Chapter 9. Financing of tertiary education in Colombia

This chapter examines the availability of financial resources in support of Colombia's tertiary education development, looking in particular at resource mobilisation, utilisation and allocation.

The chapter closes with a summary of main findings and recommendations, including suggestions addressing the need to (i) increase public funding in tertiary education, (ii) reach a more equal distribution of public subsidies among public tertiary education institutions, and (iii) introduce performance-based mechanisms to allocate public resources to tertiary education institutions.

Introduction

The success of the Colombian government's ambitious plan to reach a 50% enrolment rate in tertiary education by 2014 hinges, in large part, on the availability of sufficient financial resources and increased reliance on allocation methods that encourage innovation among tertiary education institutions. To assess the impact and coherence of the financing strategy for tertiary education, this chapter examines the following dimensions:

- Resource mobilisation: is Colombia investing sufficiently at the tertiary education level?
- Resource allocation: are public resources distributed in a manner that encourages innovation and rewards performance?
- Resource utilisation: are available resources used in an effective manner?

Bearing in mind that Colombia aspires to become a member of the OECD, this chapter relies, for benchmarking purposes, on comparisons not only with countries in Latin America and the Caribbean (LAC) but also with advanced industrial nations.

Resource mobilisation

Overall Funding

The priority given to education by successive Colombian governments is reflected in relatively high funding levels. At about 8% of GDP, total expenditure on all levels of education has been quite constant and significant during the last decade. As shown by Table 9.1, tertiary education expenditure represents a fourth of the total, in the order of 2% of GDP.

Table 9.1 **Expenditure on education in Colombia (2000-2010)**

		2000	2003	2005	2007	2008	2009	2010	2011
Education (all levels)	Public expenditure on education as % of GDP	4.3	4.4	4.4	4.4	4.4	4.8	4.7	4.7
	Private expenditure on education as % of GDP	3.6	3.3	3.1	2.9	3.0	2.9	2.9	2.9
Tertiary Education	Public spending on tertiary education as a proportion of GDP	1.0	0.9	0.9	0.8	0.9	0.9	1.0	1.0
	Public spending on tertiary education as % of total expenditure on tertiary education[1]	46	45	45	46	45	48	50	50
	Total spending on tertiary education as % of GDP	2.1	1.9	1.9	1.8	1.9	2.0	2.0	2.0
Education (all levels)	Total expenditure on education as % of GDP	7.9	7.7	7.5	7.3	7.4	7.7	7.6	7.6

Notes:

(1) 2011 Preliminary data.

Sources: MEN; GDP 2000-2007: DANE; GDP 2008, 2009, 2010 and 2011: DNP.

Seen in the regional and international context, Colombia's resource mobilisation efforts for education are laudable. According to the statistics in Table 9.2, total spending on education, at more than 7% in 2008, is way above the OECD average of 5.9% and LAC average of 5.3%. The same is true of tertiary education expenditure, which amounted to 1.9% of GDP, compared to an OECD average of 1.5% and LAC average of 1.3%, respectively, in 2008.

Table 9.2 **Expenditure on education as a proportion of GDP in selected countries, 2008**

Countries	Expenditure for all levels of education – public and private sources (2008)	Total expenditure on tertiary education – public and private sources (2008)	Public expenditure on tertiary education (2008)
Denmark	7.1	1.7	1.6
Finland	5.9	1.7	1.6
Sweden	6.3	1.6	1.4
OECD average	**5.9**	**1.5**	**1.0**
France	6.0	1.4	1.2
Israel	7.3	1.6	0.9
Austria	5.4	1.3	1.2
Ireland	5.6	1.4	1.2
United States	7.2	2.7	1.0
Germany	4.8	1.2	1.0
Netherlands	5.6	1.5	1.1
New Zealand	6.6	1.6	1.1
Mexico	5.8	1.2	0.9
Portugal	5.2	1.3	0.9
Spain	5.1	1.2	1.0
United Kingdom	5.7	1.2	0.6
Brazil (3)	5.3	NA	0.8
Australia	5.2	1.5	0.7
Italy	4.8	1.0	0.8
Korea	7.6	2.6	0.6
Japan	4.9	1.5	0.5
Chile (1)	6.4	2.0	0.3
Argentina	6.1	1.2	0.9
Colombia (2)	**7.2**	**1.9**	**0.9**
LAC Average	**5.3(4)**	**1.3(5)**	**0.7(6)**

Notes:

1. *Education at a Glance 2010: OECD Indicators*. Data 2008.
2. Ministry of National Education.
3. Public expenditure only.
4. Average includes nine Latin American countries: Argentina, Brazil, Chile, Colombia, El Salvador, Guatemala, Mexico, Panama, Peru. Source: Author's estimates based on: UNESCO UIS, "Total Expenditure on Educational Institutions and Administration as a % of GDP". All sources. All levels. Retrieved on 21 December 2011; http://stats.uis.unesco.org/unesco/TableViewer/tableView.aspx.
5. Average includes eight Latin American countries: Argentina, Brazil, Chile, Colombia, Guatemala, Mexico, Panama, Peru. Source: Author's estimates based on: UNESCO UIS, "Total Expenditure on Educational Institutions and Administration as a % of GDP". All Sources. Tertiary. Retrieved on 21 December 2011.
6. Average includes nine Latin American countries: Argentina, Brazil, Chile, Colombia, Costa Rica, Guatemala, Mexico, Panama, Peru. Source: Author's estimates based on: UNESCO UIS, "Total Expenditure on Educational Institutions and Administration as a % of GDP". All sources. All levels. Retrieved on 21 December 2011.

Source: *Education at a Glance 2011: OECD Indicators.*

As reflected in the distribution of spending between public and private sources, Colombia's high expenditure rate, especially for tertiary education, is due to a relatively prominent level of private contributions linked to the high enrolment in private institutions. Private expenditure represents exactly half of overall spending at the tertiary education level in 2011 (Table 9.3).

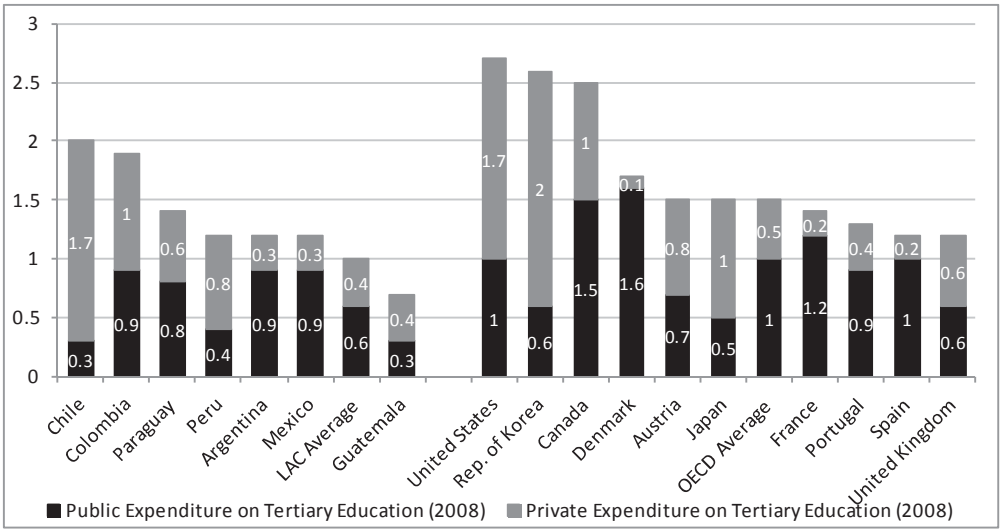
Table 9.3 **Evolution of public and private expenditure on tertiary education in Colombia (%)**

	2007	2008	2009	2010	2011
Public expenditure on higher education / GDP	0.86	0.87	0.94	1.08	0.98
Private expenditure on higher education / GDP	0.99	1.00	1.02	0.99	0.98
Total expenditure on higher education / GDP	1.84	1.87	1.96	2.06	1.96

Source: MEN (2011), Presentation made by the Minister of National Education to the review team, 18 October 2011.

This high proportion of private expenditure (between 55 and 50%) is significantly more than the OECD average of 31% and the LAC average of 46%. In the region, Colombia has the second highest proportion of private expenditure after Chile, as indicated by Figure 9.1.

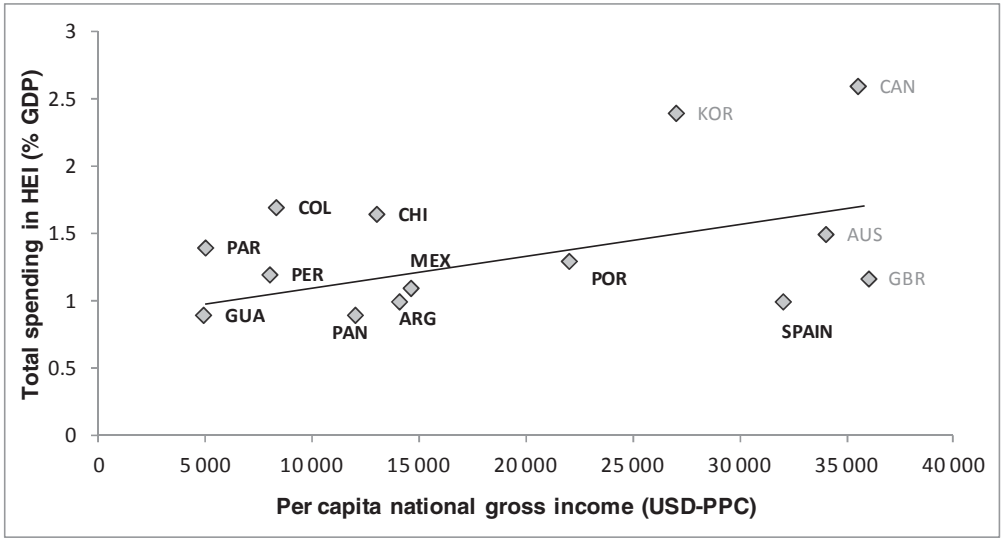
Figure 9.1 **Expenditure on tertiary education institutions as % of GDP, by sources of funding (private vs. public) 2008**



Sources: OECD *Education at a Glance* 2011 and 2010*;* CINDA (2011). Based on UNESCO, *Global Education Digest 2010.*

Considering Colombia's economic development level, this national effort on behalf of tertiary education is well above that in most countries worldwide, as illustrated by Figure 9.2, which shows the level of tertiary education expenditure related to per capita income.

