

Education Reform in Chile

Designing a Fairer, Better Higher Education System

Graduate Policy Workshop

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January 2016

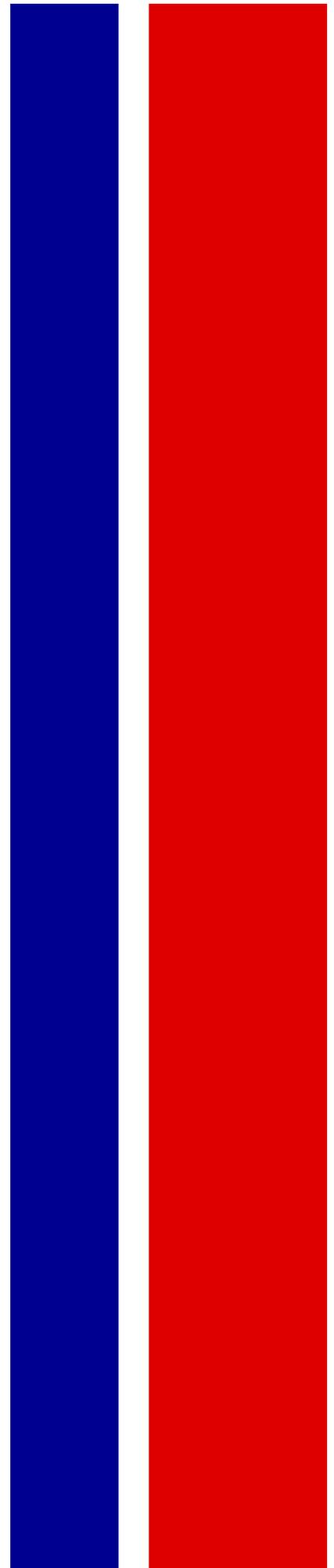


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ACKNOWLEDGEMENTS

The authors wish to thank the many people both in the United States and Chile who took the time to speak to us about our research.

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The views and opinions expressed in this report are solely those of the authors and do not necessarily reflect the position of the interviewees, their organizations, or Princeton University.

LIST OF ACRONYMS

AFD	Direct public support (Aporte Fiscal Directo)
AFI	Indirect public support (Aporte Fiscal Indirecto)
CAE	State Guaranteed Loan System (Crédito con Aval del Estado)
CFT	Technical Training Centers (Centro de Formación Técnica)
CPI	Consumer Price Index
CRUCH	Council of Rectors (Consejo de Rectores)
CNA	National Accreditation commission (Comisión Nacional de Acreditación)
CNAP	Commission for the evaluation of undergraduate programmes (Comisión Nacional de Acreditación de Pregrado)
CNED	National Education Council (Consejo Nacional de Educación)
CONAP	Commission for the evaluation of postgraduate programmes (Comisión Nacional de Acreditación de Postgrado)
CONICYT	National commission for science and technology (Comisión Nacional de Investigación Científica y Tecnológica)
CSE	Higher Education Council (Consejo Superior de Educación)
DIVESUP	Higher Education Division in the Ministry of Education (División de Educación Superior)
FDI	Institutional Development Fund (Fondo de Desarrollo Institucional)
FSCU	University Credit Solidarity Fund (Fondo Solidario de Crédito Universitario)
HECS	Higher Education Contribution Scheme
HELP	Higher Education Loan Program
HEP	Higher Education Provider
IP	Professional institutes (Institutos Profesionales)
LGE	General Education Law
MECESUP	Quality and Equity Improvement in Higher Education (Mejoramiento de la Calidad y la Equidad en la Educación Superior)
MINEDUC	Ministry of Education (Ministerio de Educación)
OECD	Organization for Economic Cooperation and Development
PAA	Academic Aptitude Test (Prueba de Aptitud Académica)
PSU	University Entry Test (Prueba de Selección Universitaria)
SIES	Higher Education Information System (Sistema de Información de la Educación Superior)
SINEC-ES	National Quality Assurance System for Higher Education (Sistema Nacional de Aseguramiento de la Calidad de la Educación Superior)
UF	Consumer Price Index in Chile (Unidad de Fomento)

EXECUTIVE SUMMARY

Chile is a country at the crossroads. Following dramatic economic growth in the last two decades, it is the only South American country to join the Organization for Economic Cooperation and Development (OECD), yet remains the most unequal OECD country. Increasing educational attainment holds promise for reducing this income inequity, but Chile must first correct failures in its largely market-based education sector in order to drive increased attainment for all Chileans.

We are focusing on the issues at the core of current Chile's policy discourse on higher education reforms. The report outlines *structural challenges prevalent in the higher education system* and offers its own set of recommendations. It is organized as follows: the first section considers the context of education reforms in Chile and sets out our approach to considering the higher education system and the second section identifies the key issues that need to be addressed and outlines a set of recommendations for system wide reforms.

Designing a Fairer, Better Higher Education system: While Chile continues to experience a boom in higher education enrollment, there remain persistent disparities in access to quality education. Since 2011, student protests have intensified in response to growing costs and unequal access. Although demands for greater access to education amongst students and their supporters are well justified, the popular diagnosis of problems in the education sector ignores many important issues. While the public focuses on how to provide "free" education, this does not address the central issues facing the Chilean education system today. Further, this focus may come at the cost of increased opportunities for disadvantaged Chileans.

Based on lessons from the international context and assessment of the structural challenges facing Chile's higher education system, the section outlines a set of recommendations for system wide reforms. We address financing higher education, improving quality, and ensuring equitable access. By supplementing and strengthening the existing system, our reforms would seek to chart a middle path that offers the incentives needed to deliver higher education that is high-quality, equitable and fiscally sustainable.

Chile's approach to these efforts will have significant implications for the future of its education sector and its ability to cement its place as a competitive, high-income economy.

CHILEAN HIGHER EDUCATION IN CONTEXT

The Context for Reform

In the last two decades Chile has demonstrated remarkable progress to put itself at the forefront of development in the region. This growth has helped increase the scope of opportunities for Chileans. As incomes and opportunities have grown, more Chileans have entered higher education for the first time, seeking greater skills and a larger share of the spoils of growth.

While more and more Chileans are accessing higher education, there remain persistent disparities in access to quality education. Demands for greater access to education amongst students and their supporters are well justified. However, the popular diagnosis of problems in the education sector ignores many important issues. While the public focuses on how to provide “free” education, this does not address the central issues facing the Chilean education system today. Further, this focus may come at the cost of increased opportunities for disadvantaged Chileans.

The State of the Chilean Higher Education System

Over last 20 years Chilean higher education has changed drastically, experiencing a boom in enrollments. In 2011, seven out of ten students were the first generation from their family accessing university. From 1990 to 2011 the gross higher education enrollment ratio increased from 14 percent to over 50 percent. Total enrollments have increased from about 660,000 in 2005 to almost 1.2 million today.¹

Governance of education

Chile’s higher education system is made up of universities, Professional Institutes (IPs), and Centers for Technical Training (CFTs). IPs and CFTs were established in 1981, focused on providing vocational and technical training. Higher education providers (HEPs) may be public or private. IPs and CFTs may be operated for profit, while universities may not.

Before the 1981 education reforms, Chile had a total of eight universities (six public and two private), which are called the “eight traditional” and considered the most prestigious. After 1981, seventeen more universities were added to the group today called CRUCH (Consejo de Rectores de Universidades Chilenas) universities. These “seventeen derived” universities were established by converting certain academic faculties and regional units of the “eight traditional” into independent institutions.

