

Chapter 2. The funding of school education in Colombia

This chapter analyses how the school system is funded in Colombia. It presents a description of the level of expenditure on education, the sources of funding, and the specific funding mechanisms, including the Sistema General de Participaciones. While focusing on school education, the distribution of funding across different levels is also considered, including for early childhood education and care and tertiary education. The chapter analyses strengths and challenges with a particular focus on the extent to which the current funding approach helps address inequities between territories, schools and students. Finally, recommendations are presented, highlighting the need to reconcile the allocation of resources with set objectives, the need for a gradual approach in policy, and the importance of investing in greater local capacity.

Context and features

Expenditure on education

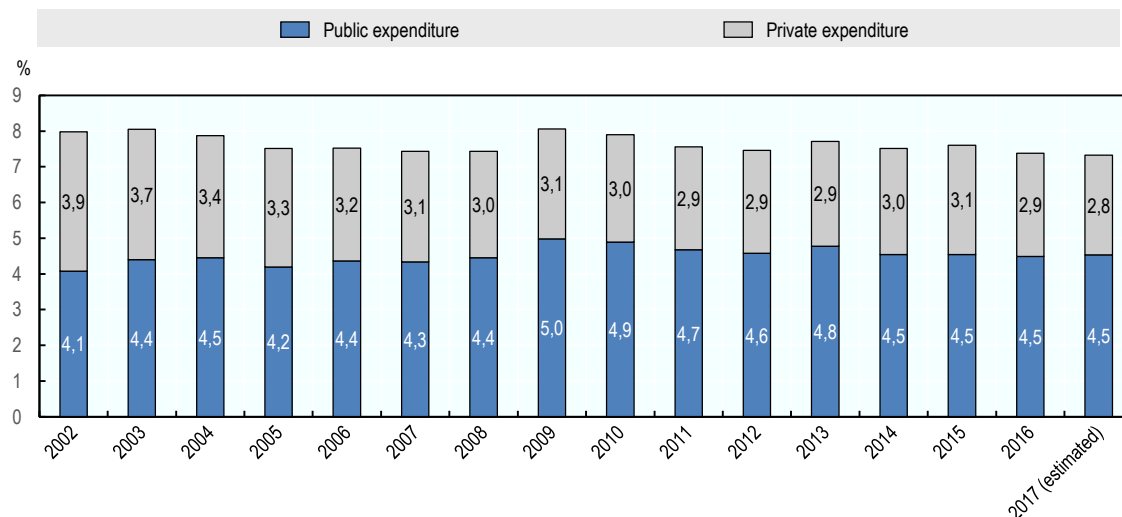
Since the steady increase in public spending on education as a share of gross domestic product (GDP) between 2002 and 2009, when spending at all educational levels increased from 4.1% of GDP to 5.0%, a gradual reduction has been observed during the 2010s, reaching an average of 4.5% between 2014 and 2017 (see Figure 2.1). The Colombian education system has historically been characterised by an important contribution from the private sector, especially by family payments for the tuition costs of tertiary education, but also fees in independent private schools without public funding. In 2017, independent private schools served 18.7% of students in pre-primary to upper secondary education (Sánchez, 2018^[1]). Private spending on education has remained at between 2.9% and 3.1% of GDP throughout the 2010s (Sánchez, 2018^[1]). This represents a share close to 40% of total spending on education in Colombia and is well above the average of 15% for OECD countries (OECD, 2017^[2]).

The decrease in public spending on education with respect to GDP in past years is explained by the adjustment of the public sector after the end of the “commodities supercycle”, especially the price of oil. The drop in commodity prices caused economic growth to fall from an average of 4.8% per year in the period 2010-14 to 2.5% in 2015-17 (MEN, 2018^[3]). The gradual adjustment in line with the government’s aim of reaching a structural deficit of 1% of GDP or less by 2022 also contributed to lower public spending on education. In addition, due to a steady growth of public debt, the cost of interest payments has begun to reduce the space for increasing social spending. This restrictive fiscal situation is expected to continue in the coming years. Compliance with the structural fiscal deficit rule by 2022 entails a significant debt service burden, so the rate of increase in annual public spending will be closely linked to economic growth (MinHacienda, 2017^[4]).

From a comparative perspective, considering total spending on primary, secondary and tertiary education, Colombia spent more than the OECD country average in 2014, with the combined contribution of the public and private sectors representing 5.8% of GDP, compared to an average 5.2% in the OECD. Colombia’s total spending on education was also higher than that of other Latin American countries such as Argentina, Brazil, Chile and Mexico, very similar to Portugal and well above Spain. However, this was the result of a greater private sector contribution to the education system. As can be seen in Figure 2.2, regarding public spending, Colombia spent less than the OECD average in 2014 (3.9% of GDP compared to an average of 4.4% in OECD countries) (OECD, 2017^[2]).

Compared to other Latin American countries with available data, total education spending by the Colombian public sector only surpassed that of Chile but was below the level of Argentina and Mexico (also see Figure 2.2). Similarly, a study of 18 countries in Latin America and the Caribbean, showed that total public spending on education in Colombia is below the average of 5% of GDP in the region, although it is higher than Ecuador, El Salvador, Panama, Paraguay and Peru, and very similar to Chile, Nicaragua and Uruguay (Cetrángolo and Curcio, 2017^[5]).

Figure 2.1. Trend in public and private spending on education as a share of GDP in Colombia



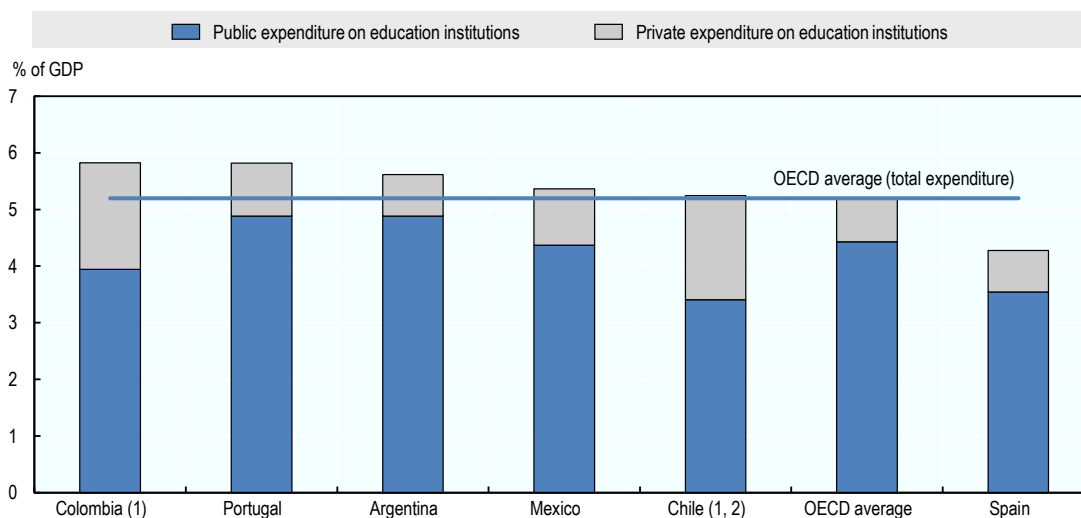
Notes: Expenditure includes all levels of education, including pre-school education, tertiary education and adult education. It also includes educational administration.

