The returns to tertiary education have been shown to be large, especially in developing countries. Yet access to tertiary education is usually unequal, limited by the high cost of attendance and inadequate access to financial markets, especially for students from low socioeconomic backgrounds. Recent figures on the total cost of tertiary education, including tuition, fees and living expenses, show an average of 35% of per capita GDP in OECD countries. In Latin America, the cost represents a higher percentage of GDP per capita, around 66% in Colombia and 96% in Peru. With such large costs of provision, countries with limited resources find it difficult to finance large expansions of tertiary education. In many countries, this has resulted in small elites attending university. This was also the case in Colombia: in 2002, prior to the inception of the Project, the enrollment rate in tertiary education among the low-income population was less than 20 percent, compared to close to 60 percent for high-income students. Access to good quality tertiary education was limited due to scarce resources, in particular for students from poor families.

With the support of the ACCES (Acceso Con Calidad a la Educacion Superior, in Spanish) Project Colombia shifted its tertiary education policy, implementing comprehensive reforms to improve equity of tertiary education. The result of this shift has been impressive: enrollment in tertiary education increased by 30 percent in the last 3 years to over 1.3 million students (Figure 1), and the number of doctoral students tripled to reach over 1,000 in 2006. Not only is the program supporting the large expansion in tertiary enrollment, ACCES is also improving equitable access by allowing economically disadvantaged students to attend tertiary education and reducing the probability that they drop out by 30 percent. In addition, the Project enhances the transparency of the market for tertiary education by increasing the availability of information regarding tertiary education institutions to students, their families, universities and the government.

What has the Project Achieved?
The project has contributed to improved access to tertiary education for the poor through three direct outcomes:

1. The availability of student loans for low-income students was markedly improved by the project. The percentage of the loans assigned to low-income students (defined as strata 1 and 2 out of six socio-economic strata in Colombia) was only 30 percent in 2002, before ACCES became effective (see Figure 2). Since inception, the ACCES program has supported over 80,000 students, 69% of which are from strata 1 and 2. This effective targeting of the student loan component has resulted in more students from disadvantaged backgrounds being able to finance their studies, thus increasing their ability to enroll and reducing
the probability that they drop out for economic reasons. An impact evaluation of ACCES, which was commissioned by the Project, found that drop out rates were 30 percent lower for beneficiaries than for non-beneficiaries with the same observable characteristics. While rigorous identification of the impact on the probability of enrolling was not possible due data limitations, there is compelling evidence that the program is improving the chance that poor students will access high quality institutions. For example, in Universidad del Norte the share of students from low socioeconomic strata increased from 11 to 34 percent the semester that ACCES became effective.

In addition to the successful targeting of the program, ICETEX, the Colombian public student loan bank, substantially improved the administration of student loans. For example, ICETEX reduced administrative costs from 13.2 percent of its budget in 2002 to 7.6 percent in 2006. Low administrative costs are key to ensuring that sufficient resources are available to support the student loan program. Further, ICETEX verified the income level of every low-income beneficiary through house visits. Lastly, ICETEX was transformed into a public financial institution under the supervision of the Financial Supervision Authority with the objectives of further improving institutional capacity and transparency and to finance more students by gaining access to additional resources in capital markets.

2. The support to doctoral programs has dramatically increased the number of Colombian doctoral students and programs. The number of doctoral students has tripled since project inception with more than 50 percent of students being financed by the ACCES program (Figure 3). By 2006, the number of programs has grown to 51 from 21 in 2002. Increasing the number of Colombians with graduate degrees is necessary to improve the quality of tertiary education through more skilled professors, and improving the human capital for scientific and technological innovation in Colombia.

3. The institutional capacity of the Ministry of Education has increased substantially. With the financial support of the Project, a Vice-Ministry of Tertiary Education was created. Since its creation, this vice-ministry has designed and implemented several innovative policies for tertiary education. With the support of this Project, the information system for tertiary education (the so-called SNIES using its Spanish abbreviation), was modernized. Though still not fully implemented, the system will provide better management information to individual universities and policy makers by reporting key indicators relevant to a modern tertiary education institution. These include student tracking, graduation rates, drop out rates, space utilization, study program and key financial information. Another valuable instrument supported by the project is the labor market observatory, which computes and disseminates detailed information on the employment rate and salaries of graduates. This instrument, launched a year earlier than expected, is available at http://www.graduadoscolombia.edu.co. By using the information, potential students can make informed decisions about which careers to choose.
Further, university administrators and policymakers can use the information to know which graduates are in high demand and can subsequently educate the graduates that firms and organizations are willing to employ.

**What were the main actions supported by the Project?**

The ACCES program was approved in 2002. The objective of the Project is to improve the quality and equity of Tertiary Education through improving the sub sector’s response to society’s needs for high quality human capital and thereby enhance Colombia’s competitiveness. It supports a series of selected actions focusing on equity, quality, governance and finance that will improve tertiary education in Colombia in a comprehensive and long term manner. For example, the Project focuses not only on university degrees, but emphasizes the need to increase enrollment into short cycle courses (technical and technological education), undergraduate programs and doctoral programs. Students should study relevant career fields to gain jobs, enhance productivity and competitiveness. In particular, the Project has three components: student aid, doctoral programs and institutional development.