Since then the education sector has grown immensely, primarily driven by the private sector. Seventy-three percent of university students attend private institutions, while only 27 percent attend public universities. Of the 60 universities operating in 2015, 25 are CRUCH universities (16 public,

9 private) and 35 are other private universities¹. All CRUCH universities have accredited status, while only 19 of the 35 other private universities have institutional accreditation. As of 2015, 43 IPs and 56 CFTs were operating, and were responsible for 29 percent and 12 percent of enrollments respectively. Of these 19 IPs and 20 CFTs were accredited and 24 IPs and 36 CFTs were unaccredited.²

The major difference between universities and the vocational sector is in the type and length of training provided. Universities focus on formal academic training, while IPs and CFTs focus on developing practical work skills. This is reflected in the length of courses – the average minimum length of university degrees for incoming students is about nine semesters. The length of courses is significantly shorter in IPs and CFTs, at just below six and five semesters respectively.

Table 1: Average prescribed length of program of incoming students (semesters)³

	CRUCH universities	Private universities	Professional Institutes	Technical Centers
2005	8.3	8.3	6.7	4.7
2015	9.1	8.8	5.8	4.6

Source: Education National Council, 2015

The governance of the higher education system is based on organic constitutional law (based on the 1981 reforms, made under military rule), with modifications made through three major legislative reforms since the resumption of democratic rule in 1990. The basic rights and general principles of education are laid down in the education act of 1990 (Law 18.962). Key amendments to these laws were made to establish the higher education quality assurance system in 2006 (Law 20.129) and to establish the General Education Law (LGE) in 2009 (Law 20.370). The Ministry for Education (Mineduc) is responsible for the higher education system, including granting permission for HEPs to offer programs and award degrees.

Quality assurance

With the increased role of the private sector has come a greater focus on quality assurance. The first steps towards a quality assurance system were taken in mid-1990s with the creation of the Education Council (CSE). This institution served as leader of the licensing system for HEPs. In the late-1990s and early-2000s, institutions were created to develop voluntary program accreditation at the undergraduate and graduate level. In 2006, Chile established a new quality assurance system (SINAC-ES^{II}) that established the current system of licensing, institutional accreditation, and program accreditation.

Licensing has few requirements and is the only compulsory aspect of the quality assurance system. The National Education Council (CNED) manages the licensing regime.

Institutional accreditation is a voluntary process administered by the National Accreditation Council (CNA), which evaluates an institution’s performance (including mechanisms, implementation and outcomes) in achieving its stated mission. HEPs have strong incentives to seek accreditation as state

¹ Military and police institutions account for only a small number of students and are not listed here.

^{II} National Higher Education Quality Assurance System

funding for tuition is only provided for students at accredited institutions. The accreditation process applies similarly to universities, IPs and CFTs, and assigns HEPs one of four grades: (a) Insufficient (No accreditation); (b) Satisfactory (allows 3 years before reaccreditation); (c) Appropriate (allows 5 years); (d) Optimal (allows 7 years).

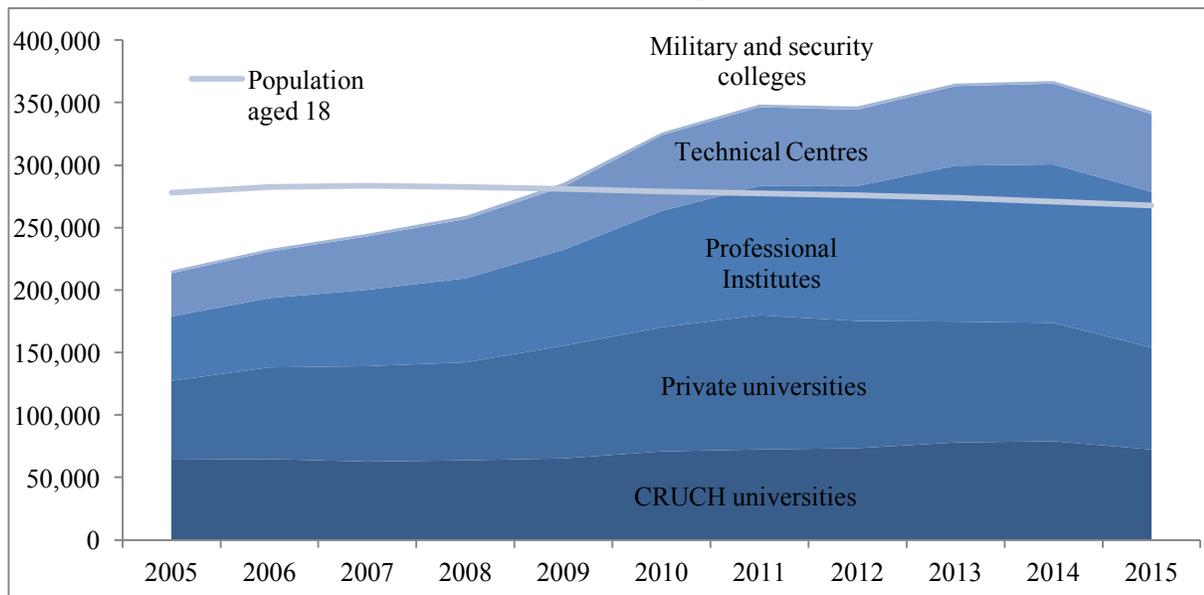
While institutional accreditation is intended to assess a HEP against its stated mission, in effect, institutions are accredited based on inputs such as the proportion of staff with higher education qualifications, the relative quality of student intake, and the provision of infrastructure on campus. Further, while CNA provides oversight for the accreditation system, much of the work is actually performed by private accreditation agencies, often companies with other interests in the higher education industry.

Finally, program accreditation follows a similar process as institutional accreditation but is performed at the program level. Program accreditation is also voluntary, with the exception of some specialist health and education programs.

Educational expansion and attainment

The increase in educational attainment has been facilitated by the massive growth in higher education enrollment. In 2015, the higher education system enrolled a total of 343,000 new students – up from 215,000 in 2005. Since 2009, the number of enrollments available has outstripped the number of students turning 18. This suggests that the higher education system is facilitating a significant increase in the skills of the Chilean adult population. With Chile’s young adult population set to decline by almost 20 percent by 2050, the higher education system will have to strengthen its focus on adult and international education markets if it is to retain this quantity of enrollments.

Figure 1: New enrollments by year and higher education provider



Source: CNED data and UN World Population Prospects: Revision 2015

The rapid growth in higher education has been primarily driven by the growth in the vocational sector – IPs and CFTs. Since 2005, new annual enrollments in IPs and CFTs have more than

doubled from 86,000 to 187,000, increasing their intake share from 40 percent to almost 55 percent. A few major operators dominate the vocational education market, with five providers responsible for 60 percent of total enrollments. In addition, the government has committed to open 15 state financed CFTs free for all students (one in each of Chile's regions). The government has also recently sought to increase access to education outside of the Santiago region by establishing two new state universities. Between 2000 and 2015, growth in enrollments in both universities and the vocational sector was focused on technology, business administration and commerce, and health.⁴

Completing higher education is related to significant private returns, reflected in both higher rates of employment and income. In 2011, 84 percent of adults with a university education had a job, while only 60 percent of those who did not go to university were employed. Among those in the workforce, adults with tertiary education earn on average 160 percent more over their lifetime than those with only secondary education. While this is encouraging, the high dropout ratio is of significant concern, suggesting that the increased uptake is not being matched with the support services students require.

Funding and finance

The Chilean higher education system is a predominantly demand-driven, user-pays system. Although rare by OECD standards, Chile's market-oriented higher education system is in large part responsible for the rapid increase in educational attainment. About 75 percent of total expenditure on tertiary education (more than double the OECD average of 31 percent) comes from private sources, mainly households. Public expenditure on higher education, which was about 0.5 percent of GDP in 2011, is amongst the lowest in the world.

