH universities (see Table 7.4).

A possible explanation for the increased student participation of the most vulnerable quintiles in the system might be attributed to the increase of scholarships and loans actually available (10 scholarship and 2 loans programs, most of them created after 1990). Moreover, since 2005 Lagos government set up the state guarantee loan (SGL), which mostly benefited

**Table 7.4** Distribution of students enrolled in higher education in Chile by type of institution and quintile of income (1990–2011)

QUINTILE	1990		2000		2011	
	Private HEIs	CRUCH Univ	Private HEIs	CRUCH Univ	Private HEIs	CRUCH Univ
I	46.2	53.8	43.8	56.2	66.8	33.2
II	53.0	47.0	51.9	48.2	70.5	29.5
III	53.5	46.5	45.2	54.8	67.1	32.9
IV	52.9	47.1	53.1	46.9	70.0	30.0
V	47.3	52.7	52.5	47.5	68.8	31.2

Source: CASEN databases (1990, 2000, 2011).

students attending to private institutions. In fact, between 2006 and 2012 SGL loans grew from 160,000 to 630,000 beneficiaries (see Table 7.5).

In 2011, under the student protests, Piñera's government decided to match the SGL interest rate (equal to 6%), with the rate of the Loan

**Table 7.5** Evolution of the number of recipients of scholarships and loans studying in HEIs (1990–2012)

<b>Student aid program/year</b>	<b>1990</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2012</b>
Bicentenario Scholarship		19,421	20,593	47,783	72,414
Nivelación Académica Scholarship					996
Scholarship for Teaching Careers Academic Excellence Scholarship		582	1082	796	6057
Scholarship for Sons of Teachers				13,427	18,295
Juan Gomez Millas Scholarship		2000	5000	9598	10,557
Nuevo Milenio Scholarship		3219	5480	2459	9499
Rettig Scholarship			10,780	71,948	97,179
Valech Scholarship		124	126	7	3
Valech Law 20.405 (Transfer) Scholarship				389	352
				3563	5608
<b>Total Amount of MINEDUC Scholarship</b>		<b>25,346</b>	<b>43,061</b>	<b>149,970</b>	<b>220,960</b>
<b>State Guarantee Loan Program</b>				216,953	316,344
<b>Solidarity University Loan Fund</b>	71,986	109,951	122,779	109,857	91,702
<b>Total of Students Granted with Student Aid Programs</b>	<b>71,986</b>	<b>135,297</b>	<b>165,840</b>	<b>476,780</b>	<b>629,006</b>

Source: Based on MINEDUC, Higher Education Division (2013). *Compendio Estadístico 2013*.

Solidarity Fund, reducing it to 2%. It could be argued that the SGL program influenced for achieving a more equitable distribution of students within the higher education system but not for access to higher-quality institutions where students recruited come from the richest quintiles.

Table 7.5 illustrates the evolution of the number of recipients of scholarships and loans studying in HEIs in the 1990–2012 period.

### 7.5.1.2 Access Related to Secondary Schooling Background

Chile made secondary education obligatory in 2005. There are three types of secondary institutions: free municipal schools financed totally by the state; privately owned but state-subsidized schools that supplement the state subsidy with private funds; and private schools financed completely by private individuals. At present, secondary education is organized in two modalities, the scientific-humanistic track, and the technical-professional track which enrolls about 40% of all students. The technical-professional modality does not specifically prepare for university enrollment but rather for direct entry into the labor market.

The type of secondary school students receive is significantly related to the kind of university they enter. Table 7.6 shows that students from private subsidized secondary schools predominate in the first-year enrollment at CRUCH universities (53%), followed by students who completed their secondary education in municipal schools (26%). However, it should be noted that students from private, fully paid schools who entered CRUCH universities during the 2013 admission period were clearly

**Table 7.6** Selection process in universities that participate in the national admission system according to kind of school from which students come from 2013

Type of secondary school	Registered	Took PSU exam	Applied to CRUCH universities	Enrolled in CRUCH universities
Municipal	102,463	83,159	30,402	23,117
Private subsidized	141,868	123,525	59,164	46,922
Paid private	26,176	24,779	20,057	18,350
Information not available	2159	1839	798	556
Total	272,666	233,302	110,421	88,945

Source: Departamento de Evaluación, Medición y Registro Educacional, DEMRE. (2013). *Proceso de Admisión 2013. Etapa de Selección*. Santiago: DEMRE (Departamento de Evaluación, Medición y Registro Educacional, DEMRE, 2013).

overrepresented, at 21% of the total, even though they make up only 8% of the total secondary school population. Meanwhile, students graduating from municipal schools are underrepresented among CRUCH enrolees.