Figure 9.2 **Level of economic development and tertiary education expenditure (2008)**



Source: Brunner (2011), *Educación Superior en Iberoamérica: Informe 2011*, CINDA.

Another way of benchmarking Colombia's spending performance is to look at expenditure per tertiary student as a proportion of GDP per capita. At 26.2% in 2008, Colombia was similar to OECD members with an average of 25.6%. In fact, Colombia has one of the highest percentages in the Latin American region, after Mexico and Brazil. However, Brazil is known for its high unit costs due to a lack of efficiency in resource utilisation (Salmi, 2008).

Public funding

Over the past decade, education expenditures have increased faster than GDP. The growth in education expenditure was 48.4%, compared to an overall increase in GDP of around 40% during the same period. Public expenditure has risen slightly faster than private expenditure. From 2002 to 2010, public spending increased by 67.3%, while private spending grew by only 25% (Table 9.4).

Table 9.4 **Total spending on education by levels (2002-2010, COP billions)**

	2002	2003	2004	2005	2006
Total expenditure on education	28.4	29.2	31.0	32.0	35.4
Public expenditure	15.6	16.7	18.2	18.6	21.3
Total public expenditure on primary and secondary education	11.9	12.9	14.1	14.6	16.9
Total public expenditure on tertiary education	3.4	3.4	3.7	3.7	4.0
Other expenditure, public sector	0.4	0.4	0.4	0.3	0.4
Private spending	12.8	12.5	12.9	13.4	14.1
Total private expenditure on primary and secondary education	5.4	5.0	4.9	5.2	5.3
Total private expenditure on tertiary education	4.2	4.1	4.4	4.5	4.9
Other expenditure, private sector	3.2	3.4	3.6	3.8	3.9

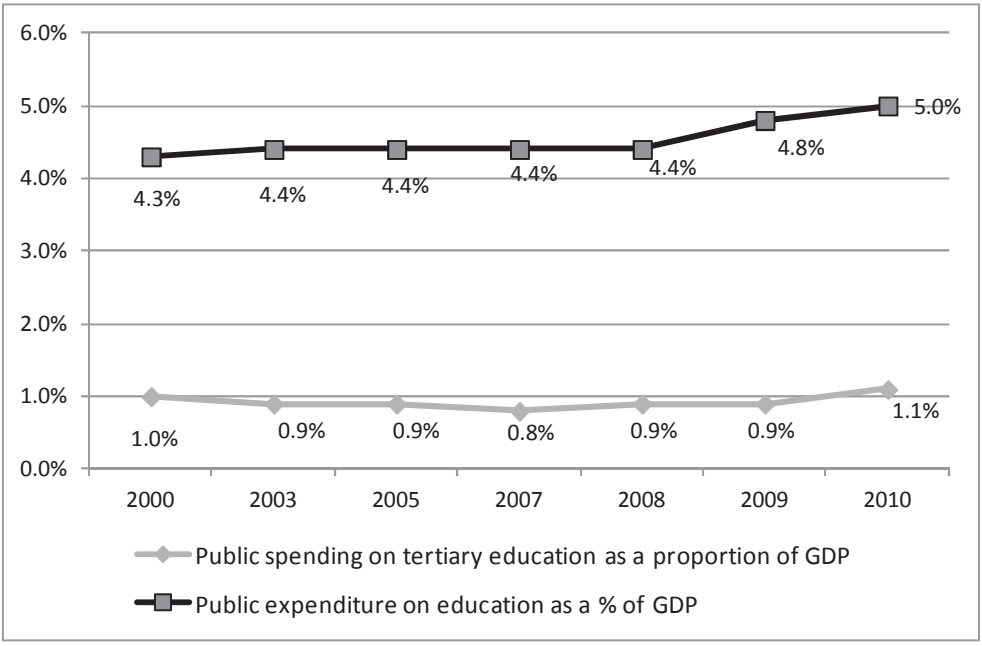
	2007	2008	2009	2010	Increase
Total expenditure on education	36.7	37.9	40.1	42.1	48.4%
Public expenditure	22.2	21.4	24.6	26.1	67.3%
Total public expenditure on primary and secondary education	17.7	18.1	19.5	20.1	69.6%
Total public expenditure on tertiary education	4.2	4.2	4.8	5.7	67.6%
Other expenditure, public sector	0.3	0.3	0.3	0.3	-25.0%
Private spending	14.6	15.0	15.5	16.0	25%
Total private expenditure on primary and secondary education.	5.5	5.6	5.8	6.0	11.5%
Total private expenditure on tertiary education	4.9	5.1	5.2	5.4	28.2%
Other expenditure, private sector	4.2	4.3	4.5	4.6	44.3%

Note: Values in COP billions, 2010.

Source: *Memorias Revolución Educativa 2002-2010: Acciones y Lecciones* (MEN, 2010). Based on: Public Sources: National Budget (Presupuesto General de la Nación). Private sources: DANE – Survey on income and spending until 2007. Years 2008-2010: estimations by the Office of Planning and Finance, Ministry of National Education.

Available statistics indicate that public expenditure on education in Colombia accounted for 15% of total government expenditure in 2008, which is significantly higher than the OECD average (12.9%). However, within the education budget, the proportion of expenditure going to tertiary education has tended to decline slightly over the past few years, from just under a quarter in 2000 to just over a fifth in 2010, as illustrated by Figure 9.3.

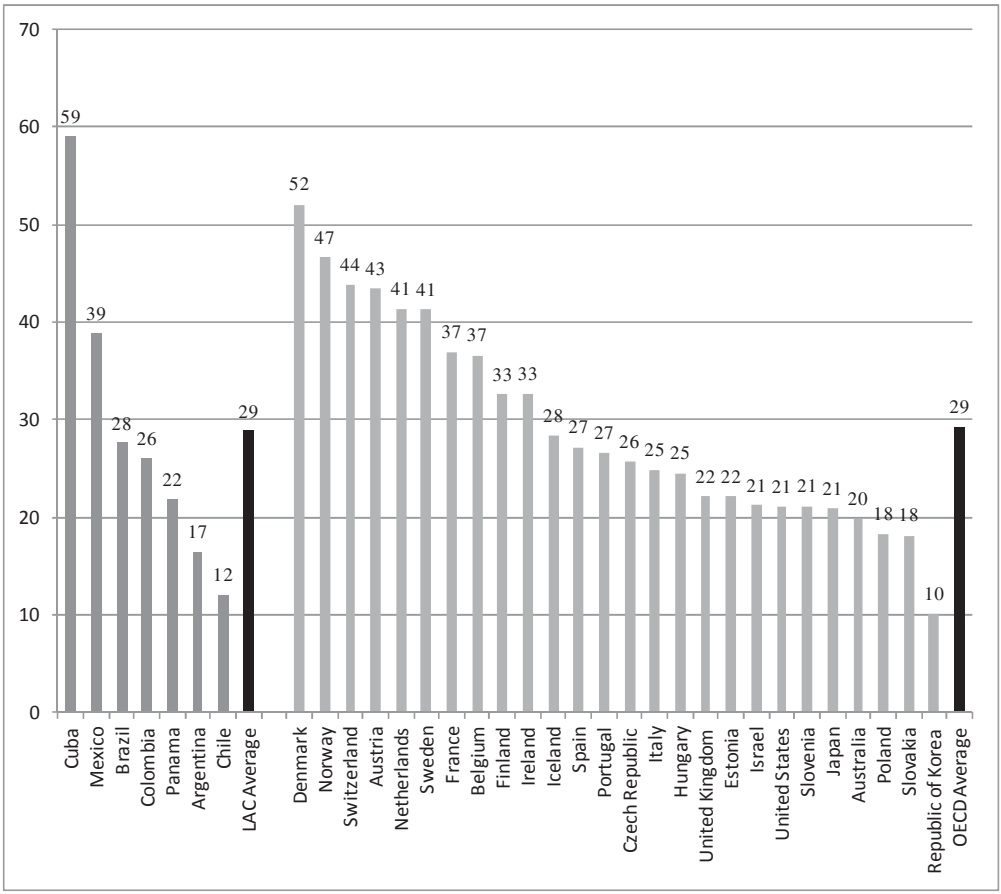
Figure 9.3 **Evolution of education expenditure (2000-2010, %)**



Source: MEN, retrieved on 20 December 2011, http://201.234.245.149/seguimiento/estadisticas/principal_ind.php?seccion=21&id_categoria=4&consulta=gasto_porc_sector&nivel=21&dpto=&mun=&ins=&sede=.

The level of Colombia's public commitment to tertiary education is less impressive than its overall spending. This is illustrated by Figure 9.4 which looks at per student public spending in an international perspective. Compared to Latin American countries as well as OECD nations in general, Colombia's contribution is in the middle range.

Figure 9.4 **Public expenditure per tertiary education student as % of GDP per capita (2008)**



Note: LAC average and OECD average are calculated on the basis of the countries in the graph.

Source: UNESCO, UIS, retrieved on 23 December 2011, http://stats.uis.unesco.org/unesco/TableViewer/tableView.aspx.

Public resources for tertiary education are channeled through five main sources, namely the Ministry of National Education, departments, municipalities, SENA and ICETEX. These contributions, and their evolution over time, are presented in Table 9.5.