The historical differentiation between CRUCH and non-CRUCH universities is reflected in higher education financing arrangements – in particular access to special forms of student loans and scholarships. CRUCH universities alone receive direct, unconditional funding, and only students of CRUCH universities can receive the most generous form of financial support (the FSCU). This is particularly important given the low levels of government finance to the sector, delivered through the following mechanisms:

1. **Public grants and funds.** The government finances HEPs via several mechanisms: (a) the Direct Fiscal Grant (Aporte Fiscal Directo or AFD), which accounts for one-third of tertiary education public resources and is allocated to only CRUCH institutions; (b) the Indirect Fiscal Grant to both public and private institutions (Aporte Fiscal Indirecto or AFI), which accounts for about 5 percent of public spending and is a type of voucher provided to the 27,500 top scorers on the university entrance exam or PSU; (c) the competitively-allocated funds available for R&D, quality improvements (Mejoramiento de la Calidad y la Equidad en la Educación Superior or MECESUP), and research; and (d) the student financial aid packages (grants and loans) which are transferred to HEPs in students' names. CRUCH Universities receive the greater share of AFI, as this primarily flows to students with higher PSU scores.
2. **Students' fees.** Paid directly by the students to the HEPs. Students finance their education through scholarships, loans, and their own resources. For CFTs and IPs, the direct enrollment fee and undergraduate tuition fees represent the majority of total income.

Differential access to government means that HEPs have widely differing funding models. For example, while CRUCH universities rely on tuition fees for less than 50 percent of their funding, in non-CRUCH universities tuition provides over 80 percent. Further, the need for funds (for both education and research) and lack of price regulation has led to increased tuition costs and a larger financial burden on students. Over the last two decades growth in tuition fees has fast outpaced growth in GDP. On average, university tuition in Chile now equates to 41 percent of GDP per capita, the highest relative cost amongst OECD countries.

In response to these costs, in 2012, the Piñera government reformed student financing to increase access to partial scholarships and to provide income contingent loans. However, these loans and scholarship had a limited impact as they did not cover the full amount of tuition fees, rather only cover up to a certain “reference price” calculated by the government. Fees above the reference price (“top-ups”) are unregulated, and add significantly to the overall cost of education, particularly in private universities. Chile currently provides two types of student higher education loans: the University Credit Solidarity Fund (FSCU) for students enrolled in CRUCH universities and the State Guaranteed Loan System (CAE), available to students at any accredited HEP.

Table 2: Loans available to Chilean students

	FSCU	CAE	Corfo
Eligibility (income)	Four lower-income quintiles	All students	All students
Eligibility (institution)	CRUCH	All licensed HEPs in the CAE network ⁵	Determined by the banks
Funding source	Private (government guaranteed)	Private (government guaranteed)	Private
Interest rate	2 percent real	2 percent real	8 percent real
Income-contingent?	Yes (5 percent income)	Yes (10 percent income)	No
Cancellation w/in	15 years	20 years	N/A

The FSCU is an income-contingent loan, which requires students to pay 5 percent of their income starting from 2 years after they have finished their studies. The FSCU charges a 2 percent real interest rate on its loans. The FSCU historically had a low repayment rate of less than 40 percent since 2000.⁶

The CAE finance system provides loans for tuition up to the government set, reference fee. To be eligible, students must be studying in an accredited institution and have a minimum PSU score of 475 points or (if enrolled at a CFT or IP) a high school average GPA of 5.3. The CAE is otherwise unconditional, enabling students from low income backgrounds to access finance. CAE is given to the poorest students, mostly in the first and second quintile, however one in three beneficiaries are still in the third or higher quintile. Private universities receive 44 percent of CAE beneficiaries; with large amounts also flowing to students at IPs and CFTs. CAE has grown rapidly since its inception, and since 2008 has had more beneficiaries than the FSCU.

Chile’s student loan system generates significant debts. In the majority of developed countries the percentage of income that is used for the payment of university student loans is between 2.6 and 6.7 percent, whereas the payment average in Chile is 18 percent for a period of 15 years.⁷

Admission processes

Admission processes vary significantly across universities, Professional Institutes (IPs) and Centers for Technical Training (CFTs). Over half of total universities (CRUCH and eight other private universities) base admissions on a single admission test, the PSU (*Prueba de Selección Universitaria*). The PSU is managed by the Ministry of Education, but designed and evaluated by the University of Chile. The PSU tests students' knowledge in four main areas of knowledge: Spanish, mathematics, sciences, and history. Together with the PSU, two other criteria have recently been introduced in the admission decision: secondary school grade point average (GPA) and relative class rank in two previous years. However, PSU reigns in relative importance.

A number of private universities also use the PSU, especially established institutions or those seeking to improve their academic reputation. Institutions that do not require the PSU rely mostly on secondary school grades and sometimes, personal interviews. Non-selective higher education is available in IPs, CFTs, and some private universities. The only official requirement for admission is a secondary education certificate of graduation. However, given this requirement, providers can engage in informal selection amongst the prospective pool of students.

PSU completion and scores are highly correlated with socioeconomic background. Disadvantaged students tend to perform poorly. In 2010, 62 percent of students graduating from municipal schools took the test and only 33 percent eventually enrolled in HEPs. In contrast 93 percent of private schools' students took the PSU and 76 percent enrolled in HEPs. There is clear segmentation in access to opportunities for higher education – this is an issue that higher education reforms should not ignore.

Student protests and the proposed higher education reform

Since 2011, student protests have intensified in response to growing costs and unequal access. The students' main demand is for universal free education, alongside greater action to prohibit privately owned (non-profit) HEPs from extracting profits from their operations.

Table 3: Demands of the 2011 student protest movement

<ul style="list-style-type: none">• Increased support for public universities• More equitable admissions process to prestigious universities• Free public education irrespective of socio economic status	<ul style="list-style-type: none">• Ban profits in higher education• Improve accreditation process and end state support for poor quality institutions• Students representatives in HEP's decision making body
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Source: Economist and BBC News, 2011

In 2013, Michelle Bachelet won the Chilean presidential elections on a platform of establishing universal free higher education, backed by tax reform, within six years. In May 2015, the government announced its plans for reform, however legal challenges and changed circumstances have led to frequent changes to these initial proposed reforms. The current plan would provide free education to the lowest five income deciles for selective higher education institutions from 2016. The Ministry of Education estimates that around 20 percent of students (234,000) would qualify for free tuition.

While popular, these reforms fail to address the structural problems facing the higher education system. Rather it appears to be a “quick fix” that will result in distortions and poor outcomes. Indeed, the first phase of proposed reforms, (known as *Gratuitad 2016*) is already facing opposition for excluding significant numbers of poor students by limiting free education to students enrolled in CRUCH universities, and select, not-for-profit CFTs. Other HEPs are only eligible if they can meet strict conditions, which only three universities with 6,000 students are currently able to fulfill.⁸ The policy denies free tuition to 140,000 out of the 390,000 students in the same income bracket studying in the same program at other private universities. *Gratuitad 2016* also excludes the vast majority (88 percent) of low-income students that study in CFTs and IPs. Under the proposed plan, only students from professional institutes and technical colleges that are non-profit and accredited would be eligible for free tuition. Currently, only 101 out of the 181 professional institutes and technical colleges are non-profit and about half of these are accredited, meaning that the benefit will apply to only 60,000 students enrolled in this sector.

It is difficult to see how free higher education can be expanded to remaining students in a fiscally constrained environment. This is even before considering the fundamental problems in funding research and improving quality across the system. It is clear that a new analysis is needed to practically address these problems. However, it is not clear whether free education is a legitimate goal for education reform. Considering these goals is the focus of the next section.

THE ROLE OF HIGHER EDUCATION

The role of the private and public sectors in the provision of higher education is a controversial subject around the world. The Chilean government's proposal for universal free higher education has proved particularly contentious. However, the government has yet been unable to translate this commitment into credible policy reforms. To inform this policy development, we first ask 'why do we value education?' Drawing on this, we then develop a set of principles for education policy.

Why Do We Value Education?

Education has value as both an end in itself, and as instrument for achieving other societal aims. Education has intrinsic value because it^{III}:

- Enables people to develop their capabilities to their highest potential, to grow intellectually and achieve personal fulfillment.
- Increases knowledge and understanding, which is valuable for its own sake.
- Helps to shape enlightened, democratic, and inclusive societies.