Over the last two decades inequity in schooling level has been reduced between quintile 5 (highest family income) and 1 (lowest family income) (Cruces, García, & Gasparini, 2012). Nevertheless, access to higher education by family income level continues to be unequal, especially if the type of secondary education (scientific-humanistic or vocational) from which graduates come is analyzed.

Some 55% of secondary school students are enrolled in schools with scientific-humanistic programs, while 45% are enrolled in technical-professional programs. About 82% of 4th year students in scientific-humanistic programs go on to higher education, while only 48% of students in technical-professional programs do so.

In recent years both the Ministry of Education and universities have devised programs to facilitate the transition from secondary to tertiary education. The Ministry of Education coordinates a program called *Coaching and Effective Access Program (CEAP)* which is carried out by universities linked to a set of about 50 secondary schools preparing students to go on in their studies. The program *Propedeutico* is carried out by 10 universities seeking to serve needy students who want to take the PSU. A third example are programs promoted in recent years by CRUCH universities that have created vacancies reserved for low-income students likely to score poorly on the PSU. A recent study catalogued 100 different projects in 14 CRUCH universities (CINDA, 2011).

### 7.5.2 Access to HEIs and Gender

In recent years female participation in universities has achieved the same level as that of males. At present women are a larger proportion of the total in private universities, but less than men in public universities. Between 1987 and 2009 female enrollments have grown more rapidly than those of men so that overall more women are enrolled than are men (see Table 7.7).

As Table 7.8 shows, for the period 1984–2015, the female undergraduate population grew at 1.5 times the rate for male enrollments (716% vs 462%); this coincides with the more active role women have been assuming in all spheres of social life.

**Table 7.7** Overall proportion of the 18–23 age group in higher education by gender (1987–2009)

Year	Female (%)	Male (%)	Total coverage (%)
1987	27.3	28.6	27.9
2000	39.8	41.1	40.5
2009	47.3	43.4	45.4

Source: SEDLAC (CEDLAC & World Bank). (2014). Cobertura bruta en educación superior según género. Available at: <http://sedlac.econo.unlp.edu.ar/esp/estadisticas-detalle.php?idE=20> (SEDLAC (CEDLAC & World Bank), 2014).

Our analysis of access to tertiary education by type of institution and by gender shows that for the period 1984–2015, the male population increased one-third in CRUCH universities (137%) and the TTCs doubled the enrollment (194%); meanwhile the PIs and new private universities experienced an extremely significant increase in enrollment (1496% and 5628%, respectively). In the same period, as the table shows, the enrollment of women increased by 228% in the TTCs, 1718% in PIs, 17071% in new private universities, and 270% in the CRUCH universities.

A disaggregated analysis by the institution's funding type and gender reveals that, between 1984 and 2015, female enrollment in private HEIs rose by 1247% compared to 269% at public institutions. For males, it rose proportionately: by 969% at private institutions and 137% at public institutions (CRUCH universities) (see Table 7.9).

### **7.5.2.1 Access to HEIs by Members of Ethnic Minority Groups**

Certainly, one of the areas least often explored is the access that various indigenous groups have to higher education and to the education system in general. One explanation for this lack of attention is the small percentage these groups represent in the overall population; another is the fact that governments have not designed systematic policies to support this segment of the population. Clearly, over time, ethnic minorities in the country are gradually becoming more invisible, even though they constitute a player that on no account should be ignored. In 1996, 9.6% of the age group of ethnic minority groups attended postsecondary institutions; by 2009 attendance had doubled, reaching 18.6% (MIDEPLAN, 2009).