Values for 2017 are only estimated. At the time of writing, final figures were not yet available.

Source: Adjusted from Sánchez, J. (2018), *OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools: Country Background Report for Colombia*, <http://www.oecd.org/education/schoolresourcesreview.htm>; Based on calculations from Advisory Office of Planning and Finance (OAPF) of the Ministry of National Education (MEN) and data from the National Administrative Department of Statistics (DANE).

Figure 2.2. Expenditure on educational institutions as a percentage of GDP in Colombia and selected countries, 2014

From public and private sources, primary to tertiary education



1. Data refer to 2015.

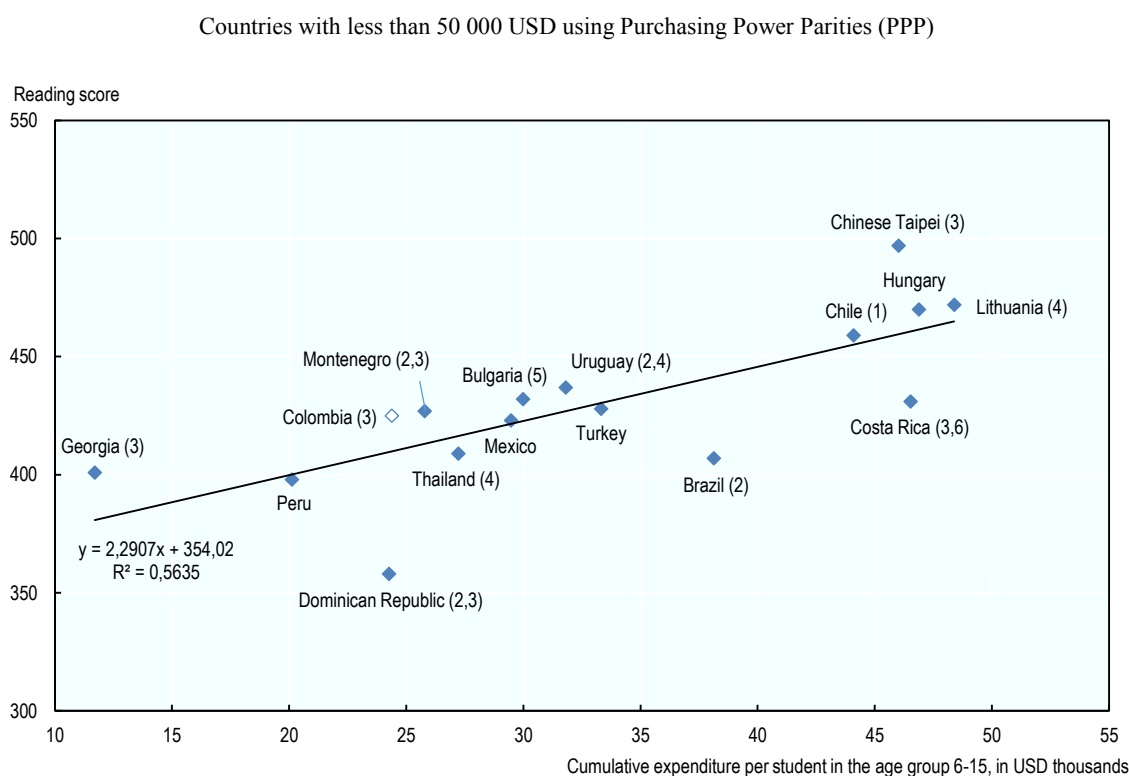
2. Public expenditure does not include international sources.

Note: Countries are ranked in descending order of total expenditure from both public and private sources.

Source: Adjusted from OECD (2017), *Education at a Glance 2017: OECD Indicators*, <http://dx.doi.org/10.1787/eag-2017-en>, Figure B2.1.

Spending on education per student in Colombia is well below the average of OECD countries, as shown in Table 2.1. Per-student spending in primary education reached only 28.5% of the OECD average in 2014, and 35.9% for secondary education. This figure is also the lowest among Latin American countries with comparable information, namely Argentina, Brazil, Chile and Mexico (OECD, 2017^[2]). Comparative data suggest that higher spending per student, among low- and middle-income countries, is positively correlated with average academic performance, as observed in the OECD Programme of International Student Assessment (PISA). Here, Colombia was slightly above the expected performance for its current level of spending per student (see Figure 2.3).

Figure 2.3. Relationship between spending per student and average reading performance in PISA



1. Year of reference for expenditure data 2015.
2. Expenditure for public institutions only.
3. Year of reference for expenditure data 2013.
4. Total expenditure data include pre-primary education.
5. Year of reference for expenditure data 2012.
6. Expenditure combined for public and government-dependent private institutions.

Notes: Cumulative expenditure per student refers to 2015 calculated using the theoretical duration of studies. Average reading performance in PISA refers to the year 2015.

Source: Adjusted from OECD (2017), *Education at a Glance 2017: OECD Indicators*, <http://dx.doi.org/10.1787/eag-2017-en>, Figure B1.a.

However, the low level of spending per student in Colombia can be explained both by its lower per capita income – lower than the other Latin American countries with which Colombia is compared in Table 2.1 – and by the large proportion of school-age children and youth among the country's population. For this reason, an indicator that better reflects the relative public spending per student is spending as the proportion of per capita

income (see Table 2.2). This indicator shows that Colombia's spending per student in primary education in 2014 was quite similar to Chile and surpassed Argentina and Mexico. In secondary education, it was quite close to Argentina and Brazil and surpassed Chile and Mexico. At both education levels, Colombia's spending per student is not very different from Portugal and Spain, given their higher level of economic development.

Table 2.1. Annual expenditure per student in Colombia and selected countries, 2014

In equivalent USD converted using Purchasing Power Parities (PPP), based on full-time equivalents

	All early childhood education	Primary education	Secondary education
Colombia (1,2)	1 011	2 490	3 060
Argentina	2 747	3 356	4 790
Brazil (3)	3 768	3 799	3 837
Chile (2)	6 153	4 321	4 478
Mexico	2 668	2 896	3 219
Portugal	6 349	6 474	8 821
Spain	6 674	6 970	8 528
OECD average	8 858	8 733	10 106

1. Early childhood education includes only pre-primary programmes.
2. Year of reference is 2015.
3. Expenditure includes only public institutions.