Education also functions as an instrument – a means of achieving other things of value. Education is often cited as contributing to:

- Increasing economic growth and material wellbeing
- Advancing equality
- As a way to achieve equality of opportunity

Education enhances economic growth and material wellbeing by driving the growth of human capital, an important prerequisite for development. Education's role in reducing inequality draws on both the economic returns to education and on the provision of opportunities in a broader sense. Education's impact on productivity and wages means that increased access to education should reduce inequality (and vice versa). Similarly, education can reduce social gaps that contribute to persistent social disadvantage. For these reasons, ensuring broad access to education is also one of the best ways to help increase equality of opportunity and align individual incentives with the social good.

Some HEPs can also play other important social roles. For example universities role in research has many intrinsic and instrumental uses. This is an important role that should not be ignored.

Thinking about trade-offs

Designing an education policy is fundamentally about trade-offs. Balancing trade-offs between competing priorities is essential for effective education policy, where focusing exclusively on any one objective outlined above may undermine the provision of others. For instance, revenue and capacity constraints mean that a government is limited in the range of interventions it can make in a

^{III} This draws on the UK Government's *Dearing Report on Higher Education* (1997)

society. Government provision of education, therefore, comes with an opportunity cost in terms of other social goods. Trade-offs also occur within higher education. For instance, when a higher education provider chooses to offer a certain set of programs, they are trading off the provision of other programs that they may have offered. Similarly, a revenue-constrained education system may trade-off between the quantity and quality of education provided.

Furthermore, all education policies make trade-offs regarding the distribution of wealth and opportunity in a society. Education brings with it high private and social returns, which are distributed in some way between individuals, HEPs, and the broader community. Considering these distributional impacts is essential if one is to achieve a fair approach to higher education.

Developing Policy Principles

The contrasting and complementary roles of education provide a framework for considering the design of higher education policy. In this section, we will use the roles of education outlined above to develop some broad principles for education funding.

Program selection and provision

The provision and distribution of education is a social choice, and can be used to advance the social good. Given society's scarce resources, it is important that the education system is designed in a way that achieves society's goals.

Within the constraints necessary to advance the social good, individuals should be free to express preferences regarding their own future, including their own education. A person should be free to choose their program of specialization, and where appropriate, have some degree of flexibility regarding their courses within a given specialization.

The value of education in enhancing capabilities, and the diversity of educational preferences across individuals, suggests that the education system should provide broad access to a diverse range of subjects. An effective higher education system will channel investment into programs that maximize net benefits. By aligning the incentives of students and HEPs with the social good, we can ensure society receives a larger return for its investment in higher education.

Merit is relevant in distributing access to higher education. A meritocratic approach increases the returns to education and allocates resources in a manner that rewards individual effort. However, it is rarely the case that opportunities are equal. This means that in distributing scarce higher education resources one must consider prior opportunity, alongside ability and effort. This could mean that government intervention is needed to increase access amongst disadvantaged groups.

Pricing is a useful tool

Pricing provides powerful incentives for shaping the behavior of higher education providers and students. Differential pricing is the most obvious way of establishing appropriate incentives for program choice. In general, pricing should seek to reflect the expected net benefit of the program. Where total benefits from offering a particular program of study are large, government payments to higher education providers should reflect this. Pricing can be used to encourage institutions to offer

programs with the highest returns, and for students to take them. This does not mean that setting of prices should be left to the market. There are significant market failures at work in higher education stemming from asymmetries in information, bounded rationality, and imbalances of market power between students and education providers.

Pricing is also useful for addressing distributional questions associated with high returns to education. To the extent that the benefits mostly accrue to the individual, individuals should incur the lion's share of the costs. In contrast, pursuing a career with low private benefits and high social benefits should be encouraged through lower costs. For our purposes we consider a reasonable distribution of costs and benefits to be one that ensures:

- Higher education institutions have incentives to provide high quality, socially beneficial education (and in universities, research).
- Society receives a social dividend from supporting higher education that can then be used to support its other objectives.
- Individuals receive a private dividend that both expands their personal capabilities and rewards socially beneficial activities.

While prices help to determine behavior, high upfront costs can deter access to education as short-term liquidity constraints make it difficult for students to balance education and other living costs. This suggests that payment of tuition fees and potentially some portion of living costs should be deferred. Payment of these debts should also be contingent on outcomes, that is, actual income after graduation. This will encourage higher education amongst debt-averse (often low-income) students, and better aligns the costs of higher education with outcomes.

Pricing should be predictable, simple and transparent. While it is important that pricing is flexible to reflect changing needs in the long term, there is significant variability in returns to education. If this variability were reflected in pricing, it would create uncertainty for students and HEPs and inhibit long-term decision-making. When prices change, they should change gradually to provide a degree of certainty for affected parties. Simplicity and transparency of funding is also important. The rules for obtaining funding should be clear for higher education providers, and students should be able to simply compare the costs of different programs.

Funding should be conditional

The provision of government support for higher education does not ensure desired outcomes are met. In order to achieve this, the government must establish incentives that encourage providers to act in accordance with social aims. This can be done by making funding conditional on achieving minimum benchmarks pertaining to criteria of social value.

Where higher education providers receive government support it is appropriate that they demonstrate they are meeting certain benchmarks. For instance it is appropriate that HEPs meet a minimum standard of education in order to receive government support. Similarly, it is important to ensure that students uphold their responsibility to make good use of scarce social resources. As such, support for students should be limited in length and scale.

DESIGNING A FAIRER, BETTER HIGHER EDUCATION SYSTEM

Higher education in Chile has expanded significantly over the last two decades. However, with this expansion have come growing concerns regarding education quality and access. The choices made now are crucial for Chile's future development and ongoing prosperity. In this section we consider the challenges facing Chile's higher education system and make recommendations to establish a fairer, better system for the long term.

Ensuring a competitive higher education system requires reformers take a systematic focus. In order to facilitate this discussion, we divide this section into four related but conceptually distinct sections. The first section will make some 1) general recommendations regarding the higher education system, before subsequent sections focus on developing recommendations for 2) financing higher education, 3) improving quality and 4) ensuring equitable access.

1) General recommendations

There are a number of issues that affect the higher education system in Chile as a whole. This section considers these general issues, and recommends a range of responses. Subsequent recommendations should be considered in light of these overarching themes.

1.1) Equitable treatment of education providers

The Chilean higher education system has suffered from the inconsistent and illogical treatment of different educational institutions. At present the higher education system is segmented between profit and not-for-profit, private and public, CRUCH and non-CRUCH, and universities, technical colleges and professional institutions. This blunts the transmission of incentives for genuine aims and promulgates a system that supports unequal treatment on an arbitrary basis. In doing so it disadvantages those students that fall on the wrong side of the arbitrary divide. The differential treatment of the CRUCH universities is based on historical precedence and political negotiation, at odds with the development of a modern competitive system.⁹¹⁰ Where there is differentiation between institutions of the same type, it should be because of meaningful objective criteria – like differences in quality or level of accreditation (discussed further below).

We consider that all HEPs should have equitable access to resources under common rules. This does not mean that funding and support should be “no strings attached.” Rather, all funds should be available subject to the same set of rigorous standards. Further, while non-discrimination is important, it is also essential to recognize that different types of higher educational institution have different roles. In particular the differences among the university sector and CFTs and IPs must be taken into account in all aspects of the design of the higher education system.

Recommendation

- Higher education providers should be free from discrimination based on arbitrary characteristics such as group membership, age, or reputation. Differentiation is appropriate on to the extent that it is based on objective criteria, used for the purposes of incentivizing quality or achieving other legitimate objectives.