Several factors explain why aboriginal students do not attend private universities in high numbers, including the group's low SES, the high cost of studying at a private university, and the group's greater

**Table 7.8** Evolution of undergraduate higher education enrollment by specific type of institution and gender, 1984–2015

Type of institution	1984		1995		2000		2005		2009		2015		Growth in the period 1984–2015	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
TTC	23,331	22,055	38,627	34,108	25,414	27,229	31,870	31,306	51,945	58,062	68,669	72,372	45,338 (194%)	50,317 (228%)
PI	11,600	10,117	21,521	19,459	48,843	31,750	69,498	45,048	99,490	90,107	185,080	183,901	173,480 (1,496%)	173,784 (1,718%)
Private univ.	2,566	1,120	36,617	32,387	50,229	51,157	97,957	109,139	119,117	139,843	146,979	192,317	144,413 (5,628%)	191,197 (17,071%)
CRUCH univ.	66,024	39,558	86,469	68,517	106,618	94,644	123,404	113,905	141,975	134,708	156,621	146,156	90,597 (137%)	106,898 (270%)
Overall total	103,521	72,850	183,234	154,471	231,104	204,780	322,729	299,398	412,527	422,720	557,379	594,746	478,142 (462%)	521,896 (716%)

Source: Mineduc [Ministry of Education]. (2010). Sistema de Información para la Educación Superior (SIES) [Higher Education Information System—SIES]. Available at: <http://www.mifuturo.cl> and CNED. (2015). *Estadísticas de Educación Superior*. Available at: [http://www.cned.cl/public/Secciones/SeccionIndicadoresPostulantes/Indices\\_Sistema.aspx](http://www.cned.cl/public/Secciones/SeccionIndicadoresPostulantes/Indices_Sistema.aspx) (CNED, 2015).

**Table 7.9** Evolution of undergraduate higher education enrollment by institution's funding type and gender, 1984–2015  
**Institution's funding type** **1984** **2009** **2015** **Growth in the period 1984–2015**

	1984		2009		2015		Growth in the period 1984–2015	
	Men	Women	Men	Women	Men	Women	Men	Women
Private HEI	37,497	33,292	270,552	288,012	400,758	448,590	363,261 (969%)	415,298 (1,247%)
Public HEI (CRUCH Univ)	66,024	39,558	141,975	134,708	156,621	146,156	90,597 (137%)	106,598 (269%)
Overall total	103,521	72,850	412,527	422,720	557,379	594,746	453,858 (438%)	521,946 (716%)

Source: Mineduc [Ministry of Education]. (2010). Sistema de Información para la Educación Superior (SIES) [Higher Education Information System—SIES]. Available at: <http://www.mifuturo.cl> and CNED. (2015). *Estadísticas de Educación Superior*. Available at: <http://www.cned.cl/public/Secciones/SeccionIndicesPostulantes/> Indices\_Sistema.aspx (CNED, 2015).

identification with public universities. In addition, some public institutions have special admission policies to encourage such students to enroll, such as the Universidad de la Frontera's affirmative action program (RUPU) (Espinoza & González, 2013).

### **7.5.3 Characteristics of the Institutions Chosen by Applicants and Students**

#### ***7.5.3.1 Access to Higher Education by Type of Institution***

As Table 7.10 shows, in 2015, a total of 1,152,125 undergraduate students were enrolled in all three types of institutions: universities, PIs, and TTCs. Enrollments are mainly concentrated in universities and are almost equally divided between the CRUCH universities and the new private ones. Thus we see that, in the past 25 years, university enrollment has practically quadrupled and that the new private universities have experienced significant growth, from 19,000 students in the early 1990s to 340,000 at the time of writing.

Enrollment in PIs has also increased in the past 25 years, representing at present around one-third of total enrollments in the system. Meanwhile, enrollment in TTCs has behaved more erratically over the last three decades, reaching its lowest point at the beginning of the 21st century and picking up drastically in recent years; this is explained by the creation in 2001 of the New Millennium Scholarship Programme (NMSP) that aimed to facilitate access by disadvantaged young people.