Table 9.5 **Evolution of public spending by institutional channel (COP million)**

Categories	2000		2004	
National transfers to TEIs	1 174 043	82.6%	1 601 004	76.1%
Transfers to TEIs from decentralised entities[1]	78 197	5.5%	109 371	5.2%
SENA Professional Technical	N/A	N/A	29 340	1.4%
SENA Technological	N/A	N/A	10 844	0.5%
ICETEX	105 164	7.4%	243 463	11.6%
Operational expenditure MEN (all levels)	15 133	1.1%	17 727	0.8%
MEN investment in quality, promotion, etc.	0	0.0%	43 733	2.1%
ICFES	49 028	3.5%	49 512	2.4%
Total	1 421 565	100.0%	2 104 994	100.0%

Categories	2008		2010	
National transfers to TEIs	1 964 417	62.9%	2 350 887	59.4%
Transfers to TEIs from decentralised entities[1]	154 587	4.9%	169 780	4.3%
SENA Professional Technical	114 900	3.7%	8 036	0.2%
SENA Technological	115 309	3.7%	360 866	9.1%
ICETEX	559 950	17.9%	794 377	20.1%
Operational expenditure MEN (all levels)	33 539	1.1%	45 744	1.2%
MEN investment in quality, promotion, etc.	148 179	4.8%	159 945	4.0%
ICFES	31 313	1.0%	68 487	1.7%
Total	3 122 194	100.0%	3 958 122	100.0%

Notes (1): Exact values of transfers to TEIs from decentralised entities are provided until 2006 and values for 2008, 2010 and 2011 are based on MEN estimates. The resources transferred to ICETEX represent government subsidies that are used by ICETEX in combination with its own resources. ICFES serves the entire education system through the tests that it organises.

Sources: MEN, SENA.

These figures show a clear trend, over the past ten years, of a relatively lower budget share going to the public universities and technical institutes, and increased funding for SENA programmes and ICETEX. This corresponds to a strategic choice in favour of expanding coverage through vocational training (SENA) and private provision, with appropriate student aid (ICETEX).

Income diversification

Colombian public universities and non-university institutions have two principal funding sources to supplement the government's budgetary contribution: tuition fees and income generation from contracts and donations. With respect to the first source of additional income, Table 9.6 shows the average level of tuition fees paid in Colombian public universities in COP and USD equivalents.

Table 9.6 **Average fees in public and private universities in Colombia**

Average yearly fees (2 semesters per year)	2009	2010	2011
Public universities (average 18 public universities)	COP 1 232 085 *(USD 688)*	COP 1 194 426 *(USD 617)*	TBC
Private universities (average 59 private universities)	COP 5 619 660 *(USD 3 136)*	COP 5 907 429 *(USD 3 297)*	COP 6 220 077 *(USD 3 471)*

Note: USD figures based on USD exchange rate of 2 April 2012: COP 1 792/USD.

Source: MEN.

Even though tuition fees in Colombian public universities are about six times less than in private ones, seen in the regional context they are significant compared to most Latin American countries. Table 9.7 shows the distribution of LAC countries by level of tuition fees.

Table 9.7 **Tuition fees in public universities in Latin American countries (2011)**

No Fees	Argentina, Brazil, Cuba, Ecuador, Guatemala, Honduras, Nicaragua, Venezuela
Less than USD 500	Bolivia, El Salvador, Mexico,[1] Panama, Peru, Uruguay
Between USD 500-1 000	Colombia, Costa Rica
More than USD 3 000	Chile

Note (1): Only in a few universities in the Northern states (Aguascalientes, Baja California, Nuevo Leon, Sonora).

Source: *Education at a Glance 2007: OECD Indicators*, for Chile; for the other countries, field visits by Jamil Salmi.

Contrary to what happens in other regions of the world, which are characterised by very diverse funding situations across countries in terms of levels of public investment and cost sharing in tertiary education, Latin America shows a very homogeneous pattern. With two exceptions – Chile with high levels of private funding and Cuba with high levels of public funding – all countries have low levels of cost sharing and low to medium levels of public funding. Colombia fits into the latter category (Table 9.8).

Table 9.8 **Patterns of public funding and cost-sharing in Latin America**

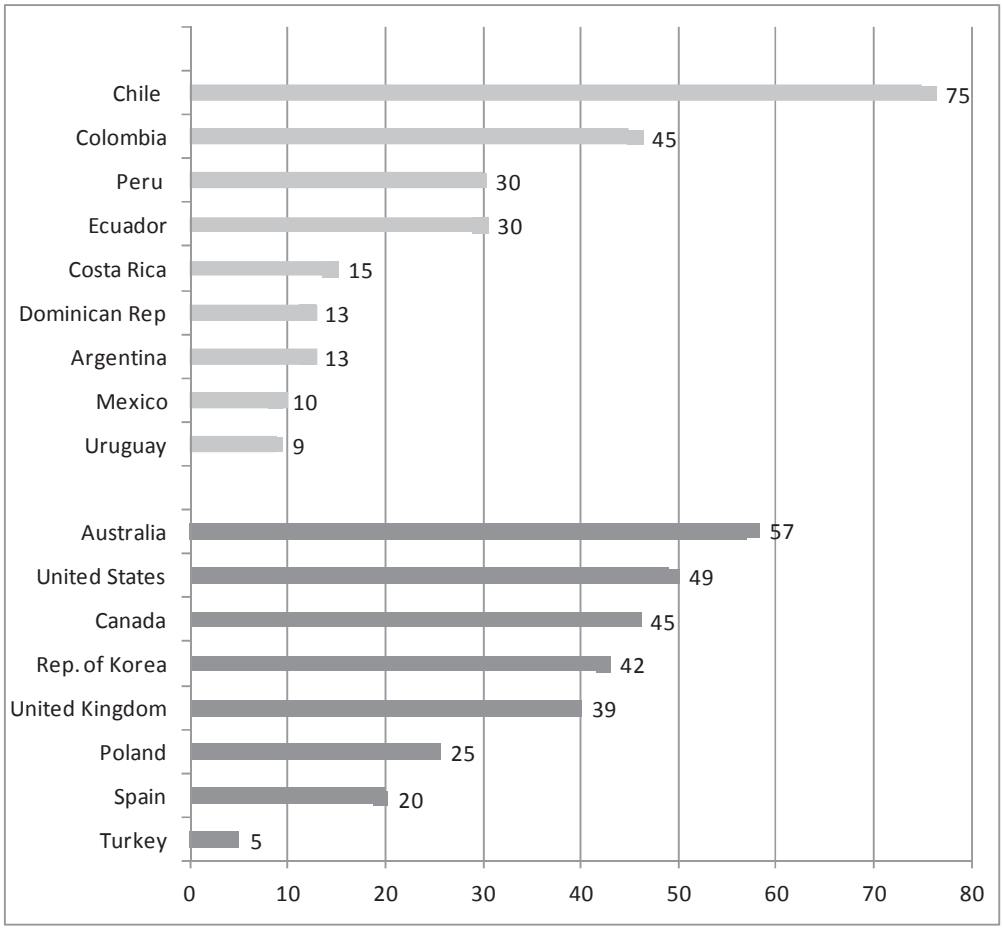
		Tertiary education public expenditure as % of GDP in LAC		
		0.5	0.5 – 1	1
Tuition as % of unit cost in public universities	40	Chile	None	none
	20 - 40	none	None	none
	20	Guatemala, Peru, Dominican Republic, El Salvador	Argentina, Brazil, Colombia, Mexico, Paraguay	Costa Rica, Cuba, Jamaica, Venezuela

Sources: UIS and CINDA (2011), UIS retrieved on 3 Jan 2012, http://stats.uis.unesco.org/unesco/TableViewer/document.aspx?ReportId=136&IF_Language=eng&BR_Topic=0.

Colombian public universities have other income sources besides tuition fee payments, such as donations, contract research, consultancies, continuing education and other miscellaneous activities. Some universities also benefit from dedicated fiscal resources. For instance, Law 122 of 1994 authorises the issue of special administrative stamps to benefit the University of Antioquia, for an annual value not to exceed COP 200 million (about USD 120 million). The resources generated through the sales of these special administrative stamps are dedicated to investment, infrastructure maintenance, sport and arts equipment, ICT, libraries and laboratories.

Overall, the proportion of self-generated resources in Colombian public universities, including tuition fees and research contracts, amount to 45% of their total income. This represents significant progress over the past two decades, up from 18% in 1993 and 27% in 2003. Today, the income generation performance of Colombian public universities is above the average of Latin American countries as well as many OECD countries (Figure 9.5). Relevant experience from Europe is presented in Box 9.1.

Figure 9.5 **Self-generated income in public universities as a proportion of total resources (c. 2010)**



Note: Self-generated income represents principally tuition fees and income from consultancies and research contracts.

Sources: CINDA. For Poland and Turkey, database of the International Comparative Higher Education Finance and Accessibility Project, downloaded on 21 February 2008 from www.gse.buffalo.edu/org/IntHigherEdFinance/. For the United States, National Center for Education Statistics database, downloaded on 4 January 2012 at http://nces.ed.gov/programmes/digest/d10/tables/dt10_364.asp?referrer=list.

Box 9.1 **Lessons from fund-raising efforts in Europe**

A recent European Commission survey on the fund raising efforts of European universities found that success was related to three main factors. The first is what is defined as institutional privilege, *i.e.* the wealth and reputation of the university, as well as pre-existing relationships with potential donors. The second is the level of commitment of senior academic leaders and other research staff in this regard. The third and final factor has to do with the environmental of a university, namely its location and the geo-political context in which it operates.

With regards to the type of donors, the survey showed that European universities raise money mostly from private corporations, while contributions from alumni are much less frequent.