1.2) A strategic approach to skills, jobs, and education

There is evidence of a fundamental mismatch between the offerings of higher education providers – particularly universities – and the skills needed within the economy. The current Chilean system relies on a demand side response for educational attainment to adjust to labor market needs. In this conception, a reduction in labor market demand for a certain skill set should be reflected in lower wage expectations for those skills. Forward looking students will note this change in wage expectations, and some of them will shift into other occupations with wages or other attributes that are now preferred. Therefore, low returns to a certain skill set should see reduced demand for education and lower enrollments in that program of study. While intuitive, the evidence for this dynamic is at best weak.¹¹

There are a number of reasons why this mechanism may fail. First, students may not know, or may be misinformed, as to which skill sets will be in demand when they graduate. Even with this information any response will be subject to lags as education is a process of years not months. Finally, significant differences in the relative market power between universities and student applicants mean that students have a limited ability to effect course offerings.

Whatever the reason for the lack of flexibility in skills supply, it makes sense for the government to take a more strategic approach to skills development. It is important that this is done in a way that respects the right of students to express preferences for their education as well as university autonomy. However, it is reasonable that where the government foresees shortages in particular skill-sets or under-enrollment in fields of high social value, that it provide incentives to higher education providers to increase enrollments in these fields relative to other fields that are less in demand. This requires that the government work with business and higher education providers to encourage price responsiveness and provide education in line with social needs.

Recommendations

- The government should develop a strategic approach to education that provides systemic incentives to develop in-demand skills and skills with high social returns.

1.3) Increase and improve the publication of information

Improving access to information can provide benefits across all aspects of the higher education system. Providing better access to information can be particularly important in ensuring that HEPs face the appropriate set of incentives and that students are able to make informed choices about their futures.

We consider that there are three areas where greater access to accessible information would be appropriate:

- Regarding the returns to different types of education and HEPs.
- Regarding the quality of different HEPs.
- Regarding the performance of HEPs in providing access to disadvantaged students.

Recommendations

- The government should publish, in an accessible format, a greater amount of information regarding the performance of HEPs. This should include information regarding:
 - Labor market outcomes (for example employment rates and income).
 - HEPs performance metrics regarding their quality of education.
 - HEPs performance in ensuring access for disadvantaged groups.

1.4) A holistic approach is required

Education policy must function as a system. There are complex interactions between incentives that mean that a change to one part of the system will invariably have flow on effects. The policy package presented in the sections below needs to be seen as a holistic package encompassing improvements in the funding mechanism, quality assurance system, and the selection process. Changing the quality system can be ineffective unless it is tied to financial incentives or deterrents. Similarly, changing the finance system will not improve outcomes if quality standards aren't enforced. And improving selection processes will only make partial inroads to improving equity and equality of opportunity without reforms to the finance and quality systems.

This package of reforms has sought to balance these elements to ensure that the system of incentives created aligns with Chile's national interests. Partial implementation of this reform package will no doubt result in unintended and unwanted consequences.

Recommendation

- To ensure optimal effectiveness, the recommendations in this report should be implemented in their entirety.

2) Financing and funding recommendations

From a financing standpoint, if universal free education were to be offered, the following conditions would have to be met:

- Higher education institutions would need sufficient income to meet the costs of the additional students.
- The impact on public finances must be sustainable.

Chile fails to meet both these conditions. Most HEPs use tuition fees and direct public funding as their main source of revenue. To fund free higher education the government would have to raise an additional US\$6 billion at current enrollment rate (2.16 per cent of GDP), a significant and unnecessary cost to fund a dubious objective.¹² The US\$6 billion estimate does not even account for the unprecedented rise in enrollments that would be triggered by free education. Thus, it is preferable to continue using private funding for at least some of the financing of higher education. A well-designed student loan system can do just that, while encouraging access and increasing equity in the higher education system and society.

2.1) State guaranteed student loans

In Chile, the state-guaranteed student loans – namely, FSCU and CAE – are far from solving the problems of equity and access. Some of the issues inherent in the system include:

- *CAE and FSCU only offer partial coverage of tuition fees*, up to the amount of reference fees. Tuition fees comprise of reference fees set by the government and the additional premium charged by individual HEPs in the absence of government price controls. Students are also not offered loans to cover their living costs, making it difficult to ensure regional mobility of students from low-income families.
- *Eligibility conditions disfavor students from low-income groups*. Limiting access to loans based on the institution of study and scores in the university access exam (the PSU) limit access amongst low-income students. The FSCU is only offered to students from the 25 CRUCH universities while CAE has a minimum PSU requirement. Research suggests that municipal school pupils from lower socio-economic background are least likely to get high scores at the PSU and exceed the CAE threshold. Further, low-income students are more likely to attend unaccredited IPs and CFTs and therefore be ineligible for government support.
- *Both systems are characterized by inefficient collection mechanisms, with low loan recovery rates*. Since 2007, over 350,000 Chileans have taken CAE loans, and around half of those who have entered repayment since 2010 have defaulted.¹³ Default rates don't vary by education backgrounds and socioeconomic status, suggesting that the cause could be suboptimal program administration, rather than excessive debt burdens driving an inability to repay. Key problems include a lack of ongoing transparency into borrower obligations, lack of effective communication with borrowers as they enter repayment, and deficient incentives for those responsible for collection.¹⁴
- *CAE has a highly inefficient and distortionary funding mechanism* for government purchase of private student loans. While banks offer student loans, they are allowed to immediately sell any of these loans to the government. The government does not have control over the portfolio of loans sold to them, so the banks sell them the riskier loans and make disproportionately high returns of around 30 percent.¹⁵ The high cost of capital raises the structural cost of CAE, so that in 2014, over 40 percent of the budget for the CAE was earmarked for the repurchase of the portfolios of the banks – effectively a state subsidy to capital markets.

Promoting equity through improved income-contingent loans

While Chile has provided students with income contingent loans, their current design leaves much to be desired. Chile should streamline the loan system by replacing the FSCU and CAE with a single system of government provided and managed student loans. At present, the CAE and FSCU system discriminate between students with identical financial need and academic merit for arbitrary reasons.

A replacement system should feature an Income Contingent Loan scheme, similar to that of Australia in order to facilitate private contributions to education spending requiring upfront payment. This allows consumption smoothing whilst protecting access to higher education¹⁶. The main benefits of an income contingent loan system are that it allows everyone to afford higher

education at point of entry and protects low earners because financial risks are borne by the government rather than the individual.

Case Study: Income Contingent Loan schemes implemented in Australia¹⁷¹⁸

The Higher Education Contribution Scheme (HECS) provide loans to all students regardless of socio-economic background. Students eligible for government funded university places can choose to pay their tuition fees upfront to their universities and receive a 20 percent discount or to defer payment with a zero real interest rate loan from the Australian government. The government then pays an equivalent amount directly to the institution.

Since 1998, students may choose a combination of both payment options, paying part of the fees upfront (at least A\$500) with a 10 percent discount and deferring the rest. The loan amount is repaid through the income tax system once a student's annual earnings reaches the threshold for repayment (A\$54,126 for the 2015-16 income year). The repayment rates increases from 4 percent to 8 percent as income increases.

The 2003 reforms introduced an income contingent loan scheme for fee-paying students, FEE-HELP, as part of the new broader Higher Education Loan Program (HELP). FEE-HELP offers fee-paying students an income contingent loan facility to pay their full tuition fees in public or private higher education institutions. Similar to HECS-HELP, debts accrued under FEE-HELP are indexed to the consumer price index, but charge no real interest.

The Australian student loan funding system offers a number of important advantages to Chile's current system: it offers loans to every student regardless of previous qualifications and it allows repayment to begin only once a certain minimum threshold has been reached. In Australia, this repayment is automatically deducted from income through the income tax system. A further discussion of the Australian, Chilean and South Korean income contingent loan systems is provided in Appendix 1.

Private financing through income contingent loans would only provide part of the funding for the higher education system. At present, Chile's education system relies far more heavily on private contributions than other OECD countries and greater direct government support is essential. We believe a long-term target of recouping 50 percent of higher education costs from private beneficiaries is both fair and credible. By splitting the funding of education and research between students and the government, we are also able to differentiate between the private cost of courses for students and the support paid to HEPs for each student enrolled in a given course. This allows the incentives for both students and HEPs to be better aligned with those desired.