Source: OECD (2017), *Education at a Glance 2017: OECD Indicators*, <http://dx.doi.org/10.1787/eag-2017-en>, Tables B1.1. and C2.3.

Table 2.2. Annual expenditure per student relative to GDP per capita in Colombia and selected countries, 2014

By level of education, in percentage of GDP per capita

	All early childhood education	Primary education	Secondary education
Colombia (1,2)	7.5	18.6	22.8
Argentina	13.5	16.5	23.5
Brazil (3)	23.3	23.5	23.7
Chile ²	26.6	18.7	19.4
Mexico	14.8	16.1	17.9
Portugal	21.4	21.8	29.8
Spain	19.2	20.1	24.6

1. Early childhood education includes only pre-primary programmes.
2. Year of reference is 2015.
3. Expenditure includes only public institutions.

Source: Authors' calculations based on OECD (2017), *Education at a Glance 2017: OECD Indicators*, <http://dx.doi.org/10.1787/eag-2017-en>.

Similar results are observed comparing this indicator for primary and secondary education to other countries in Latin America and the Caribbean, where Colombia's level of spending was similar to the regional average (Cetrángolo and Curcio, 2017^[5]). Even so, the comparison for early childhood education shows a significant investment deficit since spending per student was half or less than expenditure in other countries studied. This result has been repeatedly highlighted in national (Bernal et al., 2018^[6]) and international reports (OECD, 2016^[7]).

In sum, these results show that Colombia's current level of spending in primary and secondary education is reasonable given its current level of economic development, but

that significantly greater efforts need to be made in early childhood education. Given the still low levels of coverage in secondary education in Colombia as described in Chapter 1, it can be expected that additional resources will also be required to maintain stable spending per student while increasing participation at secondary levels.

Financing at different educational levels

Table 2.3 shows public and private spending as a percentage of GDP by level of education for 2014. The results indicate that Colombia's public spending on primary and lower secondary education was higher than the OECD average and similar to other Latin American countries, despite the fact that the contribution of the private sector at these levels was the highest among the 37 countries for which information was available.

Table 2.3. Public and private expenditure by level of education as a share of GDP in Colombia and selected countries, 2014

	Colombia (2)	Argentina	Chile (1,2)	Mexico	Portugal (3)	Spain	OECD average
All early childhood education	0.5	0.6	1.1	0.6	0.6	0.8	0.8
Public sources	0.3	0.5	0.9	0.5	0.4	0.6	0.7
Private sources	0.2	0.1	0.2	0.1	0.2	0.2	0.1
Primary	2.1	1.9	1.5	2.0	1.8	1.3	1.5
Public sources	1.6	1.6	1.3	1.7	1.6	1.1	1.4
Private sources	0.5	0.3	0.3	0.3	0.2	0.2	0.1
Lower secondary	1.5	1.5	0.6	1.0	1.3	0.8	1.0
Public sources	1.2	1.3	0.5	0.9	1.2	0.8	0.9
Private sources	0.3	0.2	0.1	0.1	0.1	0.1	0.1
Upper secondary	0.5	1.0	1.1	1.0	1.4	0.9	1.2
Public sources	0.4	0.9	0.9	0.8	1.2	0.8	1.1
Private sources	0.1	0.1	0.2	0.2	0.2	0.1	0.1
Tertiary	1.7	1.2	2.0	1.4	1.4	1.3	1.6
Public sources	0.8	1.1	0.8	1.1	0.9	0.9	1.1
Private sources	0.9	0.2	1.3	0.4	0.5	0.4	0.5

1. Public expenditure does not include international sources.

2. Year of reference is 2015.

3. Some levels of education are included with others.

Note: Figures for total expenditure public and private sources combined by level of education as a share of GDP do not always add up due to rounding to one decimal.

Source: OECD (2017), *Education at a Glance 2017: OECD Indicators*, <http://dx.doi.org/10.1787/eag-2017-en>, Table B2.3.

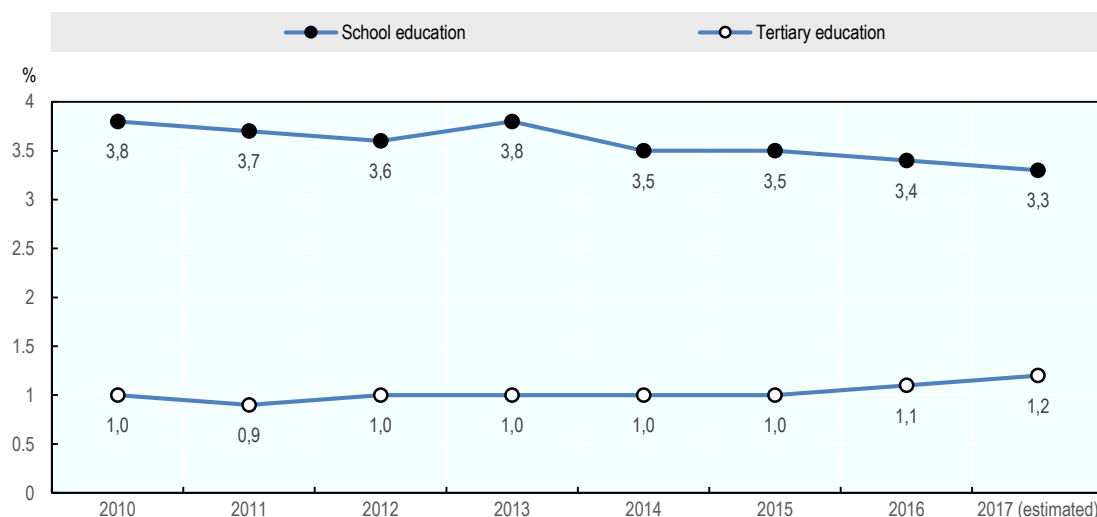
On the other hand, public spending on early childhood and upper secondary education is far below the level observed among the different countries in the comparison, which is mainly linked to problems of educational coverage that are particularly critical in rural areas as highlighted in Chapter 1.

An intermediate case is seen in public spending on tertiary education, which, despite being lower than the OECD average, is very similar to the levels of other Latin American countries such as Chile, and also in line with Spain and Portugal.

During the current decade, there has been a restructuring of public spending on education. Since 2010, public spending on school education as a proportion of GDP has been gradually reduced, down from 3.8% of GDP in 2010 to 3.3% in 2017.¹ At the same time, public spending on tertiary education remained at around 1.0% of GDP between 2010 and

2015, rising to 1.2% in 2015-17 (Figure 2.4). This reorganisation in public spending on education is also reflected in the different rate of increase in public resources in real terms at each level, which rose by 12.8% between 2010 and 2017 for school education, while the increase in spending on tertiary education over the same period amounted to 42.1%.