#### ***7.5.3.2 Access to Higher Education by Institutional Funding Type***

In contrast to the situation described above, a different picture emerges when we group enrollments into two categories: institutions that receive direct state support (the public HEIs) and those that do not (the private HEIs). Analyzing these data, we found that in 1983, 71.5% of enrollment was concentrated in public institutions (CRUCH universities and two PIs), but by 2015 the landscape had changed substantially, with CRUCH universities (currently the only public entities) accounting for only 26% of total enrollment in higher education. The remaining 74% of students are enrolled in private HEIs—those that were created in the wake of the 1981 reform and that do not receive direct state support. These are all either PIs or TTCs (see Table 7.11).

**Table 7.10 Undergraduate enrollment by type of institution, 1983–2015**

Type of institution	1983	1990	1995	2000	2005	2009	2015
Universities	110,133	127,628	223,889	302,572	444,893	535,643	642,073
CRUCH	107,425	108,119	154,885	201,186	237,545	276,683	302,777
Private	2708	19,509	69,004	101,386	207,348	258,960	339,296
PIs	25,415	40,006	40,980	79,904	114,546	189,597	368,981
TTCs	39,702	77,774	72,735	53,184	63,104	110,007	141,071
Total	175,250	245,408	337,604	435,660	622,543	835,247	1,152,125

Source: Mineduc [Ministry of Education]. (2010). Sistema de Información para la Educación Superior (SIES) [Higher Education Information System—SIES]. Available at: <http://www.mifuturo.cl>. Figures for 1983 and 1990 include two establishments receiving direct state support; C/NEED. (2015). *Estadísticas de Educación Superior*. Available at: [http://www.cneed.cl/public/Secciones/SeccionIndicesPostulantes/Indices\\_Sistema.aspx](http://www.cneed.cl/public/Secciones/SeccionIndicesPostulantes/Indices_Sistema.aspx) (C/NEED, 2015).

**Table 7.11 Undergraduate enrollment by institutional funding type, 1983–2015**

Type of school	1983	1990	1995	2000	2005	2009	2015
Public HEIs (CRUCH universities)	125,316	114,591	154,885	201,186	237,545	276,683	302,777
Private HEIs	49,934	130,817	182,719	234,474	384,998	558,564	849,348
Total	175,250	245,408	337,604	435,660	622,543	835,247	1,152,125

Note: Public HEIs include all CRUCH universities; private HEIs include the new private universities, TTCs, and PIs.  
Source: Mineduc [Ministry of Education]. (2010). Sistema de Información para la Educación Superior (SIES) [Higher Education Information System—SIES]. Available at: <http://www.mifuturo.cl> and CNED. (2015). *Estadísticas de Educación Superior*. Available at: [http://www.cned.cl/public/Secciones/SeccionIndicesPostulantes/Indices\\_Sistema.aspx](http://www.cned.cl/public/Secciones/SeccionIndicesPostulantes/Indices_Sistema.aspx) (CNED, 2015).

## 7.6 CONCLUSION

Regardless of increasing enrollments in Chilean higher education over the last three decades, equity in access has not been achieved. Participation rates are still markedly different across income groups, and the most disadvantaged students (defined by SES, gender, or ethnic origin) mainly enroll in lower-prestige postsecondary educational institutions (which offer low-quality programs) and in institutions oriented to technical and vocational training.

In terms of strategies and policy recommendations to reduce inequality in tertiary education and participation in society, inclusion is associated with conditions of equity of access. The inclusion of vulnerable groups to higher education is a recent event in the international arena that has been accompanied by a gradual process of massification. Its development has been characterized by the recognition of socioeconomic and gender differences. The impact of these changes has contributed in part to increase the participation of these groups at the tertiary level (Mendes, Piscoya, Celton, & Macadar, 2008). Despite these advances, the politics of inclusion and equity have been primarily related to criteria of merit (aptitude), academic capacity, economic needs, and diversity of traditionally marginalized groups to the detriment of the needs for achievement, motivation, effort, experience, and academic interests of these to choose and participate according to quality and viable available educational opportunities.