Experience indicates that successful fund-raising involves the following dimensions:

- Commitment of management and governing bodies.
- Full participation of academic staff.
- Financial and human investment in fund-raising activities.
- Rewards for staff successful in attracting philanthropic donations.
- Production and dissemination of materials for fund-raising purposes, such as a website, leaflets and brochures.
- Use of a database to maintain and update records on interactions with donors.
- Reporting on philanthropy in universities' annual financial reports.

One of the successful cases of effective fund-raising efforts came from the United Kingdom, where a government-sponsored matching funding scheme was set up in 2008 following similar positive experiences in Singapore and Hong Kong. Since August 2008, the government has matched any eligible gift made to a participating tertiary education institution, for an amount not to exceed GBP 200 million.

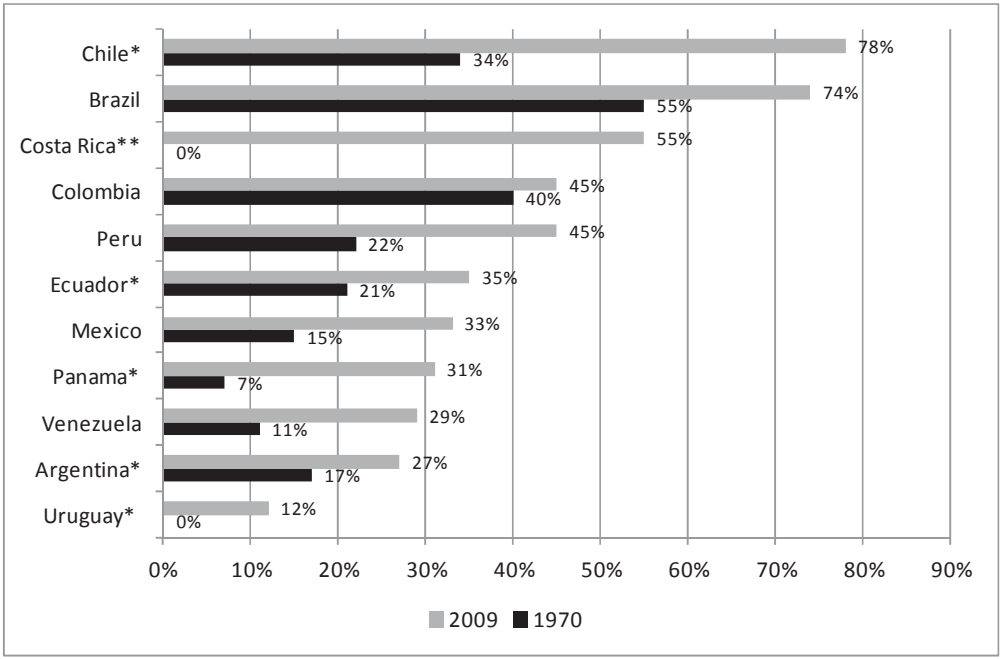
Sources: European Commission (2011), *Giving in Evidence: Fundraising from Philanthropy in European Universities*, Brussels, http://ec.europa.eu/research/era/docs/en/fundraising-from-philanthropy.pdf.

Universities UK (3 April 2008), "Information for Members: Formal Launch of the Matched Funding Scheme for English HE institutions", *Investor in People*, London.

Private tertiary education

For more than two decades, Colombia has been among the Latin American countries with the highest proportions of private sector enrolment in tertiary education, reaching 60% in the late 1990s (Figure 9.6). Only Costa Rica, Brazil and Chile have a higher share.

Figure 9.6 **Share of private tertiary education enrolment in selected Latin American countries (1970, 2009)**



Notes:
* 2008 data.
** 2006 data.
Sources: UNESCO, UIS, retrieved on 9 August 2011; CINDA, 2009 and García Guadilla, 1998.

As discussed earlier, the resources invested by private providers, combined with the tuition fees paid by students and their families, have represented a significant share of the total investment in tertiary education, complementing the state's contribution.

But against the general trend observed not only in Latin America but also in most parts of the world, Colombia is now seeing a gradual diminution of private sector enrolments, as illustrated by Table 9.9. Between 2002 and 2010, the share of enrolment in private institutions has gone down

from 58% to 45%, even though these private institutions continue to account for 72% of the total number of tertiary education institutions in the country, up from 70% in 2001.

Table 9.9 **Evolution of private sector enrolment, 2002-2010**

Year	Public	Private	Total	Public (%)	Private (%)
2002	416 722	583 426	1 000 148	41.67%	58.33%
2003	470 532	579 500	1 050 032	44.81%	55.19%
2004	541 274	572 452	1 113 726	48.60%	51.40%
2005	588 051	608 639	1 196 690	49.14%	50.86%
2006	661 612	622 453	1 284 065	51.52%	48.48%
2007	739 468	621 680	1 361 148	54.33%	45.67%
2008	827 259	665 035	1 492 294	55.44%	44.56%
2009	877 346	707 949	1 585 295	55.34%	44.66%
2010[1]	930 307	761 490	1 691 797	54.99%	45.01%

Note (1): Preliminary data.

Source: MEN, SNIES. Web Page MEN, retrieved on 9 August 2011.

According to interviews during the team's field visits, this unusual evolution in Colombia is due to the perceived better quality of the public universities and their much lower cost. This will have a significant bearing on the prospects for achieving a financially sustainable expansion strategy.

Implementing the government's expansion and improvement plans: searching for financial sustainability

The cost of the government's ambitious and laudable tertiary education development plan, aiming at expanding coverage up to 50% of the age group and improving the quality and relevance of teaching and learning across the board, has not been calculated in detail. It is therefore important to develop a projection model and run a series of scenarios to assess the financing gap carefully, and to explore various alternatives that would allow the plans to be implemented in a financially sustainable way. Under any scenario, the need for additional resources will be considerable.

In any country, five avenues to a sustainable financing strategy are available: *(i)* increasing public subsidies, *(ii)* improving internal efficiency, *(iii)* introducing greater cost-sharing in public institutions, *(iv)* relying more on private sector investment and provision, and *(v)* investing more in short duration or distance education programmes. In Colombia, these five approaches have varying potential for resource mobilisation.

First, according to government sources, there is little room for significant increases in budgetary support for the tertiary education sector. Part of the new fiscal resources coming from the mining sector (*regalías*) will benefit some of the public universities through additional research funds channeled through COLCIENCIAS, but there is limited fiscal space to raise the recurrent budget to any significant extent. One of the main demands of the student movement in 2011 was to reallocate resources from the defence budget to the education one. No one can argue against this demand in theory. But in practice, the prospects of such budget reallocation appear very limited in a country that still faces armed insurrection.

The second avenue is increased internal efficiency. As will be shown in the third section of this chapter, there is a lot of room for freeing up public resources through reduced dropout rates and shorter time to degree completion. The challenge will be to make progress in that direction without compromising the quality of teaching and learning.

Cost sharing in public tertiary education institutions is the third option for increased resource mobilisation. In theory, the case for moving in that direction is strong. In Colombia as in most Latin American countries, public universities that continue to offer "free" education are likely to be more regressive than those that charge fees, because of the high proportion of students from wealthier families – well prepared in elite private high schools – who gain access to the top public universities without having to contribute to the cost of their tertiary education (see Chapter 3 on Access and Equity). A recent study by researchers at Jorge Tadeo Lozano University revealed that the probability of entering university for a high school graduate from strata 5 or 6 is almost 4 times higher than that of a graduate from strata 1 or 2. According to the former Rector Isaza, "what university education does is perpetuate social inequalities in the country, preparing the rich for leadership positions and the poor to be workers" (Isaza, 2011). An estimate of the benefits incidence of public subsidies in tertiary education shows that the richer quintiles receive a disproportionately high share of resources (Table 9.10). Students from the fifth and highest quintile, for instance, obtain almost half the total amount of subsidies going to public universities.

Table 9.10 **Benefits incidence of public subsidies in public universities, 2008**

Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5
3.7%	6.7%	15.4%	28.4%	45.8%

Source: Núñez Méndez (2009).

The present level of tuition fees in the Colombian public universities is certainly not prohibitive for students from strata 4, 5 and 6, as illustrated by Table 9.11 which shows fees as a percentage of per capita income in several countries.

Table 9.11 **Tuition fees as percentage of per capita gross national income**

Country	Public universities	Private universities
Australia	11.3%	21.9%
Canada	10.0%	N/A
Japan	11.8%	18.5%
South Korea	16.3%	31.1%
New Zealand	6.5%	N/A
United Kingdom	5.2%	4.9%
United States	11.4%	42.0%
Italy	3.3%	11.5%
Netherlands	4.4%	4.4%
Israel	12.0%	29.2%
Chile	27.9%	32.0%
Colombia	**11.2%**	**55.4%**

Sources: *Education at a Glance 2007: OECD Indicators*; *Background Report* [MEN, 2011]; *World Economic Indicators*, World Bank.

Unfortunately, few democratic countries in the world have managed to introduce tuition fees in public universities in the recent past. Australia, the Netherlands, New Zealand and England stand out as exceptions in that regard. Any attempt to introduce or increase tuition fees in Latin America has been met with strong political opposition, as vividly illustrated by the ten-month strike at the UNAM, Mexico's flagship university, in 1999. More recently, the 2011 student protests in Chile, echoing similar complaints against excessive fees in South Korea, have challenged the viability of maintaining high levels of tuition fees in these two countries that have the most extreme levels of cost sharing in the world. The irony is that if higher fees are introduced, Colombia, with its well-established student loan system (see Chapter 3), has the right student aid support mechanism to ensure that no academically qualified student from a poorer family need be denied access to tertiary education for financial reasons; meanwhile, better-off students would be contributing a fairer share of the cost of their own studies.

The fourth avenue for resource mobilisation is increased reliance on the private sector, but the prospects are not promising. As signalled earlier, Colombia is one of the few countries in the world where the proportion of private enrolment has gone down in recent years. Furthermore, the vehement opposition to the government's proposal to allow for-profit institutions signals that this avenue has no future in the short to medium term.