Figure 2.4. Trend in public spending on education as a share of GDP by level in Colombia



Notes: School education includes pre-school education, including the compulsory transition year. Values for 2017 are only estimated. At the time of writing, final figures were not yet available.
Source: Data provided by Ministry of National Education (MEN).

Sources of funding for education

Distribution of public and private expenditure

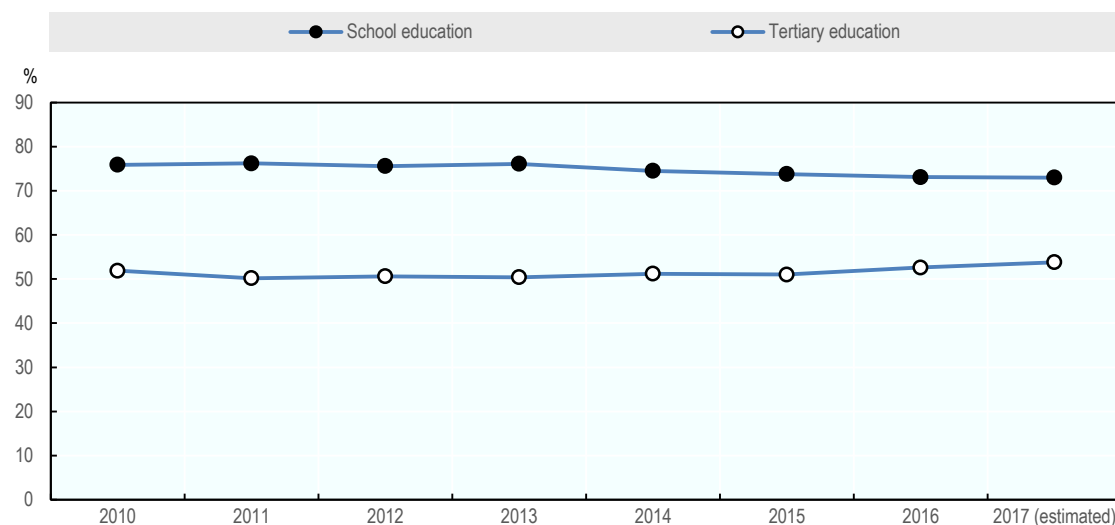
Most funding of school education in Colombia comes from public sources. In the period 2010-17, the state financed between 73.2% and 76.1% of the total expenditure in the sector, reflecting a high stability in the state's participation in education funding, although with a slight decrease in recent years (Figure 2.5). Even so, this percentage is still the lowest for countries with information collected for OECD *Education at a Glance* and is well below the average for OECD countries – only Australia, Chile, New Zealand and Turkey have private financing of more than 17% for school education (OECD, 2017^[2]).²

In Colombia, almost all of the private financing at these levels of education corresponds to families that enrol their children in independent private schools financed with monthly tuition payments. Since 2012, co-payments by families with children in public schools between the transition year³ and Year 11 have been prohibited, although payments are still permitted in adult education and the four semesters of initial teacher education in higher teaching schools (*Escuelas Normales Superiores*).⁴

Looking at tertiary education, the percentage of private funding has also remained high and stable. Since 2010, it has remained slightly above 50% of total spending, despite the increase in public spending at this educational level, by 41.2% in real terms from 1.0% to 1.2% of GDP. This demand for higher public spending on tertiary education will be maintained in the coming years as tertiary enrolment is growing rapidly, both in public

and private institutions. This reflects the growing coverage of secondary education, an important goal set out by the government in office at the time of writing through its National Development Plan, as well as a demand for regular funding sources, such as the student loans programme for tertiary education of ICETEX, a state agency promoting higher education through student finance, or the *Ser Pilo Paga* initiative, tertiary scholarships for the best students from disadvantaged backgrounds.

Figure 2.5. Trend in public spending on education as a share of total expenditure by level in Colombia



Notes: School education includes pre-school education, including the compulsory transition year. Values for 2017 are only estimated. At the time of writing, final figures were not yet available.
Source: Data provided by Ministry of National Education (MEN).

Financing by level of governance

The financing of the school system in Colombia is highly centralised. Of the total financial resources that the public sector allocates to school education, the central government contributes close to 90%, a level that has remained between 90.4% and 90.9% since 2010, while the country's 95 certified territorial entities (*entidades territoriales certificadas*, ETC) and non-certified municipalities (*municipios no-certificados*) contribute the remaining close to 10%.⁵ Despite the low direct contribution of the certified territorial authorities responsible for providing education at the regional and local level, the high heterogeneity in their fiscal capacity, management and priority assigned to education generate high inequality in the resources available to students in different parts of the country (Bird, 2012^[8]; CGR, 2017^[9]; OECD, 2016^[7]). This is analysed in depth below.

In this context, spending on public education is financed mainly through transfers from the Ministry of National Education (*Ministerio de Educación Nacional*, MEN, hereafter ministry/ministry of education) and other public entities to the certified territorial entities, non-certified municipalities and public schools. This means 80% of public spending for school education is executed by the territorial entities and their educational institutions, although this percentage has shown a slightly decreasing trend, falling from 83.3% in

2010 to 79.7% in 2017 (Annex 2.A shows the different sources of financing and how they are used).

Specific mechanisms for financing the public school system

As mentioned previously, the financing of the public school system is highly centralised, since almost 90% of the total resources are provided through the national budget (*Presupuesto General de la Nación*), a percentage that has remained stable between 2010 and 2017. The main sources of financing are:

1. The General System of Transfers (*Sistema General de Participaciones*, SGP), a system for sharing revenues between the central and subnational governments, which represents about two-thirds of the resources for the school system, reaching 79.4% in 2017, including social security payments to teachers through the National Teachers Pension Fund (*Fondo Nacional de Prestaciones Sociales del Magisterio*, FOMAG), which is financed with tax revenues and managed by the ministry.
2. The General System of Royalties (*Sistema General de Regalías*, SGR), a system for sharing royalties from the exploitation of non-renewable natural resources, especially oil.
3. Own resources of the territorial entities.
4. Transfers and programmes of the ministry of education financed through the ministry's investment budget financed from the national budget, and resources from programmes administered by other entities, such as the Department for Social Prosperity (*Departamento de Prosperidad Social*, DPS) or the Ministry for Information Technologies and Communication (*Ministerio de Tecnologías de la Información y las Comunicaciones*, MinTIC).
5. Resources from the private sector, especially co-operatives.

Table 2.4 shows the trend in public education spending and the role of different sources of funding.