Recent literature seeks to explain why exclusion of certain sectors in higher education and the inequality in the distribution of access opportunities continue to occur. One explanation given is that inequities in the tertiary system are due in large part to inequities existing in preceding levels, reaching students' homes and their relative availability of economic, social, and cultural development.

The expansion of tertiary education has, however, had a positive impact on equity. Two recent studies conducted independently in Europe (Koucký, Bartušek, & Kovařovic, 2008; Shavit, Arum, & Gamoran, 2007) with samples of 15 and 23 European countries, respectively, conclude that the expansion of postsecondary systems has been accompanied by a decrease of inequity of access levels. A similar situation is observed in Latin America. Also, demographic developments, as a consequence of the expansion of immigration or of traditionally excluded groups, intensify the need to focus policies on equity issues.

At the same time, differentiation and diversification of tertiary education systems creates new challenges with respect to equity matters (Shavit et al., 2007). This is particularly clear in the case of dual higher education systems, where along with a level of institutions and university programs (Type 5A according to the Education International Standard Classification–1997) there is a level of vocational–technical institutions and programs (Type 5B).

## REFERENCES

- Albornoz, O. (1993). *Education and society in Latin America*. Pittsburgh, PA: Pittsburgh Press.
- Aldridge, S. (2001). *Social mobility: A discussion paper*. London: Performance and Innovation Unit. Available at: <http://webarchive.nationalarchives.gov.uk/+http://www.cabinetoffice.gov.uk/strategy/downloads/files/socialmobility.pdf>.
- Altbach, P. (1996). Patterns in higher education development: Towards the year 2000. In Z. Morsy, & P. G. Altbach (Eds.), *Higher education in an international perspective: Critical issues* (pp. 21–35). New York, NY: Garland.
- Bravo, D., & Manzi, J. (2002). *Equidad y Resultados Educativos: SIMCE y PAA [Equity and educational outcomes: SIMCE (Educational Quality Measurement System) and PAA (Academic Achievement Test)]*. Santiago: Dept. of Economics, University of Chile and School of Psychology, Pontificia Universidad Católica de Chile.
- Brunner, J. J. (2000). Educación superior y desarrollo en el nuevo contexto latinoamericano [Higher education and development in the new Latin American context]. *Revista de la Educación Superior Chilena* 12 (julio), 25–37.
- Carlson, K. (1983). How equal is equal? *Journal of Educational Equity and Leadership*, 3(3), 243–257.
- CINDA (2011). *El proceso de transición entre educación media y superior: Experiencias universitarias*. Santiago: CINDA.
- CNED. (2015). Estadísticas de Educación Superior. Available at: [http://www.cned.cl/public/Secciones/SeccionIndicesPostulantes/Indices\\_Sistema.aspx](http://www.cned.cl/public/Secciones/SeccionIndicesPostulantes/Indices_Sistema.aspx).
- Crossland, F. (1976). The equilibrists's query: Equality, equity or equilibrium? Thoughts on policies of access to higher education. *Prospects*, 6(4), 526–539.
- Cruces, G., García, C. & Gasparini, L. (2012). Inequality in education: Evidence for Latin America. CEDLAS Documento de Trabajo N° 135 (Agosto), Buenos Aires.
- d'Addio, A. (2007). Intergenerational Transmission of Disadvantage: Mobility or Immobility across Generations? A Review of the Evidence for OECD Countries. OECD Social Employment and Migration Working Papers, No 52, Paris.
- De Moura Castro, C., & Navarro, C. (1999). Will the invisible hand fix Latin American private higher education? In P. Altbach (Ed.), *Private prometheus: Private higher education and development in the 21st century* (pp. 51–72). Chestnut Hill, MA: Greenwood.
- DEMRE [Department of Evaluation, Measurement and Educational Registry], University of Chile (2007). *Unpublished admissions process data for 2007*. Santiago: DEMRE.
- Departamento de Evaluación, Medición y Registro Educativo, DEMRE (2013). *Proceso de Admisión 2013. Etapa de Selección*. Santiago: DEMRE.
- Donoso, S., & Cancino, V. (2007). Caracterización socioeconómica de los estudiantes de educación superior [Socio economic characterization of students in higher education]. *Calidad en la Educación*, 26(1), 203–244.
- Hingozza, O. (2000). Higher education and the emerging markets: The case of Chile. In J. Mauch, B. Donnorumo, & M. McMullen (Eds.), *The emerging markets and higher education: Development and sustainability* (pp. 171–198). New York, NY: Routledge Falmer.