The fifth possible approach is to continue diversifying the public provision of tertiary education. The government has already successfully promoted the development of technical and technological institutes and intends to continue in that direction. The review team fully supports this strategy, provided more budgetary resources are transferred to these institutions so as to give the clear message to Colombian society that these institutions are not a second-class option, but an equally effective way of getting a high-quality professional education.

A complementary path would be to develop the type of open universities and distance education programmes that have been found to benefit large segments of population in other parts of the world, such as India, South Africa, Thailand and Turkey. Thailand's two Open Universities, for instance, have been the government's principal instrument for expanding access and reaching out to students from rural areas and the poorest social stratum.

Resource allocation

Anatomy of the present allocation system

Contrary to what happens in basic education, where the Colombian government relies on an innovative funding formula, a very traditional, conservative resource allocation approach is followed in tertiary education. With the exception of the resources dedicated to student loans, the Ministries of National Education and Finance do not apply any real funding formula and the budget that tertiary education institutions receive is linked only marginally to performance measures. As is common in many developing countries, the direct transfer of public funds to universities and other tertiary institutions is principally based on historical trends and negotiations. According to Law 30 of 1992 (article 86), the main reference criteria for distributing direct government contributions to public universities and institutions are the budget and costs recorded in 1993, adjusted for inflation.

The present allocation model does not take unit costs into consideration, which means that no allowance is made for the distribution of students by levels (undergraduate and graduate students) and academic programme. The

model does not reward institutions for efficiency (minimising dropout, maximising completion rates) or relevance (employment outcomes of graduates), and does not even meet the additional costs that institutions incur as a result of increases in the number of enrolled students. This issue was raised and dealt with constructively in the new law that was presented to Parliament in 2011. But since that proposed law was withdrawn after student protests, the same, outdated allocation mechanisms continue to operate.

Only a very small part of the resources allocated by the Ministry of National Education, about 0.1% in 2010, is performance-based. And that tiny part applies only to the universities, not to the technical and technology institutes. The Ministry evaluates each university using variables such as faculty, enrolment, research, outreach and welfare. The results of this evaluation determine an additional contribution (approved by the CESU) allocated to each university on an annual basis.

As a result of the lack of clear and transparent rules and criteria to determine how the bulk of resources are allocated, the present pattern of public resources distribution is characterised by acute disparities. These appear at two levels: first, between universities and university institutions on the one hand and the technical and technological institutes on the other; secondly, among the public universities themselves.

To begin with funding disparities across the various sub-sectors within the tertiary education system, Table 9.12 below illustrates vividly how institutions – and through them their students – are treated very unequally in terms of per student allocation, without any cost, relevance or performance justification. Some public technical or technological institutes do not even receive any government budget to support their operational costs. Out of the 30 public technical and technology institutes in Colombia, only 19 actually receive regular public subsidies.

Table 9.12 **Per-student allocation of public subsidies by type of institution, 2011**

Type of Institution	Number of institutions	Public enrolment	Budget (USD million)[1]	Per student allocation (USD thousand)[1]
Universities	32	537 490	1 094	2 035
University institutions	14	33 622	6	179
Technical and technological institutes	16	63 655	19	302

Note (1): USD exchange rate of 2 April 2012: COP 1 792/USD.

Source: MEN, SNIES.

These figures attest to the fact that public institutions which are not universities are overwhelmingly under-financed. These wide variations are out of step with the situation in most other countries in the world, where the difference in per student subsidies across various types of institutions is not as great. To support that point, Table 9.13 places the Colombian case in an international perspective, showing that the allocation to non-university institutions is possibly one of the lowest in the world.

Table 9.13 **Per-student subsidy in public non-university institutions and universities, selected countries (%)**

Country	Per student subsidy in non-university institutions as % of subsidy in universities
Colombia	2
Australia	56
United States	42
Canada	59
France[1]	107
Germany	48
South Korea	44

Note (1): The higher figure for France reflects the fact that the "classes préparatoires", the "grandes écoles" and the technology institutes are better resourced than the universities.

Sources: MEN and Mikhail (2008).

The second issue of serious concern with respect to resource allocation is the unequal distribution of government subsidies among the 32 public universities in Colombia. Table 9.14, which shows the range of budget contribution per student, is evidence of the need for the Colombian government to move away from the present arbitrary distribution method, which does not take into consideration the number of students enrolled, the performance of a given university, the relevance of its programmes or even the costs involved.

This situation has major implications at two levels. First, it is likely to induce significant differences in performance. The recently published B.O.T. ranking of the top 50 Colombian universities, based on four main criteria (quality of education 40%, employability 15%, income generated through consulting services 15%, research 30%), shows a strong correlation between the rank of the best public universities and the level of public subsidies which they receive (B.O.T., 2011). The universities which are less generously financed will find it difficult to improve their education and research results. Secondly, the unequal distribution of resources has serious negative equity consequences for the students involved. The share of subsidies they receive is mostly determined by their regional origin and has little to do with their academic merit.

Table 9.14 **Per-student government subsidy in public universities, 2011**

University	Budget transfer	Number of students	Per student subsidy COP	Per student subsidy USD[1]
Universidad Nacional de Colombia	445 726 344 793	48 780	9 137 481	5 099
Universidad del Cauca	74 661 572 370	10 803	6 911 189	3 857
Universidad de Antioquia	218 359 754 465	32 733	6 670 936	3 723
Universidad Pedagógica Nacional	48 337 023 606	8 669	5 575 848	3 112
Universidad del Valle	164 032 497 984	30 427	5 391 018	3 008
Universidad de Nariño	45 103 067 213	8 963	5 032 140	2 808
Universidad del Atlántico	83 243 307 019	17 022	4 890 336	2 729
Universidad de Córdoba	53 256 076 882	11 390	4 675 687	2 609
Universidad Surcolombiana de Neiva	40 227 587 225	8 987	4 476 198	2 498
Universidad de Caldas	53 958 683 048	12 516	4 311 176	2 406
Universidad del Pacífico	9 277 092 405	2 214	4 190 195	2 338
Universidad industrial de Santander	87 061 277 191	21 429	4 062 778	2 267
Universidad de los Llanos	22 286 051 427	5 685	3 920 150	2 188
Universidad Pedagógica y Tecnológica de Colombia	91 199 422 490	24 349	3 745 510	2 090
Universidad de Cartagena	57 888 862 221	15.752	3 675 017	2 051
Universidad Tecnológica de Pereira	57 902 995 890	16.069	3 603 398	2 011
Universidad de Sucre	13 493 498 499	4 456	3 028 164	1 690
Universidad Colegio Mayor de Cundinamarca	14 630 925 886	5 099	2 869 372	1 601
Universidad Tecnológica del Chocó "Diego Luis Córdoba"	30 799 815 732	10 974	2 806 617	1 566
Universidad del Quindío	36 968 993 649	13 965	2 647 261	1 477
Universidad de la Amazonia	18 208 590 934	7 069	2 575 837	1 437
Universidad del Magdalena	34 351 031 905	14 023	2 449 621	1 367
Universidad Francisco de Paula Santander - Ocaña	8 787 138 592	3 735	2 352 648	1 313
Universidad de la Guajira	14 068 136 114	7 608	1 849 124	1 032
Universidad Popular del Cesar	20 384 594 102	12 782	1 594 789	890
Universidad del Tolima	32 384 388 675	26 352	1 228 916	686
Universidad Francisco de Paula Santander - Cúcuta	23 767 028 896	20 087	1 183 205	660
Universidad de Pamplona	27 241 160 456	27 390	994 566	555
Universidad de Cundinamarca	9 119 317 364	9.897	921 422	514
Universidad Militar Nueva Granada	9 172 993 545	13 021	704 477	393
Universidad Nacional Abierta y a Distancia - UNAD	30 808 263 815	56 417	546 081	305
Universidad Distrital Francisco José de Caldas	13 295 102 855	28 827	461 203	257

Note (1): USD exchange rate of 2 April 2012: COP 1 792/USD.

Source: MEN.

Towards a more objective and fairer resource allocation system

With the exception of Chile, all Latin American countries rely principally on a traditional historical/negotiated allocation system to distribute the annual recurrent budget among public universities and institutions. To facilitate a more effective use of public resources and encourage tertiary education institutions to be more innovative, the government of Colombia could consider introducing performance-based budget allocation mechanisms that would provide financial incentives for improved institutional results in relation to national policy goals. Four main types of innovative allocation mechanisms can be considered, separately or in combination, for this purpose.

- Output-based funding formulae: output or outcome measures are used to determine all or a portion of a funding formula, for example universities are paid for the number of students they graduate, sometimes with higher prices for graduates in certain fields of study or with specific skills.
- Performance contracts: governments enter into regulatory agreements with institutions to set mutual performance-based objectives.
- Competitive funds: financing is awarded to peer-reviewed proposals designed to achieve institutional improvement or national policy objectives.
- Vouchers: students receive coupons representing a given financial value that allows them to pay for their studies at any tertiary education institution of their choice.

Output-based funding. A more transparent and objective way to distribute funds for recurrent expenditures uses a formula linking the amount of resources spent on inputs such as the number of students or professors to some indicator of institutional performance such as the number of graduates. Examples of countries that have built performance into their funding formulas include:

- Denmark, which has a "taximeter model" in which 30 to 50% of recurrent funds are paid for each student who passes exams.
- The Netherlands, where half of recurrent funding is based on the number of degrees awarded.
- South Africa, where the funding formula takes both the number of students enrolled and the number of graduates into consideration.

- Australia, where funding for doctoral student places is based on a formula comprising graduations (40%), research outputs (10%) and research income, including competitive awards (50%).

A 2004 feasibility study in Malaysia calculated that the tertiary education system could save 10-30% of the operating budget of the public universities if resources were allocated on the basis of a funding formula using unit costs benchmarked against the better-performing institutions (Innovation Associates, 2004).