Recommendations

- Establish a new system of income contingent loans that:
 - Are provided to any student enrolled in an accredited HEP.
 - Cover the entire cost of tuition, and potentially living costs for students from low-income backgrounds (means tested based on parental wealth/income).
 - Charge a zero real interest rate, with the loan indexed in line with changes in the cost of living as measured by the Unidad de Fomento (UF).

- Offer additional subsidies for students in high social value disciplines (e.g. teaching).
- Impose a minimum income threshold after which the loan becomes payable. This may be indexed, for example, to 75 percent of median full time annual earnings.
- Are administered by the taxation office (Tesorería General de la República) rather than private banks.
- Apply rules retroactively to include existing debts held in CAE and FSCU systems.
- Offer a fixed discount to students that pay fees up front, to incentivize those who can afford it from not availing these loans.
- Provide loans directly to students, with the tuition amount disbursed to universities on behalf of the students.
- Introduce a long-term target to ensure 50 percent student and 50 percent government financing of the higher education system.

2.2) Pricing

Chile has the second most expensive private university system of any OECD country, after the United States. High tuition fees lead to high student debts and difficulty in servicing loans.

Loopholes in the “reference fee” system have also led to cost inflation in higher education. Chile has a standard reference fee for each degree program to determine the amount to be disbursed in student loans. The Ministry of Education sets this amount annually based on a group of institutions by area of discipline, taking into account educational indicators (e.g., graduation rates and retention of students, teaching quality, scientific productivity of the institution). In the absence of government price controls, many universities have responded to this measure by raising fees above the reference fee, i.e. charging a top-up or premium. Around 60 percent of Chilean higher education students receive grants or government-backed loans but these cover, on average, 85 percent of their tuition fees. The families end up bearing the tuition cost charged in excess of the reference fee, a gap that is particularly harmful to the most vulnerable students.

Using prices to avoid excessive costs and increase flexibility

Government-backed student loan support should match the actual tuition fee, while making sure that tuition for each discipline is within an acceptable threshold. While setting these thresholds, greater emphasis needs to be put on benefits instead of tying them directly to costs. Eliminating top-ups should be made a precondition for all higher education institutions seeking to receive public funds including student loans.

This will also create an incentive for HEPs to offer disciplines that are of higher social and market value (i.e. with higher returns). At present, HEPs offer expensive degrees with poor labor market outcomes; these serve a higher fraction of humanities, art, journalism or agriculture majors as opposed to providing degrees in higher-earning science, health, technology, and business fields. Past enrollees in low-repayment degrees earned substantially less during their first several years in the labor market.¹⁹

By making tuition more reflective of market returns, tuition will be more responsive to student and labor market needs. As discussed in the previous recommendation, government can also subsidize tuition of specific disciplines the state wishes to promote.

Recommendations

- Enforce price controls to keep tuitions low. Specifically, charging top-ups should be banned for all government supported places.
- Government should conduct periodic re-assessment of the maximum price threshold in consultation with the HEPs

2.2) Increasing competitive research-based funds

Limited government support for research means that many universities use research expenses as a justification for high tuition fees. While research has positive impacts on the provision of education, it is sufficiently separate that a different funding stream may be required.

Chile spends only 0.4 percent of gross domestic product on research and development (R&D), significantly less than OECD member countries, which on average allocate over 2.3 percent. Funding for R&D is delivered largely through CONICYT. The two biggest competitive funding for R&D are the Fund for the Development of Scientific and Technological Research (FONDECYT) and the Fund for the Promotion of Scientific and Technological Development (FONDEF). The University of Chile, the Catholic University and the University of Concepcion together receive 59 percent of funds for university research disbursed through CONICYT.

Case Study: Allocating Performance-based Research Funds in Australia and England

Australian funding for research is almost fully performance-driven. It is based on the volume of the competitive research income received by the universities, the number of students completing a research degree and the volume of the universities' research publications. The quality of the research publications is evaluated in a national assessment (the ERA: Excellence in Research for Australia) and is used for the calculation of about 10 percent of the research allocation.

In England, research grants are based on research performance, that is, the quality of the research carried out in the universities' departments. Initially, the scores in the periodic Research Assessment Exercise (RAE) were used to determine the research grant. In 2013, the RAE was introduced that evaluates the societal impact of a university's research, in addition to the quality of the research.

Current funding through the existing AFD (that fund CRUCH universities based on historical precedence) and AFI (that pay universities based on the number of students with top PSU scores) should be abolished. Instead funding should be targeted to support research at the university level. This should have two streams:

- Unconditional direct funding based on objective criteria (such as the number of enrolled undergraduate, graduate or post-graduate students).
- Competitive funding that supports particular research streams and activities.

The university sector has noted that insufficient unconditional funding creates uncertainty that reduces their ability to plan research activities. Providing a stream of unconditional funding helps to reduce this uncertainty and to level the playing field between universities of different capabilities. This unconditional funding should be supplemented by competitive research grants that would support research in line with Chile's strategic priorities and social objectives. A specialist agency should be established under Mineduc to manage the allocation of these funds. This fund, guided by an independent oversight committee would:

- Establish objective criteria for disbursing unconditional funds.
- Set research priorities and the research agenda.
- Approve research proposals and grants (including selective block-grant research).
- Evaluate research activities.

Safeguards need to be in place so that corruption and discriminatory practices do not seep into the system. Objective criteria, such as the number of articles published or the number of students graduated in the sciences could be subject to manipulation, whereas judgment calls by allocators are prone to favoritism and cronyism. Some preventative measures include:

- Meritocratic criteria for appointing membership on the boards that decide who gets unconditional research funds.
- Setting guidelines and standardized practices of awarding grants; establish an open and transparent system.
- Use an independent audit committee to conduct 360-degree peer evaluation of the board members (including evaluation from the grant applicants).

Recommendations

- Replace current direct funding with unconditional and competitive research funding.
- Establish an independent agency to oversee the design of this system and disbursement of funds.
- Establish safeguards against nepotism, favoritism and cronyism (e.g. meritocratic criteria for appointing board members, audit committee to conduct evaluation, etc.)

3) Quality and accreditation recommendations

A high quality education system should prepare students to be the drivers of progress and sustainable development from the environmental, social, and economic perspective. Disparities in the quality of education means that Chile's success in increasing enrollments in higher education has not been reflected in equal access to opportunity amongst Chilean students. Reducing the quality gap between HEPs requires fundamental reform of the quality assurance system.

A well-functioning quality assurance (QA) system should aim to achieve²⁰:

- Equity, relevance, and efficiency in the higher education system
- A culture of quality and professionalism leading to continuous improvement
- Minimum standards to protect the interests of every student
- Diversity of institutions, programs, and educational projects
- International engagement and mobility of students

- Transparency and availability of information for students, parents, policymakers, and institutions to build trust in the QA system

Quality assurance and improvement in higher education comes as a result of combined efforts between governance agencies, education institutions, students, parents, and general academic society.²¹ It establishes a set of incentives and safeguards to drive improvements in the education system and maintain them for the long term. The current QA system, SINAC-ES (National Higher Education Quality Assurance System), fails to achieve these aims.

3.1) Building an effective accreditation framework – mechanisms and standards

Quality assurance and enhancement are both a continuous and cyclical process. Maintaining oversight of HEPs is crucial to ensure the overall quality of the system and to provide value for money for the investment of students and the government. The current system is largely voluntary, and fails to provide the required incentives.