- Espinoza, O. (2002). *The global and national rhetoric of educational reform and the practice of (in) equity in access to the Chilean higher education system, 1981–1998*. Unpublished doctoral dissertation, School of Education, University of Pittsburgh, Pittsburgh.
- Espinoza, O. (2005). Privatización y comercialización de la educación superior en Chile: Una visión crítica [Privatization and commercialization of higher education in Chile: A critical view]. *Revista de la Educación Superior (ANUIES)*, 34(3), 41–60, N°135.
- Espinoza, O. (2007). Solving the equity/equality conceptual dilemma: A new model for analysis of the educational process. *Educational Research*, 49(4), 343–363.
- Espinoza, O. (2008). Creating (in) equalities in access to higher education in the context of structural adjustment and post-adjustment policies: The case of Chile. *Higher Education*, 55(3), 269–284.
- Espinoza, O. (2013). Breaking down societal barriers: Increasing access and equity to higher education. In J. Balán (Ed.), *Latin America's new knowledge economy: Higher education, government, and international collaboration* (pp. 55–70). New York, NY: Institute of International Education (IIE).
- Espinoza, O. (2014). The equity goal oriented model revisited. In A. Teodoro, & M. Guilherme (Eds.), *European and Latin American higher education between mirrors* (pp. 155–167). Rotterdam: Sense Publishers.
- Espinoza, O., & González, L. E. (2007). Perfil socioeconómico del estudiantado que accede a la educación superior en Chile (1990–2003) [Socio economic profile of students who access higher education in Chile (1990–2003)]. *Revista Estudios Pedagógicos*, 33(2), 45–57.
- Espinoza, O., & González, L. E. (2013). Access to higher education in Chile: A public vs. private analysis. *Prospects (UNESCO)*, XLIII(2/166), 199–214.
- Espinoza, O., & González, L. E. (2015a). Equidad en el Sistema de Educación Superior en Chile: Acceso, Permanencia, Desempeño y Resultados. In A. Bernasconi (Ed.), *Educación Superior en Chile: Transformación, Desarrollo y Crisis (Capítulo XII)* (pp. 517–580). Santiago: Ediciones de la Universidad Católica de Chile.
- Espinoza, O., & González, L. E. (2015b). *Los Movimientos Subyacentes de la "Reforma" del Sector Terciario Bajo el Gobierno de Bachelet: Escenarios y Desafíos, . Barómetro de Política y Equidad, Palabra empeñada. Crisis política y agenda gubernamental* (Volumen 10, Junio, pp. 99–119). Santiago: Fundación Equitas-Fundación Friedrich Ebert.
- Espinoza, O., González, L. E., & Uribe, D. (2009). Movilidad Social en Chile: El Caso del Gran Santiago Urbano. *Revista de Ciencias Sociales*, XV(4), 586–606, (Octubre-Diciembre).
- Goldthorpe, J. (2003). The myth of education-based meritocracy. *New Economy*, 10(4), 234–239.
- González, L. E., & Espinoza, O. (2006). Perspectivas de desarrollo de la educación superior en América Latina en un mundo globalizado [Perspectives on developing higher education in Latin America in a globalized world]. *Revista Quórum*, 15, 63–76.
- Gordon, E. W. (1972). 'Toward defining equality of educational opportunity.' In F. Mosteller, & D. Moynihan (Eds.), *On equality of educational opportunity* (pp. 423–434). New York, NY: Random House.
- Harvey, G., & Klein, S. (1985). Understanding and measuring equity in education: A conceptual model. *Journal of Educational Equity and Leadership*, 5(2), 145–168.
- Koucký, J., Bartušek, A., & Kovařovic, J. (2008). *Inequality and access to European tertiary education during last fifty years*. Prague: Education Policy Centre, Charles University.
- Larrañaga, O. (2002). *Elementos para una reforma del sistema de crédito estudiantil en Chile [Elements towards a reform of the student loan system in Chile]*. Santiago: Department of Economics, University of Chile Working Document N°189.