Performance contracts. Performance contracts are non-binding regulatory agreements negotiated between governments and tertiary education institutions which define a set of mutual obligations, usually performance targets to be achieved by the institution, sometimes with additional funding provided by the government. The agreements may be with entire systems of institutions or with individual institutions. All or a portion of funding may be based on whether institutions meet the requirements in the contracts. The agreements can be prospectively funded or reviewed and acted upon retrospectively.

Examples of countries or sub-national governments with performance contracts include:

- France, which since 1989 has devoted one third to half of the recurrent budget to four-year performance contracts. Payments are made when the contracts are signed, with a post-evaluation to assess the degree and effectiveness of implementation.
- Finland has contracts that set out general goals for the entire tertiary education system as well as specific goals for each institution.
- Denmark uses "development contracts" setting long-term improvement goals for the institutions.
- Spain, where several provinces (*comunidades*) have developed an interesting variation on this model called a "contract programme" (*contrato-programa marco de financiación global*) as a result of the decentralisation policy which has delegated significant powers to the autonomous regions of the country.
- Chile introduced "performance agreements" on a pilot basis in 2007, whereby four public universities are receiving additional resources to implement a carefully negotiated institutional improvement plan with clear progress and outcome indicators. The positive results of the pilot phase have led the Chilean government to announce, in 2011, its intention to extend the opportunity of participating in a performance agreement to all Chilean universities.

- The United States has examples of different types of tertiary education compacts (*e.g.* Maryland, Michigan, North Dakota, Virginia).

Competitive funds. In Latin America, Argentina and Chile are two nations that have used competitive funds to promote quality improvements and build capacity among tertiary education institutions. FOMEC (*Fondo para el Mejoramiento de la Calidad Universitaria*, Fund for University Quality Improvement) in Argentina and MECESUP (*Programa de Mejoramiento de la Calidad y Equidad de la Educación Superior*, Programme for Improvement of Quality and Equity in Higher Education) in Chile have demonstrated their usefulness and value as an effective and flexible resource allocation mechanism to help improve quality and relevance, promote pedagogical innovation, and foster better management – objectives that are difficult to achieve through funding formulae.

The government of Colombia could consider a similar mechanism as one of the principal channels for allocating public investment funds to tertiary education institutions. In this context, the recent positive experience of ICETEX, with its 38 million dollar competitive funding programme to increase coverage, should be carefully reviewed to learn lessons that could be applied to other government funding mechanisms.

As the Argentine and Chilean tertiary education communities have experienced first hand, one of the principal benefits of competitive funds is the practice of transparency and fair play through the establishment of clear criteria and procedures and the creation of an independent monitoring committee. One of the added benefits of competitive funding mechanisms is that they encourage universities to undertake strategic planning activities which help them formulate proposals based on a solid identification of needs and a rigorous action plan from a global institutional perspective that goes beyond the views of individual faculties.

Finally, one of the strengths of competitive funds is that they are more likely to be effective in improving quality than broader-based approaches such as negotiated budgets or funding formulae. Therefore, should the Colombian government consider establishing a competitive fund, it could also link the eligibility of interested tertiary education institutions to participation in the accreditation process, either on a voluntary basis as happened in Argentina or in a compulsory way as is the case in Chile.

Vouchers. The purpose of voucher funding is to promote greater competition among tertiary education providers in response to student interests by giving public support indirectly through the users rather than directly to the providers (Salmi and Hauptman, 2006). While many countries use voucher-type arrangements to pay institutions for enrolments driven by

student preferences, there are few that use demand-side vouchers in the form of coupons provided to students to pay for recurrent expenses. The most prominent examples can be found in the former Soviet Republics of Kazakhstan, Georgia and Azerbaijan which began implementing a voucher scheme in 2001, 2005 and 2010, respectively. In Kazakhstan, for instance, about 20% of the students receive voucher-like education grants that they carry with them to the public or private university of their choice, so long as they choose to study a grant-carrying subject. Eligibility of the students is determined by their score in the highly competitive Unified National Test (equivalent to SABER 11) and their subject choice.

Even after only a few years of operation, the Kazakh voucher system appears to be functioning as an effective allocation instrument to reward those institutions that are perceived as better performing and offer national priority subjects. All tertiary education institutions, public and private alike, are very attentive to their ability to attract education grant beneficiaries. The voucher scheme also seems to be a successful tool to promote the growth of the better quality private institutions which have been able to multiply the number of grant beneficiaries within the past three years (OECD/World Bank, 2007).

Lithuania is another relevant example. Under the voucher system introduced in 2009, 60% of all students are given the flexibility to enrol in the public or private university of their choice. One of the visible benefits of the voucher system has been that several universities had to close down or redesign their low quality programmes which did not attract enough students. Some mergers have also taken place, enabling consolidation into stronger institutions.

The Universities for All programme (ProUni) in Brazil constitutes an interesting variation of a voucher scheme. Under that programme that has been in place since the mid-2000s, the Brazilian government uses tax incentives to "buy" places in private universities for deserving, academically qualified low income students who were not admitted in the top public universities because of the limited number of places.

A similarly innovative programme, called Access with Equity (*Acceso con Equidad*), already exists in Colombia, in the Department of Antioquia. A public-private partnership bringing together the local authorities, a group of private universities and a number of private sector employers offers the opportunity to study in local private universities to academically qualified low income students who could not find a place in a public university. The students get a scholarship equivalent to 75% of the tuition costs and receive an ICETEX loan for the remaining 25%.

Resource utilisation

The third element to be analysed in this chapter on the financing of tertiary education in Colombia is resource utilisation, *i.e.* the extent to which public subsidies for tertiary education are used efficiently and effectively. Four dimensions are worthy of attention in the Colombian case: *(i)* internal efficiency, *(ii)* the deployment of academic staff for teaching purposes, *(iii)* spending on administrative staff and *(iv)* financial controls in the private segment of the tertiary education sub-sector.

Internal efficiency

As mentioned earlier in this report, Colombian universities are characterised by high dropout rates (see Table 9.15). Even though the situation has improved slightly in the past decade, the overall dropout rate is still close to 45% on average. This translates into wasted opportunities for many young Colombians and a poor use of sparse public resources for the country as a whole.

Table 9.15A **Dropout rate in public and private institutions by cohort (%)**

Level	Public	Private
University	43.5	46.6
Technological	55.4	53.0
Technical	60.5	59.2

Source: SPADIES, November 2011.

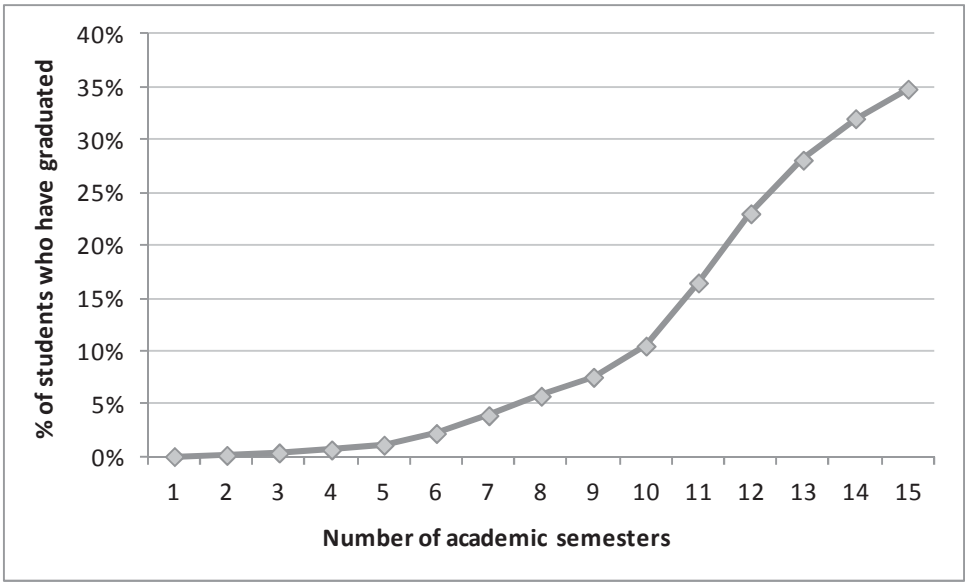
Table 9.15B **Dropout rate in public and private institutions by year (%)**

Year	Public	Private
2007	17.2	19.3
2008	14.1	16.2
2009	13.9	15.6
2010	13.2	14.6
2011	11.2	13.8

Source: SPADIES, November 2011.

Dropout rates vary greatly among institutions, regions, and academic programmes. As Table 9.15B shows, the dropout rate per cohort is a little lower in public than in private universities; but public T&T programmes have slightly higher dropout rates than private T&T programmes. Overall, however, in the years 2007-11 when there were always many more university than T&T students in the system, public institutions have consistently shown a lower annual dropout rate than private institutions.

Figure 9.7 **Graduation rate per cohort**



Source: MEN SPADIES, May 2011.

Another dimension of this problem is that students actually take much longer to graduate than theoretically expected. Figure 9.7 shows the graduation rate for various cohorts of students. Only 10% of the students graduate on time. About 30% of the students graduate with two years of delay, meaning that they take seven years on average to graduate instead of five.

International experience indicates that high levels of dropout are usually due to a combination of financial and non-financial barriers. The best approach, therefore, is to address both factors at the same time, which is the strategy that Colombia has followed. On the one hand, the Ministry of

National Education has supported regional projects developed by tertiary education institutions to assist students with academic problems by providing remedial courses, tutoring and tracking; to provide career guidance for secondary school students interested in entering tertiary education; and to improve institutional processes that help students adjust to university life. Between 2007 and 2010, the Ministry contributed COP 6.3 billion, while the 36 institutions involved matched this amount with another COP 6.8 billion. As a result, 39 663 students have received assistance through direct support programmes. Competency training has begun for 6 457 students through collaboration processes with high schools. Among the first group of 11 supported institutions, the average annual dropout rate decreased from 13.2% in 2007 to 11.5% in 2008. For the 19 institutions supported between 2008 and 2009, the annual dropout rate decreased from 18.7% in 2008 to 17.3% in 2009. The dropout rate among institutions that did not receive support increased slightly from 12.1% in 2008 to 12.4% in 2009. At the beginning of 2010, the Ministry selected 6 more projects.