The General System of Transfers (Sistema General de Participaciones)

The main funding mechanism for public school education is the General System of Transfers (SGP). The system was created in 2001 by Law 715, and amended by Law 1176 in 2007, in order to help solve the country's fiscal crisis in the late 1990s, when the co-participation of territorial governments in tax revenues increased rapidly and subnational authorities were granted more flexibility in servicing debts (CGR, 2017^[9]; OECD, 2014^[10]). At the time of writing, a reform of the system was under discussion.

The SGP is a revenue sharing system designed to supplement the resources of territorial entities to help them carry out some of their functions. The SGP was constituted in 2001 with a fixed amount of resources rather than a certain share of fiscal revenues, and this amount was readjusted annually until 2016, according to inflation and a general additional rate. The system's resources for education received a readjusted additional annual rate of 1.3% in 2008 and 2009, 1.7% in 2010 and 1.8% per year between 2011 and 2016. However, since 2017, the SGP's funding is readjusted according to new rules linked to the average increase in national income in the previous four years, while the education sector no longer receives a readjusted additional rate.

Table 2.4. Trend in public spending on education in Colombia, 2010-17

Figures in billion Colombian Pesos (COP), in 2017 currency, average 2017

		2010	2014	2017 (estimations)	Increase (%) 2010-17
B.N	TOTAL BASIC EDUCATION PUBLIC SECTOR	27 384	31 240	30 700	12.1
B.N.1	TOTAL BASIC EDUCATION PUBLIC SECTOR (CENTRAL LEVEL)	24 745	28 267	27 908	12.8
B.N.1.1	Transfers	20 602	24 020	24 515	19.0
B.N.1.1.1	General System of Transfers (SGP) - Budgetary allocation	17 973	19 380	20 061	11.6
B.N.1.1.2	Integral attention to early childhood (SGP allocation for increase in GDP by more than 4%)	x	x	173	
B.N.1.1.3	School meals – SGP	51	167	172	14.3
B.N.1.1.4	National Teachers Pension Fund (FOMAG)	2 464	4 325	3 965	60.9
B.N.1.1.5	Rest (other transfers)	14	149	144	916.6
B.N.1.1.5.1	Other transfers Ministry of National Education (MEN)	8	142	137	1 658.9
B.N.1.1.5.1.5	School meals Article 145 of Decree 4923 of 2011	x	132	128	
B.N.1.2	National investments	4 143	4 247	3 393	-18.1
B.N.1.2.1	Investment Ministry of National Education (MEN)	777	1 417	1 344	72.9
B.N.1.2.1.1	Infrastructure	307	236	345	12.4
B.N.1.2.1.3	Coverage, Quality and Efficiency	234	265	478	103.9
B.N.1.2.1.4	Early childhood	235	13	6	-97.5
B.N.1.2.1.5	School meals	x	903	515	
B.N.1.2.2	Expenditure of other central entities in education	3 366	2 830	2 049	-39.1
B.N.1.2.2.1	Computers to Educate (CPE)	111	244	88	-20.9
B.N.1.2.2.2	Compartel	206	125	320	54.9
B.N.1.2.2.3	More Families in Action	797	1 577	1 009	26.6
B.N.1.2.2.4	School meals (Colombian Institute of Family Welfare, ICBF)	620	103	x	-100.0
B.N.1.2.2.6	Royalties	1 440	783	632	-56.1
B.T.2	TOTAL BASIC EDUCATION PUBLIC SECTOR (TERRITORIAL [DEPARTMENTS AND MUNICIPALITIES])	2 640	2 973	2 793	5.8
B.P.3	BASIC EDUCATION PRIVATE SECTOR (only contributions of co-operatives)				
B.P.3.1	Rents with specific destination	55	43	44	-19.4
S.N	TOTAL TERTIARY EDUCATION PUBLIC SECTOR	7 512	9 032	10 610	41.2
S.N.1	TOTAL TERTIARY EDUCATION PUBLIC SECTOR (CENTRAL LEVEL)	7 288	8 766	10 353	42.1

x : Not applicable

Notes: Numbers are expressed in short scale, one billion meaning a thousand million (10⁹), one trillion meaning a thousand billion (10¹²).

Values for 2017 are only estimated. At the time of writing, final figures were not yet available.

Source: Authors' estimations based on data provided by the Ministry of National Education (MEN).

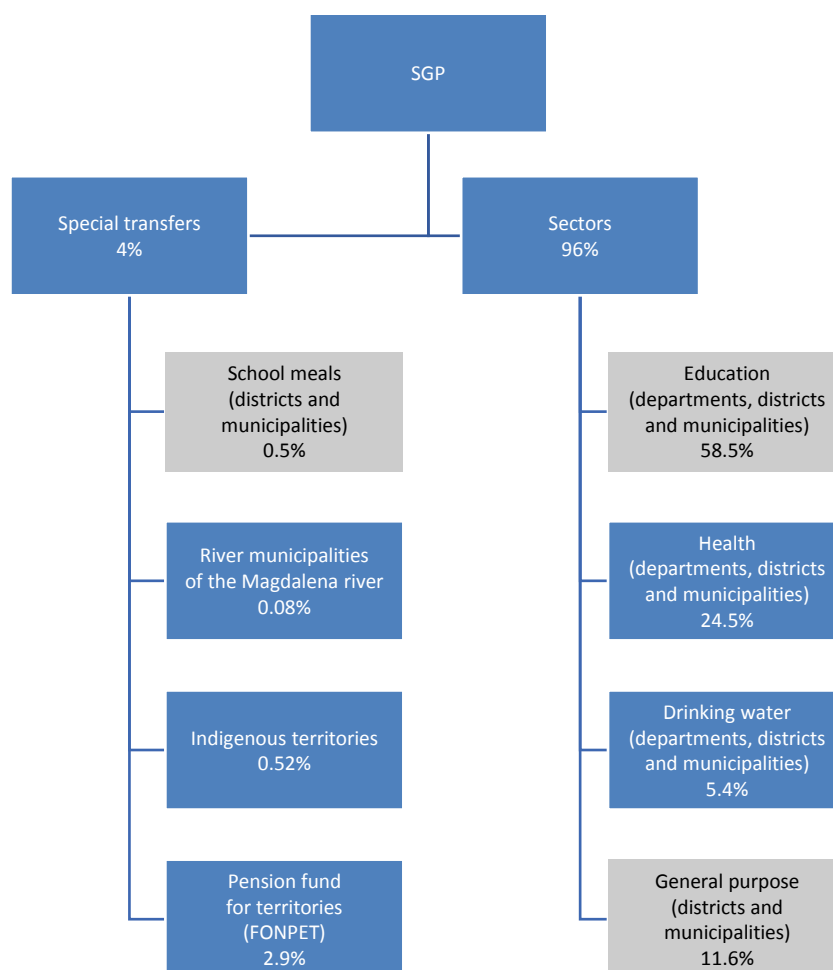
This regulatory framework reflects two considerations. On the one hand, the creation of the SGP prioritises fiscal discipline over the responsibility and autonomy of subnational governments, eliminating fiscal co-participation between levels of government, and reducing over time the relative weight of transfers to territorial entities, without strengthening their capacity to generate their own tax revenues (Bird, 2012^[8]). At the same time, the SGP shows the higher priority of education for the central government, particularly school education.