In order to operate HEPs only need to be “licensed.” Licensing is a low benchmark that doesn’t consider whether providers ensure a minimum level of quality. Instead quality assurance is the responsibility of the “accreditation” system, a voluntary system that assesses HEP performance at both an institutional and program level. The government encourages accreditation through the use of conditional funding. Only students attending accredited institutions are eligible to apply for state funding. The accreditation system relies on students and society to promote the accountability and responsiveness of HEPs. However, education from unaccredited HEPs is still in demand – even given evidence of low returns to education from these low-quality institutions. As such, it appears that HEPs providing a low quality product face limited consequences.

Case Study: Australia’s Tertiary Education Quality and Standards Agency²²

In 2011, the Australian government established the Tertiary Education Quality and Standards Agency (TEQSA) as an independent quality assurance agency for the higher education sector. TEQSA is responsible for the implementing a streamlined and nationally consistent regulatory system for quality improvement and to ensure minimum quality standards are achieved. TEQSA’s standards based regulation requires it to:

- Implement a national set of standards of quality in higher education (these standards are independently developed by the Higher Education Standards Panel).
- Enforce Threshold Standards (established by the Higher Education Standards Framework) as a condition for entry and continued operation of HEPs in the education system.
- Apply standards to all providers offering courses leading to a regulated higher education award, irrespective of where and how a course is delivered.
- Assess each provider’s adherence to Threshold Standards in light of the provider’s particular circumstances.
- Apply standards flexibly and with regard to the diversity of teaching methods and delivery modes.

TEQSA’s approach to regulation therefore respects diversity within the sector, both in academic vision and teaching practice. TEQSA encourages higher education providers to explore innovative approaches to the delivery of higher education, particularly where these are shown to increase access to education.

Even where HEPs seek accreditation, the measurement of quality is hampered by subjective standards applied by Accreditation Agencies. The current accreditation system is supposed to assess

HEPs against their own conception of their educational project. This would mean that different standards would be applied to institutions with different projects. However, stakeholder comments suggest that the actual method of evaluation differs from that envisioned by the legislation, with an informal standardized approach applied that does little to reflect the HEPs' mission.

Stakeholders noted that this approach was undermined by a focus on inputs rather than outputs, and favors the traditional universities at the expense of providers of vocational and technical education. Stakeholders have reported that accreditors will often make judgments based on the number of PhDs, full-time professors, and publications. These metrics are unlikely to be useful in assessing the quality of HEPs focused on providing vocational education and training. This rigid approach fails to account for the diverse needs of students and will likely impede the development of a flexible and innovative education system. Stakeholders also questioned the duplication of accreditation at the institutional and program level. It appears that such duplication is unnecessary as long as HEPs are required to meet minimum quality standards at an institutional level. While there is a case for certain programs of particular social value (such as teaching, medicine, or nursing) to require students to demonstrate minimum competencies, program accreditation should in general be voluntary and be managed by the relevant professional association.

Recommendations

- Require the accreditation of HEPs as a prerequisite for operation. Institutional accreditation should occur periodically, and be assessed relative to the National Standards Framework (see below). Levels of accreditation should be established to indicate different levels of quality.
- Increase incentives by making student finance and other funding conditional on accreditation level or demonstrated quality improvements. Funding should be open, competitive, and assessed against objective criteria.
- Introduce sanctions for non-complying or low-performing HEPs. An escalating set of penalties (from fines to closure) should be applied in the event of failing to meet minimum standards.
- Create a National Standards Framework for institutional accreditation, this should:
 - Differentiate criteria, standards, and requirements that are applied to universities and providers of vocational education.
 - Evaluate performance through outcomes, not inputs. Metrics should reflect differing institutional aims where possible but must focus on achieving outcomes of value, for example, achieving employment-rates or developing specific competencies.
 - Increase quality standards over time. As Chile develops, a higher level of educational quality will be necessary to remain competitive. Increasing minimum standards should also help reduce persistent regional and economic inequalities.
 - Systematically consider international approaches, such as institutional assessment benchmark against international standards for course length and content.
- Consider mandatory accreditation for programs relating to essential social services. Accreditation of other programs should be voluntary and managed by the relevant professional associations.

3.2) Reforming the institutional framework

Long-term improvements in education quality require institutional reforms in the government agencies responsible for quality assurance. Essential to this is centralizing and simplifying Chile's current fragmented quality assurance systems (SINAC-ES). At present, SINAC-ES has numerous agencies responsible for similar processes, which has created a vacuum of leadership and accountability. For example, the licensing function performed by CNED (the National Education Council) fails to inform the institutional accreditation performed by the CNA (the National Accreditation Commission). Further, there is no evidence of ongoing monitoring to ensure compliance with license conditions and no major sanctions apply for failing to meet conditions. These split roles undermine leadership and accountability for the quality of the higher education sector. This will require reforms to the institutional framework to create incentives for sustained leadership.

An additional issue is the conflicts of interest that arise from the role played by accreditation agencies in the Chilean QA system. The CNA lacks adequate resources to oversee the accreditation of the sector on its own, and relies on accreditation agencies to assess many HEPs. This gives rise to conflicts of interest as accreditation agencies not only accredit institutions but also offer other consulting services to universities. To ensure impartial evaluation and transparency in accreditation decisions, accreditation agencies, if used, should be barred from offering other services to the HEPs they accredit.

Quality assurance needs to be separated from monitoring and compliance, including accreditation appeals. This should address and solve the current tension inside SINAC-ES with CNED acting as the appellate body for CNA decisions on accreditation. The Superintendence of Higher Education should be created to take charge of monitoring compliance of quality standards and be responsible for enforcement or imposition of sanctions and penalties on institutions not complying with quality standards.

Recommendations

- Task DIVESUP with developing a new set of quality standards, with separate sets of standards to be developed for universities and for technical and professional institutions.
- Create a National Higher Education Accreditation Agency, which will be accountable for interpreting and implementing these quality standards and for assuring the effectiveness of the higher education quality assurance system.
- Ramp up the budget allocation to allow them to hire education experts.
- Establish *Superintendencia* of Higher Education responsible for monitoring and enforcing quality standards, including imposition of sanctions for non-compliance.
- Ensure all agencies are adequately funded for these tasks.
- Discontinue the use of private accreditation service providers. If private accreditation support is required during the transition to this system, providers should only be used if they are free of potential conflicts of interest.
- Require that international benchmarking be used in developing quality standards, implementing the quality assurance and in assessing institutional approaches to course

curriculum, design and length.

- Increase availability of information about quality and performance of institutions, to help students and parents make better-informed decisions.

4) Selection and access recommendations

While Chile has succeeded in increasing access to higher education in the last two decades, there remain clear disparities in access to education based on a students' socioeconomic background. Chile has in place a number of policies to reduce inequality in educational access, including scholarships and financing schemes that provide all students with support to access higher education. This however, fails to address the main barrier to attainment of higher education – their relatively poor performance on highly influential selection exams.

4.1) *The PSU is a driver of inequality*

At present, 33 universities (the 25 CRUCH and 8 private universities) use an entrance exam, the PSU, as their major method of student selection^{IV}. Introduced in 2003, the PSU was meant to be a temporary replacement^V for a similar admissions test, the PAA^{VI}, which had been used in Chile since 1965. Whereas the PSU is a test of general knowledge, the PAA covered a wide array of subject matter, including specific tests for different disciplines. The PSU shows a clear bias in favor of students from privileged socioeconomic backgrounds. On average and students at private schools significantly outperform students coming from subsidized and public schools.

Evidence suggests that the movement from the PAA to the PSU has contributed greatly to inequality of access in the Chilean education system. Analysis of these tests suggests that the PSU is far less likely to predict student success than the PAA.²³ This suggests choosing students based on their PSU score is a somewhat arbitrary approach to student selection. Further, there is strong evidence that the PSU is biased in favor of students from privileged social backgrounds. Students from municipal schools and poor households score significantly lower than students from private schools and rich households²⁴ – a student from the richest quintile on average scores 150 points more than a student from the lowest quintile.²⁵ Given the PSU is a poor predictor of student performance and is strongly correlated to socioeconomic status, its reform will likely improve both equity and allocative efficiency in the higher education system.