On the other hand, ICETEX has taken the lead in providing financial support to prevent needy students from abandoning their studies for economic reasons. The impact of this has already been mentioned in Chapter 3. Suffice to mention here that the Colombian government and the concerned institutions are well aware of this serious dropout issue and have begun to address it a consistent and effective way. The next phase should build on the most successful projects implemented so far and scale them up.

Some countries have also used negative incentives to improve degree completion times, on the assumption that subsidised education does not help motivate students to graduate on time. In several German States, for example, students who take more than two years of additional time to graduate have to pay so called “long term fees” as a deterrent.

The long formal duration of first degree studies (five years for a bachelor’s degree) is a structural feature that affects the ability of Colombian universities to operate as efficiently as they could. While a good number of private universities and a few public ones have moved to reduce the duration of their bachelor’s degrees, the majority of public universities are keen on maintaining the traditional degree structure, arguing that shorter degrees would result in a loss of quality.

The review time is not convinced by the public universities' argument. Even if students take no additional time, Colombian first degrees generally take one year longer, often take two years longer, than similar degrees in North America or Europe. This represents a significant social cost for the country, compounding the issue of over-staying. Aligning the duration of Colombian first degrees with international practice would permit the redeployment of a significant proportion of the resources currently used in tertiary education, with resulting savings for students and their families. It should also boost students' chances of completing their programmes and reduce dropout. The MEN could use financial incentives and the accreditation system to encourage Colombian universities to move in this direction.

Deployment of academic staff

While it is not easy to calculate the number of students per teacher due to a lack of consistency in the definition of full-time and part-time lecturers, the data provided by the Ministry reveal a wide range, from 5 students per teacher at the University of Antioquia to 27 at the University of Cucuta (Table 9.16). It is not easy to establish a clear relationship between low student-teacher ratios and high quality, if full institutional accreditation is taken as the mark of high quality. The seven universities[1] with this accreditation are shaded in Table 9.16: their ratios range from 5 to 16 students per teacher. In view of these major differences, it would be useful to undertake an in-depth study of the deployment of academic staff in public universities to see how this relates to the quality of teaching and learning.

Administrative expenditure

Another way of looking at resource utilisation is to compare how much public universities spend on administrative functions relative to educational activities. Table 9.17 shows the proportion of administrative costs in the universities' total budget, ranking them from most efficient to least efficient, and again highlighting in grey those with high-quality accreditation. The data reveal stark differences across universities. The ratio ranges from 16% at Universidad Militar Nueva Grenada to 65% at Universidad Nariño; in universities with VHQA (voluntary high quality accreditation) the ratio ranges from 25% to 63%. In all, seven universities spend more than half their budget on administrative expenses, which may result in insufficient resources being dedicated to the educational side. It would be desirable for the MEN to look into this issue carefully and encourage those universities to explore ways of rebalancing their budget towards more spending for teaching and research.

Table 9.16 **Deployment of academic staff in public universities: student/teacher ratio, 2010**

University	Student/teacher ratio
Universidad de Antioquia	**5**
Universidad Pedagógica Nacional	7
Universidad-Colegio Mayor De Cundinamarca	8
Universidad del Quindío	8
Universidad Militar-Nueva Granada	8
Universidad de Nariño	10
Universidad de Pamplona	10
Universidad Nacional de Colombia	**10**
Universidad de Cartagena	10
Universidad del Pacífico	11
Universidad del Tolima	11
Universidad de La Amazonia	11
Universidad de Cundinamarca-UDEC	12
Universidad del Cauca	12
Universidad de La Guajira	12
Universidad Tecnológica de Pereira - UTP	**13**
Universidad Tecnológica del Chocó - Diego Luis Córdoba	13
Universidad Francisco de Paula Santander - Ocaña	13
Universidad Industrial de Santander	**13**
Universidad de Sucre	13
Universidad de Caldas	**13**
Universidad Popular del Cesar	14
Universidad Surcolombiana	14
Universidad del Valle	**15**
Universidad Pedagógica Y Tecnológica de Colombia	**16**
Universidad Distrital - Francisco José de Caldas	16
Universidad Nacional Abierta y a Distancia UNAD	16
Universidad de Los Llanos	17
Universidad del Atlántico	18
Universidad de Córdoba	18
Universidad del Magdalena	18
Universidad Francisco de Paula Santander - Cúcuta	27
Average	**11**

Source: MEN, SNIES.

Table 9.17 **Administrative expenditure in public universities, USD thousands,[1] 2011**

Universities	Total administrative expenditure – operating expenses	Total expenditure	Administrative expenditure – operating costs
Universidad Militar-Nueva Granada	6 726.6	4 2762.6	15.70%
Universidad Popular del Cesar	4 956.2	2 1824.4	22.70%
Universidad de Sucre	2 775.2	1 1596.5	23.90%
Universidad Pedagógica y Tecnológica de Colombia	16 447.2	65 758.6	25.00%
Universidad de Pamplona	9 953.0	38 376.3	25.90%
Universidad del Cauca	14 685.6	56 046.3	26.20%
Universidad Francisco de Paula Santander -Cauca	5 992.1	20 414.7	29.40%
Universidad de la Amazonia	4 477.1	13 979.8	32.00%
Universidad del Tolima	1 1420.2	35 561.0	32.10%
Universidad del Valle	4 9387.1	150 553.0	32.80%
Universidad Surcolombiana	11 542.0	34 401.0	33.60%
Universidad del Quindío	12 541.2	33 679.2	37.20%
Universidad-Colegio Mayor de Cundinamarca	5 142.0	13 685.7	37.60%
Universidad del Atlántico	13 991.6	36 662.7	38.20%
Universidad del Magdalena	14 544.6	38 057.7	38.20%
Universidad Nacional de Colombia	214 641.8	540 363.5	39.70%
Universidad Francisco de Paula Santander - Ocaña	2 120.3	5 324.9	39.80%
Universidad Tecnológica de Pereira	23 884.3	58 895.8	40.60%
Universidad Industrial de Santander	49 568.6	110 330.9	46.10%
Universidad Distrital-Francisco José de Caldas	40 698.2	86 170.9	47.20%
Universidad de Caldas	26 128.7	55 011.1	47.50%
Universidad de los Llanos	10 106.3	20 548.9	49.20%
Universidad de Cundinamarca	9 352.0	18 871.8	49.60%
Universidad de Córdoba	27 211.1	52 533.8	51.80%
Universidad de la Guajira	11 642.7	20 186.5	57.70%
Universidad de Cartagena	33 079.6	56 990.4	58.00%
Universidad Tecnológica del Chocó - Diego Luis Córdoba	15 442.1	26 421.7	58.40%
Universidad del Pacífico	4 652.5	7 567.6	61.50%
Universidad de Antioquia	191 450.4	305 504.3	62.70%
Universidad de Nariño	38 377.7	59 287.3	65.40%

Note (1): USD exchange rate of 2 April 2012: COP 1 792/USD.

Source: MEN, SNIES.

Generally speaking, the team's field visits showed that public universities are still constrained by rigid civil service rules that prevent them from operating with the management flexibility that modern universities in other parts of the world enjoy. These rules apply in particular when it comes to establishing linkages with firms and NGOs or developing international partnerships (organisation of international conferences, invitations to foreign professors, student mobility, etc.).

The review team also observed, during the field visits, limited interest or willingness to share resources among technical and technological institutes operating in the same cities or parts of a city. The departmental Secretaries of Education should take an active role in helping the local institutes under their jurisdiction to share physical and human resources in a more co-ordinated way.

Financial controls

The lack of rigorous financial oversight of private tertiary education institutions was of concern to several stakeholders interviewed during the field visits. The review team was repeatedly told that, even though all private institutions are supposed to be non-profit according to the existing legislation, in practice a significant number of providers operate like commercial organisations. This has two negative implications. First of all, the MEN ought to consider the risk that the owners of private institutions may be more inclined to maximise their profit share than to re-invest any surplus in the education side of the institution. Second, realising profits under the guise of non-profit status is a form of tax evasion, representing, as such, a social loss to the country. Concerns about money laundering through private tertiary education institutions have also been expressed.

The government of Colombia has been aware of this problem for many years. The present administration was determined to address it by introducing a clear legal and fiscal distinction between for-profit and non-profit providers in the new higher education law presented to Congress early in 2011. Unfortunately, political opposition to the measure was so strong that the President of the Republic intervened personally and instructed the government to cancel that provision in the new law (several months before the law itself was withdrawn).

Notwithstanding the intense political debate and the vocal opposition to for-profit institutions from many quarters of the tertiary education community, the government cannot ignore its duties to protect students from poor quality programmes, or the clear need to have robust controls over the financial practices of private tertiary education providers, as other countries

with an significant private sector have (United States, Brazil for example). It is important, therefore, to promote a dispassionate debate with the education community, in the hope that a future reform proposal meets with less resistance than the 2011 proposal. To facilitate a more objective discussion of the pros and cons of allowing for-profit institutions to operate, the matrix below outlines the main differences between non-profit and for-profit institutions that need to be taken into account.

Figure 9.8 **Key areas of differentiation between non-profit and for-profit private tertiary education institutions**

Non-profit corporation	*Criteria*	*For-profit entity*
	Driving Motive	
Welfare/public good		Profit
	Ownership	
Stakeholders	individual(s), corporation, trust, foundation, other ways of constituting an institution	Shareholders
	Profit Distribution	
Non-distributed (fully reinvested in infrastructure,educational inputs)		Distributed to shareholders
	Tax Liability	
Exempted (revenue, property, duties)	Tax holiday	Fully taxed at corporate rates
	Public Subsidy	
100% eligible		0% eligible

Source: Elaborated by Jamil Salmi, Richard Hopper and Svava Bjarnson.