On the other hand, the SGP is characterised by its strict spending requirements, since it specifically determines which sectors receive resources, as well as the percentage of the SGP that each receives. This was justified to guarantee each citizen access to a basket of public services of comparable quality throughout the country. Education is the most important sector, receiving 58.5% of resources (see Figure 2.6) after discounting 4% for special transfers. However, the SGP also collaborates in the financing of other actions related to education, such as the transfer of 0.5% of the total resources to municipalities and districts for the provision of school meals. Municipalities and districts can contribute resources to education from the 11.6% of the total resources they receive for general purposes. The law furthermore stipulates that in periods in which the economy grows more than 4%, the certified territorial entities receive additional resources to supplement the cost of comprehensive care/integral attention for early childhood (not shown in Figure 2.6).

The distribution of SGP resources among subnational governments is specific to each sector. In the case of education, resources cover pre-school to upper secondary education.⁶ The funds are transferred annually to the ministry of education from the national budget (*Presupuesto General de la Nación*), which in turn transfers them to the Secretaries of Education, that is the education authorities of the certified territorial entities, and other territorial entities or directly to public schools. Once the resources have been transferred, the territorial entities and schools are free to distribute and use the funds according to their needs, while respecting the general purpose of the transfer stipulated by law.

The methodology for the ministry of education to allocate resources among the territories is mainly regulated by Law 715 of 2001, which establishes the criteria on which this distribution should be based: i) attended population; ii) population to be attended efficiently; and iii) equity.⁷ However, the legislation gives the central government considerable flexibility to regularly modify the form in which it distributes resources among the certified and other territorial entities responsible for providing education.

At the beginning of each year, the ministry of education, through the National Planning Department (*Departamento Nacional de Planeación*, DNP),⁸ estimates the initial amount of resources for education (SGP Education) to be transferred based on two criteria: i) the provision of education, aimed at ensuring the delivery of a basic basket of services to all students in the public education system, including adult education; and ii) efforts to improve the quality of education. There is also a small allocation, called Cancellations of Payments for Social Benefits (*Cancelación Prestaciones Sociales*), which includes resources for pensions paid to retired teachers (Law 43, 1975) not covered by FOMAG, the entity responsible for managing teachers' pensions mentioned above. In 2017, these payments represented 1.8% of the resources allocated to SGP Education (DNP, 2017^[11]). The distribution of resources for the different allocations to certified and non-certified territorial entities and schools is shown in Annex 2.A.

Figure 2.6. Distribution of resources through the General System of Transfers (SGP)

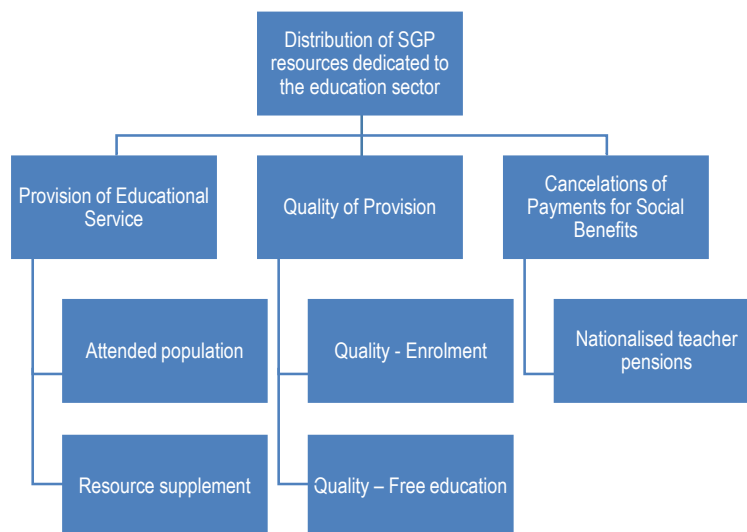
Source: Adjusted from Sánchez, J. (2018), *OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools: Country Background Report for Colombia*, <http://www.oecd.org/education/schoolresourcesreview.htm>.

The following describes the individual components and sub-components that compose the resource allocation of the General System of Transfers for education (see Figure 2.7).

1) Provision of Educational Service or Allocation by Attended Population

This is the most important component of the SGP Education, which represented 89.7% of the fund's total resources for education in 2016. All of these resources are transferred to the Secretaries of Education of the certified territorial entities, although, in the future, funds earmarked for indigenous education will be transferred to the Individual Indigenous Educational System (*Sistema Educativo Indígena Propio*, SEIP) explained in Chapters 1 and 3.⁹ The priority of this allocation is to at least cover the cost of salaries of teachers and school leaders, including their respective social benefits; the funding of private providers in the event public schools cannot meet demand, for example, due to a lack of teaching staff or infrastructure (analysed in depth in Chapter 3); and administrative costs.

Figure 2.7. Distribution of resources of the General System of Transfers for education (SGP Education)



Source: Adjusted from Sánchez, J. (2018), *OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools: Country Background Report for Colombia*, <http://www.oecd.org/education/schoolresourcesreview.htm>.

Only once these costs, and in particular staff payments, are covered can other elements be financed from this component, such as construction and maintenance of school infrastructure, educational quality, etc. In this regard, the allocation considers three sub-components: i) provision of the educational service; ii) share authorised for administrative expenses; and iii) resource supplement for financial deficit.¹⁰ All these sub-components are distributed in relation to the effective enrolment of students (attended population), both in the form of public and government-dependent private provision (*matrícula oficial y contratada*), estimated according to student enrolment from the year prior to the effective date of the distribution of the SGP (for a list of typologies for the distribution of this item and for each certified territorial entity, see Sánchez (2018_[1])).

Provision of educational service: Although the methodology for distributing resources to the respective Secretaries of Education of the certified territorial entities has been gradually modified (CGR, 2017_[9]) and, since 2015, the particular characteristics of each certified territorial entity are recognised, its specific design has varied every year between 2015 and 2017. For example, in 2016 an incentive was added for quality and efficiency in the management of spending, which was excluded in 2017 due to the higher constraints in resources available for distribution among the certified territorial entities.

For each certified territorial entity, the average per capita cost, based on the cost of maintaining the current payroll of teachers and school leaders, is added to the maximum approved administrative expenditure, based on the previous year's enrolment, since this expense represents the largest proportion of the total cost of education and is relatively stable over time.