- Latorre, C. L., González, L. E., & Espinoza, O. (2009). *Equidad en Educación Superior: Evaluación de las Políticas Públicas de la Concertación [Equity in higher education: Evaluation of public policies of the Concertación de Partidos por la Democracia]*. Santiago: Editorial Catalonia/ Fundación Equitas.
- Mendes, M., Piscocya, L., Celton, D., & Macadar, D. (2008). *Desigualdad, Inclusión y Equidad en la Educación Superior en América Latina y el Caribe: Tendencias y Escenario Alterativo en el Horizonte 2021*. UNESCO/IESALC Tendencias de la Educación Superior en América Latina y el Caribe. Caracas: UNESCO/IESALC.
- MIDEPLAN. (2009). *Pueblos Indígenas. Encuesta CASEN 2009*. Available at: <[http://www.ministeriodesarrollosocial.gob.cl/casen2009/casen\\_indigena\\_2009.pdf](http://www.ministeriodesarrollosocial.gob.cl/casen2009/casen_indigena_2009.pdf)>.
- Mineduc [Ministry of Education] (1995). *Compendio de Información Estadística, año 1995 [Compendium of statistical information, 1995]*. Santiago: Mineduc.
- Mineduc [Ministry of Education] (2000). *Compendio de Información Estadística, año 2000 [Compendium of statistical information, 2000]*. Santiago: Mineduc.
- Mineduc [Ministry of Education] (2006). *Estadísticas Educativas Año 2006 [Educational statistics, 2006]*. Mineduc: Santiago.
- Mineduc [Ministry of Education]. (2010). Sistema de Información para la Educación Superior (SIES) [Higher Education Information System—SIES]. Available at: <<http://www.mifuturo.cl>>.
- Neave, G., & van Vugh, F. (Eds.), (1994). *Government and higher education relationships across three continents: The winds of change* Tarrytown, NY: Pergamon Press.
- OECD (2007). *No more failures: Ten steps to equity in education*. Paris: OECD.
- SEDLAC (CEDLAC & World Bank). (2014). Cobertura bruta en educación superior según género. Available at: <<http://sedlac.econo.unlp.edu.ar/esp/estadisticas-detalle.php?idE=20>>.
- Shavit, Y., Arum, R., & Gamoran, A. (Eds.), (2007). *Stratification in higher education: A comparative study* Stanford, CA: Stanford University Press.
- SIES (2014). *Panorama de la Educación Superior en Chile*. Santiago: División de Educación Superior, Mineduc.
- Tumin, M. (1965). The meaning of equality in education. Paper presented at the Third Annual Conference of the National Committee for support of Public Schools. Washington, D.C. Cited in Carlson, K. 1983 How equal is equal. *Journal of Educational Equity and Leadership*, 3(3), 243–257.
- UNESCO (2005). *The quality imperative in education*. Paris: UNESCO.
- UNESCO. (2009). *Conferencia Mundial sobre la Educación Superior—2009: La nueva dinámica de la educación superior y la investigación para el cambio social y el desarrollo (Sede de la UNESCO, París, 5-8 de julio de 2009)*. Available at: <[http://www.unesco.org/education/WCHE2009/comunicado\\_es.pdf](http://www.unesco.org/education/WCHE2009/comunicado_es.pdf)>.
- UNESCO/IESALC (2008). *Declaración de la Conferencia Regional de la Educación Superior en América Latina y el Caribe*. Cartagena de Indias, CO: UNESCO/IESALC.
- Warner, W., Havighurst, R. & Loeb, M. (1944). Who shall be educated? In: Warner W., Havighurst R. and Loeb, M., *Who shall be educated? The Challenge of Unequal Opportunities*, Harper: New York, NY, pp. 141–172.
- World Bank (2000). *Higher education in developing countries: Perils and promises*. Washington, DC: World Bank.