Conclusion: minding the political dimensions of financing reform

> *There is nothing more difficult to take in hand, more perilous to conduct, or more uncertain in its success than to take the lead in introducing a new order of things.*
>
> Machiavelli (*The Prince*)

> *Institutional change always implies conflict, and for it to be positive, it always requires consensus as well. No society can exist without conflict, or mechanisms for producing or resolving conflict through consensus.*
>
> Joan Prats (Director, International Institute for Governance, Catalonia)

When it comes to their financing strategy, tertiary education systems all over the world can be divided roughly into four main groups:

- Well-funded systems that rely almost exclusively on public funding (more than 1.5% of GDP) and public provision (Gulf countries, Scandinavian countries, Saudi Arabia, Singapore, Switzerland, Scotland).
- Public systems that are relatively well funded through a combination of public resources and a significant level of cost-sharing with appropriate student aid (Australia, Canada, England, Hong-Kong - China, Iceland, Netherlands, New Zealand).
- Mixed provision systems (more than 25% private enrolment) relatively well funded through public resources and high levels of cost-sharing in both public and private institutions (Chile, China, Japan, South Korea, United States).
- Public and mixed provision systems that tend to be insufficiently-funded overall (rest of the world).

Like most Latin American countries, Colombia belongs to the fourth group. On the positive side, it has a well-functioning student loan system that effectively supports needy students enrolled in private tertiary education institutions. But public funding of tertiary education is still insufficient, a

sizeable share of public subsidies is wasted because of high dropout levels, and the allocation mechanisms are outdated and inefficient. Formulating a sustainable financing strategy is therefore a priority if the Colombian government wants to transform its laudable plans for tertiary education expansion and improvement into reality.

As the events of 2011 have shown, any attempt to reform the present, inadequate funding approach is likely to be met with distrust and opposition. This means that the success of the tertiary education development strategy is conditioned by the government of Colombia's ability to address the political sensitivity of reform in a constructive and effective way. This involves four basic considerations. The first one is a social assessment of the proposed reform in order to review the needs and preoccupations of all major stakeholders. It starts with a scan of the tertiary education landscape with the purpose of identifying all concerned groups by asking the following questions: among all the identified stakeholders, who stands to gain and who stands to lose from the proposed reform? Who benefits in the existing system, and who will in the new one? Who is likely to be indifferent, supportive, or dissenting? This type of analysis and assessment allows distinctions to be made between those groups who may be positively impacted by the proposed reforms and those who are likely to lose privileges or be negatively affected by changes in existing financing modalities and practices. With the results of the social assessment in hand, government authorities can more easily identify potential champions who can be relied on to play a leading part in the implementation of the reform and better anticipate the possible reactions in the camp of potential "losers".

The second and perhaps more crucial step is the consensus-building phase. Translating a reform programme into reality depends to a large extent on the ability of decision-makers to utilise the social assessment tool to build consensus among the diverse constituents of the tertiary education community, allowing for a high degree of tolerance for controversies and disagreements. A potentially effective approach for addressing the political sensitivity of the proposed reforms is to initiate a wide consultation process concerning the need for and content of the envisaged changes. The purpose of consensus-building activities is to make all stakeholders aware of the linkage between the proposed reforms and the likely improvements that they could bring about in teaching and learning conditions. This effort involves a blend of rational analysis, political manoeuvring, and psychological interplay to bring all the concerned stakeholders on board.

Box 9.2 **Consensus-building and cost sharing in Northern Mexico**

The Mexican constitution provides for free public education at all levels, and cost sharing has always been fiercely resisted by the professors and students at UNAM, as demonstrated by the 1999 strike. In northern Mexico, by contrast, the rector of the public University of Sonora was successful in introducing cost sharing after initiating, in 1993, a consensus-building process to explain to the academic staff and students the need for supplementary resources to improve the quality of teaching and learning.

After some initial resistance, including a widely publicised 2 000-kilometre pacific march by protesters from Hermosillo to Mexico City, the students accepted the principle of a yearly payment to generate supplementary resources. A participatory process was to determine the allocation of these resources to equity and quality-improvement initiatives. Since 1994, the students have been paying an annual contribution of about USD 300 for this purpose. A joint student-faculty committee administers the funds, which are used to provide scholarships for low-income students, renovate classrooms, upgrade computer labs, and purchase scientific textbooks and journals. A poster is prepared every year to disseminate information on the use of the money collected from the students at the beginning of the academic year.

A third, key ingredient for facilitating acceptance of reforms that challenge the status quo is the availability of additional resources that can be channelled towards tertiary education institutions and other concerned groups such as the students. This can help transform what could be called an "undoing" reform into a "constructing" reform. Another way to increase political acceptability and avoid disruptions is to introduce 'grandfathering' provisions and transitory funding arrangements that guarantee, for all institutions and beneficiary groups, amounts of resources equal to those they would have received under the previous system, at least for some period of time.

Finally, thinking about the timing and proper sequencing of reforms is important. When the Ghanaian rectors agreed on a plan for raising tuition fees in public universities in January 2005, they presented it in the form of a ten-year graduated increase programme, which facilitated acceptance from the students. Sometimes it is more effective to delay a key decision by a few weeks or even months to allow sufficient time to build a consensus.

Financing reforms are without doubt among the most challenging policy changes that governments face. Cost-sharing, cost containment, resource diversification and changes in budget allocation mechanisms are contentious topics. International experience shows that the implementation of controversial

tertiary education reforms has a higher probability of success when decision-makers manage to assess effectively the social and political contexts of the reform environment, build a consensus among the various constituents of the tertiary education community, mobilise additional resources to provide tangible incentives in support of the reform, and think carefully about the timing and sequencing of reforms. While having a political road map to guide the reform efforts is neither a magic formula nor a guarantee of success, ignoring potential opponents and failing to engage them in a dialogue about the proposed reforms is a recipe for failure.

Findings

Resource mobilisation

Public funding for tertiary education in Colombia has increased slowly over the past years, reaching a reasonable level according to international benchmarks. It is doubtful, however, that the government can mobilise enough additional public resources to fund its impressive expansion and quality improvement goals under the existing fiscal and political constraints.

Resource allocation

The allocation of public resources to the Colombian universities and non-university institutions is linked only marginally to performance criteria.

As a result, the present pattern of public resources distribution is characterised by acute disparities at two levels, first among public universities, and second between universities/university institutions and non-university institutions (technical and technological institutes).

Resource utilisation

The high dropout rates throughout Colombian tertiary education system – 45.3% on average in 2009 – and the ensuing low internal efficiency amount to a momentous waste of resources for both the state and households.

There are big variations between public universities – not obviously related to differences in quality and value – in student-teacher ratios and in the share of operating costs devoted to administrative expenses.

Due to insufficient financial oversight over private tertiary education institutions, the Colombian government is not a position to distinguish effectively between truly non-profit institutions and those that actually operate for a profit under non-profit guise.

Just as in many other Latin American countries, the long duration of first degrees in Colombian public universities compared to similar degrees in North America or Western Europe represents a social cost of significant magnitude for the country.

Recommendations

Resource mobilisation

As the Colombian government moves forward with its plans for tertiary education reforms and development, it should carefully assess the need for increased public funding for both equity and quality reasons, and explore ways of mobilising additional resources as required at the national and sub-national levels.

Resource allocation

There is a pressing need to introduce performance-based funding mechanisms for allocating a much larger part of public subsidies, with the following dual purpose: *(i)* redistributing resources to achieve a more equitable sharing of public subsidies across public tertiary education institutions, and *(ii)* offering incentives to encourage institutions to be more efficient and responsive to development and labour market needs.

Resource utilisation

To reduce dropout levels and increase internal efficiency, the Ministry of National Education should build on the successful practices of those tertiary education institutions that have shown good results in improving retention and degree completion.

The MEN should also undertake an in-depth study of how far the significant differences between public universities in their deployment of academic staff and their spending on administration relate to the quality of teaching and learning.

The Colombian authorities need to explore ways of simplifying administrative arrangements and financial management rules in public universities in order to bring about modern management practices and facilitate effective partnerships between universities and other institutions in the economy and society.

The Ministry of Finance and the Ministry of National Education need to put in place adequate regulations and monitoring capacity to ensure that private tertiary education institutions manage their resources according to transparent accounting practices and prepare annual financial reports that are independently audited.

The Ministry of National Education should encourage public universities, through appropriate incentives, to move gradually towards shorter first degrees in accordance with worldwide trends.

Implementation of financing reforms

Well-designed consultation and communication strategies should accompany any financing reform proposal to rally support from potential winners and reduce the political risks linked to the reaction of groups whose vested interests might be affected (or be perceived to be affected).

Note

1. Of the nine public university-level institutions shown as having VHQA (voluntary high quality accreditation) in Table 5.9, two are schools rather than universities and so do not appear in Table 9.16.

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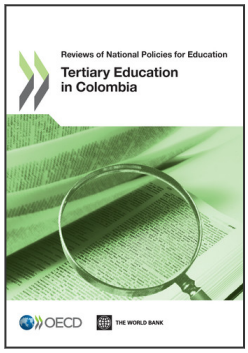

From:

Reviews of National Policies for Education: Tertiary Education in Colombia 2012

Access the complete publication at:
https://doi.org/10.1787/9789264180697-en

Please cite this chapter as:

OECD/International Bank for Reconstruction and Development/The World Bank (2013), "Financing of tertiary education in Colombia", in *Reviews of National Policies for Education: Tertiary Education in Colombia 2012*, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/9789264180697-12-en

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