Based on the average per capita cost for each certified territorial entity, cost ratios are estimated for each level of education (the funding level is equivalent to a proportion of the average cost, which is 0.8 for the transition year and primary education, 0.9 for lower secondary education and 0.95 and for upper secondary education). These proportions are

estimated based on the technical relation developed by the ministry of education for the ratio of teachers and students/classroom by level of education at a national level. In the case of adult education, an average value of 0.25 is assumed for Cycles 2 to 6,¹¹ and a value of only 0.6 if the student drops out of the programme within five months.

The resources for operating costs recognise the different costs faced by each certified territorial entity to ensure their payroll for teachers and administrative staff. In order to compensate the higher cost for the provision of rural education, the values of each level described in the previous paragraph are adjusted by an approximate additional 30% if the student attends school in a rural area - in 2017, rural students made up 28.7% of public enrolment in compulsory education.¹² Additional contributions are also added to the estimated values for each level according to specific student characteristics (see Table 2.5), which are intended to “co-finance” the higher cost to ensure education provision for these students (DNP, 2017_[11]).

Table 2.5. Adjustment in the distribution of resources for the provision of educational service

Categories of students that qualify to receive additional funding	Coefficient for additional funding per student (%)	Use of resources
Adolescent Criminal Responsibility System	20	Develop strategies, specific modalities and the implementation of educational models according to age and academic level
Boarding school	25	Facilitate access of children to education who live far away from schools, especially in remote rural areas
Special educational needs and gifted education	20	Hire support services, train teachers, and provide educational materials for these students
Full-Day schooling	20	Cover the additional payroll requirements implied by the extended instruction time

Source: Authors’ elaboration based on Sánchez, J. (2018), *OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools: Country Background Report for Colombia*, <http://www.oecd.org/education/schoolresourcesreview.htm>.

To finance the annual **administrative expenses** faced by each certified territorial entity, the ministry of education authorises a specific percentage of the estimated resources for the sub-component of attended population that can be spent for this purpose. Nevertheless, in the last two years, the ministry authorised a total amount of administrative expenditure rather than a share of operating expenditure in consideration of the increasing allocation of resource supplements as explained in the next paragraphs. For 2017, the amount authorised for administrative spending represented between 6.4% for Floridablanca and 24.5% in Guainía (for a full overview, see Sánchez (2018_[1])).

Resource supplement (payroll adjustment and compensation): To ensure the financing of minimum operating costs, supplementary resources are provided to those certified territorial entities that report an initial deficit.

The payroll adjustment refers to a one-time allocation of resources destined to finance certified territorial entities that fail to accumulate sufficient funds to cover their payroll expenses as based on the ministry’s estimated resources for Provision of Service, Quality and Efficiency. This situation is quite common, with 35 of the 95 certified territorial entities receiving resources from the General System of Transfers for this purpose in 2015.

Meanwhile, the compensation part consists of a one-time additional payment to the certified territorial entities to partially cover the difference in the resource allocation compared to the previous year for the attended population. In 2015, resources for compensation were transferred to 18 of the 95 certified territorial entities whose attended population allocation was lower than in the previous year. As reported by the National Planning Department (DNP), the compensation part was not planned to be included in future allocations.

The additional resources for resource supplement have been considerable. Between 2008 and 2015, they exceeded the resources allocated for the Quality component of the SGP for almost this entire period. In 2010, they reached 10.1% of the total resources of the SGP Education. Due to the considerable increase in resources distributed for the Provision of Service component in 2016, no resources were allocated as resource supplement in 2017 (CGR, 2017^[9]).

In addition to the resources transferred to the certified territorial entities for the Provision of Service, the payment of teachers' pensions in the certified territorial entities is carried out directly by the ministry of education through the National Teachers Pension Fund (FOMAG). These resources have grown steadily in the last decade, reaching 14.2% of the total funding provided by the central government for public school education in 2017. As a result, about 80% of public resources are used to cover payroll costs for teachers, school leaders and administrative staff.

Given the enormous financial strain involved in covering teachers' salaries, payroll expenses cannot exceed the resources allocated by the SGP Education to the respective Secretary of Education, which means the certified territorial entity cannot authorise the hiring of more teachers or administrative staff or staff promotions covered with these resources. If the entity fails to comply with this rule, such expenses will not be recognised for reimbursement and the cost increase will be the responsibility of the official who authorised it.

2) Resources for Quality of Provision

This component is comprised of two sub-components, Quality-Enrolment and Quality-Free Education.

The methodology for distributing these resources has been modified, and during recent years, an attempt has been made to balance the amount of resources allocated for both sub-components. The methodology is mainly associated with five factors: i) enrolment in the previous year; ii) rurality; iii) level of education in which students are enrolled; iv) indicators of educational performance; and v) indicators of school improvement, where the weight of performance indicators exceeds those of improvement.

The resources for the **Quality-Enrolment** element are distributed among districts and certified and non-certified municipalities, as well as the non-municipal areas of the departments of Amazonas, Guainía and Vaupés (see Decree 1122, 2011), according to two main factors: the performance of schools in these districts, municipalities and non-municipal areas, and the share of students from rural areas in total enrolment.

These resources cannot be used to finance payroll, but rather for strategies to improve the quality of the provision of public education, such as investment in infrastructure, equipment, professional development, or to complement resources for the School Meal Programme (*Pograma de Alimentación Escolar*, PAE) or school transport. These funds can also be used to cover costs related to the basic operation of schools and the payment

of public services (e.g. water and electricity). The share of this sub-component of the total resources of the SGP Education has remained stable over time, representing just over 4%.

The **Quality-Free Education** element serves to complement the central government's efforts to provide universal free education in the Colombian public school system. Since 2008 and building on previous experiences, for example in the capital Bogotá (Bonilla and González, 2012_[12]), this policy has been gradually implemented, allocating SGP Quality resources to cover monthly payments for vulnerable groups of students in public schools as defined by levels SISBEN 1 and 2,¹³ as well as for displaced and indigenous students (CGR, 2017_[9]). However, since 2012, family payments to public schools have been prohibited in all public schools that serve children between the transition year to the end of upper secondary education in order to provide free education and thereby ensure access and retention of all children in the education system.

These resources are transferred directly to each public school through their Educational Services Fund (*Fondo de Servicios Educativos*, FSE), that is the school accounts. The school principal and directive council of each public school, that is the school board, determine how these resources are used, ensuring that they are allocated to the provision of free education and to actions linked to the school's educational project (*Proyecto Educativo Institucional*, PEI) as long as they follow the use of funds allowed by law.

Funds are not transferred to private entities that are contracted and publicly funded to provide education in the event of capacity constraints or other limitations. Publicly-funded private providers are however also not allowed to charge students attending via these contracts for tuition, complementary services or other elements of provision, but these costs are covered by the Secretary of Education through the contract.