The **Student Aid component** seeks to promote the equitable expansion of tertiary education by allowing meritorious students from the poorest backgrounds to receive a mix of grants (25 percent) and non-subsidized loans (75 percent) to support study at the tertiary level and allow middle income students to receive loans. ICETEX implements the component. The support targets students from lower strata by establishing clear eligibility criteria for applicants, simplifying the application process, and increasing marketing. In particular, ICETEX undertook two crucial reforms of the delivery of student loans. First, all tertiary education institutions became directly involved in the allocation of student loans through their student aid offices. Second, students were no longer required to present real estate or other assets to guarantee repayment, this requirement had previously prevented tens of thousands of students from qualifying for loans.

The **Support to Doctoral Programs component** is implemented by Colciencias (Colombian Institute for Science and Technology) and is the first program to support national doctoral programs. Previous projects supported students to study overseas. Students receive loans that are partly forgiven if the graduate completes on time. Through the project, Colciencias finances a semester at a foreign institution for the student, and assists the student’s thesis director to participate in international research groups, thus promoting Colombia’s integration into the global pool of knowledge. Further, the component supports the creation of new doctoral programs, as well as the provision of key scientific and technological equipment for new and existing programs through a competitive fund.

The **Institutional Strengthening component** implemented by both the Ministry of Education and ICETEX has three objectives: (i) to improve tertiary education’s linkages to the labor market through the provision of information on graduates with diverse degrees and institutions. This forms the basis of Labor Market Observatory for education. Synergies are achieved by combining information on graduates from universities with information from tax authorities, labor market surveys and social security databases; (ii) to improve and expand the current quality assurance system. This is achieved by assisting the universities to upgrade their institutional information systems, by creating standard indicators for reporting, and through the creation of a web-based system to facilitate collection of this information in a central database; and (iii) to build capacity in the Ministry of Education by financing development of improved procedures and training.

**What are the Next Steps?**

Despite the impressive achievements of the Project, significant challenges remain for the future. First and foremost, the gains should be sustainable. This depends to a significant extent on the capacity of ICETEX to enforce the repayment of loans and the willingness and ability of students to repay. Adequate management of the portfolio and low administrative costs are crucial to operate and expand the program to this effort. Effective outsourcing and use of information technology will also play a fundamental role in this process. Further, ICETEX
could gain access to more capital through the private capital market—possibly with governmental support—to continue lending to students. Second, in order to complement the large increase in enrollment, the government needs to continue emphasizing the quality and relevance of the education programs. In particular, the major expansion of the doctoral programs should be reviewed, possibly through an international evaluation. Third, special emphasis needs to be paid to technical and technological tertiary education, which the project has not been sufficiently successful in expanding. Fourth, continued expansion of tertiary education and student loans implies the need to reach into a new segment of students that probably require more encouragement and preparation to enter tertiary education. This will necessitate new actions on the part of the implementing agencies, including increased provision of student guidance. Lastly, the linkages between tertiary education and the science, technology and innovation systems will need to be strengthened to maximize the future impact of the increased enrollment on Colombia’s economic development.

What can we learn from this Project?

Colombia’s success in managing an equitable expansion of tertiary education provides some important lessons for other countries:

- **Student loans offer a cost-effective alternative to increase enrollment and reduce drop-out rates of students from lower socioeconomic backgrounds.** The high out-of-pocket costs and inadequate access to financing prevents individuals from attending higher education and benefiting from the high returns which can result. While well-targeted loans are important, most students from the poorest backgrounds require additional funding in the form of grants to enroll in tertiary education.

- **Reform of tertiary education needs to be comprehensive.** Student aid has been shown to be an important element in improving access to tertiary education. However, this Project has shown that attention must also be given to the quality and relevance of course offerings if reform is to succeed. For example, demand-side financing did not prove sufficient to stimulate a major growth of technical and technological tertiary education and it was necessary to provide complementary support to the institutions offering these courses. The doctoral programs provide another example. A positive outcome required not simply an increase in the supply of students for identified program but also assistance to the institutions to develop the infrastructure necessary as the basis for quality research. Lastly, the project’s relatively small investment in information systems, designed to provide students and their families with the information necessary to guide their decisions regarding institution and careers, has greatly enhanced the outcome of the project’s major investment in student assistance.

- **Simplifying and systematizing student loan administration is of special importance to ensure the success of student loans programs.** ICETEX implemented a web-based system which simplifies and systematizes the application process. Further, it revamped all its management information systems and processes, which led to a more efficient, transparent and effective institution. Further, improvements in the collection of student loans are enhancing the long-term sustainability of the student loan scheme.

- **Institutional reforms and strong leadership are essential for the sustainability of the program.** The creation of a Vice-Ministry of Tertiary Education fostered innovations in policies and established a governing institution for tertiary education in Colombia. Most importantly, the vision, dedication, and hard work of the leadership and staff at the implementing agencies (ICETEX, Ministry of Education and Colciencias) have been fundamental to the success of the Project and the deep institutional changes that have occurred.

**Notes**


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