4.2) *Broadening considerations in student selection*

Related to this is the failure of Chile's primary and secondary education system to prepare disadvantaged students for tertiary education. Out of a total of 3,300 schools in Chile, over 10 percent (345 total) have no students who received a PSU score needed to apply to any university.²⁶ Given these poor results, many students are left with no opportunity to finance further education. Segregation and low socioeconomic inclusion in higher education institutions is transferred from

^{IV} From 2013, CRUCH universities have considered students' grades as part of the selection criteria. At present, college admission outcomes depend on high school grades alongside the PSU.

^V System of Access to Higher Education, *Sistema de Ingreso a la Educación Superior* in Spanish.

^{VI} Test of Academic Aptitude, *Prueba de Aptitud Académica* in Spanish.

earlier education. Given this persistent inequality of outcomes, reforms in primary and secondary education are particularly relevant when it comes to greater access to higher education. This disparity provides a prima facie case for greater provision of remedial courses to support disadvantaged students making the transition to higher education.

In addition to restructuring the selection test to better assess students' capabilities while improving opportunities for lower socioeconomic students, the overall selection criteria should be revisited. A university selection exam does not address all the attributes that may be relevant to a student's success. Using a wider variety of indicators should help HEPs identify the best candidates. Accordingly, consideration must be given to the weighting of different selection criteria. The current high weighting of the PSU in selection is at the expense of other relevant indicators such as performance relative to status and attributes such as leadership and creative ability. Reweighting these parameters may better target access to education to a more diverse cohort of students.

Recommendations

- Reform university selection criteria to promote equity of opportunity and provide support for disadvantaged students to transition from high school to higher education
- Update the PSU to focus on ability rather than general knowledge and consider expanding the entrance exam to consider competencies in particular courses.
- Increase incentives for disadvantaged students to access higher education, consider increasing funding for pre-university preparatory class and remedial classes to enable access to technical and professional programs.
- Engage with HEPs to ensure selection processes achieve adequate representation of students from disadvantaged backgrounds.
- Retain flexible admissions processes for technical and professional institutions. These HEPs are traditionally less segregated and less in need of intervention.
- Centralize and standardize admission processes for universities, and allow voluntary incorporation of technical and professional education providers. Allow HEPs to customize weightings as desired.
- Encourage entrance exam scores be supplemented by other criteria that may include:
 - *Evidence of relative high-performance* – for example through school rankings (potentially averaged over a number of years).
 - *Evidence of motivation or outside achievement* – through interviews, personal statements, letters of reference or extracurricular activities.
 - *Evidence of specific competence* – through subject tests, work portfolio or prerequisite courses.
- Regularly assess the impact of selection criteria on equity.
- Consider government intervention in selection processes or through conditional funding, where HEPs demonstrate systematic inequality in admissions.

CONCLUSIONS

Over the last two decades Chile has made striking progress in expanding access to higher education. However, the flexibility which enabled the private sector to achieve this growth brought with it lax quality standards and rapidly inflating costs. The challenge of the next two decades will be to build on this strong base, by creating the institutions needed for a quality education system; one that is sustainably financed, and accessible to all.

The Bachelet Government's focus on reforming higher education is welcome. However, its proposed reforms are misguided in their approach and fail to stand up to scrutiny. It seems clear that simply making higher education free does not address the real issues at hand. Further, its costs both financially and in the autonomy of higher education provider's undermine Chile's ability to achieve not only its goals in higher reform, but also its other social objectives.

As such, this report outlines an alternative approach. By supplementing and strengthening the existing system, our reforms would seek to chart a middle path that reigns in current excesses and delivers the incentives needed to deliver higher education that is high-quality, equitable, and fiscally sustainable.

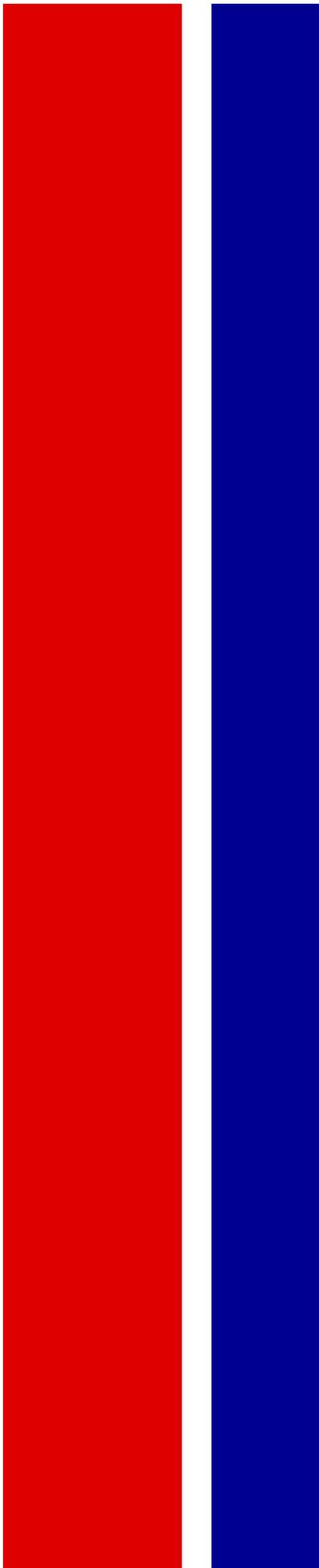
We hope that these suggestions can encourage a less acrimonious and more constructive debate on higher education reform. We believe that it is possible to deliver a mixed system, where the market, suitably constrained, helps to deliver on society's greater objectives. Building such a system would do a great deal to deliver a society that is richer, fairer, and better able to grasp the opportunities that it has worked so hard to create.

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Appendix 1: Undergraduate student loan schemes in Chile, South Korea and Australia»

	Chile		South Korea		Australia	
	FSCU	CAE	ICL	GGIS	HECS HELP	FEE HELP
Main target group(s)	Students in CRUCH Universities, with financial need and minimum PSU Score of 475/GPA of 5.27 for CFTs and IPs)	Students enrolled in accredited HEPIs with demonstrated financial need and PSU Score of 475.	Students from low income brackets and those from households with 3 or more children	All students, but interest-relief is provided to only those with financial need	All domestic students with a Government subsidized place in universities	All Students
Funding Source	Government (from tax revenue)	Government (from tax revenue)	Government via sale of national notes to Korea Student Aid Foundation	Commercial banks	Government (from tax revenue)	Carries a 25 percent surcharge that covers Government's cost of borrowing
Interest rate	2 percent	2 percent	5.8 percent (set on a yearly basis)	Interest subsidized based on income; the poorest students pay no interest.	Zero real interest (inflation only)	
Loan distribution & payment & collection	Administered through the CRUCH universities	Comision Ingresa, approves and updates records; Commercial banks handle disbursement and collection	Ministry of Education (MOE)	Korean Housing Finance Corporation buys the loans from banks and issues student loan-backed securities and guarantees payment.	The loans are administered by the Department of Education, Science and Training (DEST), the Australian Tax Office and higher education institutions. Collection is administered by the Australian Taxation Office	
Guarantor	None required	Academic guarantee from the HEI in case the student drops out	None required	Guarantee from the Student Loan Guarantee Fund	None required	
Repayment	Variable Installment (5 percent of income in 12-15 years), starting 2 years after graduation	Fixed installments for 20 years (up to 10 percent of their earnings). Grace period of 18 months	25 years after reaching a minimum income threshold	20 years (up to 10 years of grace period)	Between 4 to 8 percent of income annually, charged at a progressive rate as income exceeds a compulsory threshold (\$54,126 in 2015-16).	
Coverage of costs	Partial tuition (up to the reference Fee set by the Government)	Full tuition, fees and living expenses	Full tuition, fees and living expenses	Full tuition, fees and living expenses	Full tuition, fees and living expenses	

Source: www.studyassist.gov.au;
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