In 2017, the resources provided for this sub-component reached 3.2% of the total allocation for SGP Education (DNP, 2017_[11]). The amount of these resources increased considerably between 2010 and 2016, especially since free public education was made universal in 2012, rising to 3.3% of SGP education resources in 2016 from 1.5% in 2010.

3) Other resources allocated through the General System of Transfers (SGP)

Of the remaining SGP resources, there are several elements that provide additional resources to the public school system. For example, 0.5% of the total resources are allocated to districts and municipalities – both certified and non-certified – to finance the School Meal Programme (*Programa de Alimentación Escolar*, PAE). Another item of the SGP for Special Transfers covers pensions for staff in education and healthcare of territorial entities, with 2.9% of resources transferred to the National Pension Fund of Territorial Entities (*Fondo Nacional de Pensiones de las Entidades Territoriales*, FONPET). Municipalities and districts can furthermore contribute resources to education from the 11.6% they receive for general purposes. In 2017, this investment amounted to COP 223 billion.¹⁴ In addition, the 2007 reform of the SGP established that, in periods when the economy grows more than 4%, the ministry of finance would provide additional resources to the SGP to supplement the financing of comprehensive/integral attention to early childhood.

General System of Royalties (Sistema General de Regalías)

This mechanism was created to distribute royalties from the exploitation of non-renewable natural resources, especially oil. Traditionally, royalties were mainly distributed to the departments where the exploited natural resources were located.

However, the system of royalties was redesigned in 2011-12 to distribute the resources more equitably among the different territories, with a focus on the most disadvantaged areas and on promoting inter-institutional agreements for development.

Although initially the system's resources could only be used for investment projects, gradually their use has been made more flexible. Resources from royalties today are generally allocated to 5 types of expenditure: i) infrastructure and materials; ii) education quality; iii) school transport; iv) school meals; and v) initiatives for access and retention in education. According to data from the ministry of education, the General System of Royalties contributed COP 1.4 trillion (2017 currency) to public education in 2010, representing 5.3% of the total resources for public education. In 2017 this amount was reduced to COP 600 billion, representing only 2.1% of total resources that year.

Resources of subnational governments

Colombia's departments, districts and municipalities can make complementary contributions to the school system with their own resources. These can be used to hire additional teachers not covered by the General System of Transfers or improve the working conditions of staff, fund infrastructure investments, complement resources for national programmes, such as the School Meal Programme or Full-Day Schooling (*Jornada Única*) programme, a national policy to extend instruction time for students, or to develop new initiatives, such as the programme *Un Buen Comienzo* by the Secretary of Education of Medellín.

In 2017, these contributions reached 9.1% of total public spending on education, only 5.5% higher than in 2010, although highly differentiated according to the capacity of the respective territorial entity to generate their own resources, analysed in depth below.

Contributions and programmes of the Ministry of National Education

The Ministry of National Education is the main institution that plans, manages and supervises the financing of Colombian public education, including resources that are transferred to the Secretaries of Education. Of the total public resources allocated to the school system, in 2010 the ministry's budget represented 78.1%, increasing to 84.2% in 2017, due to the reduction of resources of the General System of Royalties and the transfer of responsibilities for the School Meal Programme from the Colombian Institute of Family Welfare (ICBF) to the ministry of education in 2011-12.

In real terms, the total amount of resources administered by the ministry of education for public education rose from COP 21.4 trillion in 2010 to almost COP 26 trillion in 2017, with 80% of this increase explained by higher resources for the General System of Transfers (SGP) and pensions fund managed by FOMAG.

In addition to managing the resources of the SGP, and according to the priorities of each government and its respective National Development Plan (*Plan Nacional de Desarrollo*, PND), the ministry of education also supports a set of other initiatives in the school system. These resources are distributed through transfers, such as for the School Meal Programme, and programmes included in the ministry's investment budget.

Important programmes implemented as part of the National Development Plan 2014-18 include infrastructure initiatives, transfers to the certified territorial entities for the School Meal Programme, a set of initiatives to improve the coverage, quality and efficiency of the school system, such as the programme Let's All Learn (*Todos a Aprender*, PTA) and

Colombia Bilingüe (a programme to improve English competencies), as well as initiatives related to rural education and policies related to the peace agreement and post-conflict.

Given that these programmes and the amount of resources involved depend on the priorities of each central government and their respective development plan, they are additional resources for the certified territorial entities, and therefore not a regular source of funding for territorial authorities to ensure coverage and improve the quality of education.

Contributions and programmes of other national public entities with relevance for education

Despite the low number of initiatives in this category, they are very important and have a large budget. For example, the Department of Social Prosperity (*Departamento de Prosperidad Social*, DPS) provides conditional cash transfers to the most vulnerable families through the More Families in Action programme (*Más Familias en Acción*) to reduce poverty and inequality. Payments are provided on the condition that families access health and education services. It, therefore, forms part of a national strategy to meet two of the goals set by the government for its 4-year term between 2014 and 2018: reducing the school dropout rate to 5% and achieving universal coverage in basic education (primary and lower secondary levels).

Despite a significant reduction in resources for 2017 compared to previous years, the programme has an annual budget of more than COP 2 trillion, which is a figure greater than the total amount of resources transferred from the ministry of education for the administration of the School Meal Programme (PAE) in 2017.

The Ministry of Information Technology and Communications (MinTic) supports the technological development of the school system with two important initiatives and the use of ICTs in the processes of continuous education and collaborative learning, such as Compartel and Computers to Educate (*Computadores para Educar*). The use of digital resources in school education is analysed in depth in Chapter 3.

Contributions of the private sector for social purposes to public school education

The private sector can also contribute to the budget of public education, mainly from the co-operative sector, since companies that contribute at least 20% of their net income to formal education are exempt from income tax. Following a tax reform in 2016, co-operatives will pay a tax rate of 20%, but these resources will be dedicated entirely for tertiary education, with the public school system losing 1.5% of its annual income.

Strengths

Education policy making has the potential to create a long-term shared vision, and education has been a priority in recent years

Beyond the ongoing efforts by recent Colombian governments in education, there has been the political will to prioritise education in terms of increasing public resources for education and making sustainable progress in educational coverage and quality.

Medium-term planning of national priorities and policies, based on strong social participation in their design and a growing use of robust information

Colombia holds national elections every four years and the new government transforms its programme into concrete actions through a National Development Plan (PND), which indicates the priority areas and specific goals to be achieved during the four-year presidential term. This entails not only the political and technical monitoring of progress towards these goals but also makes the financial distribution of the state's resources a top priority. As part of the development plan, the central government develops a four-year investment plan, indicating the resources needed to implement each programme or project in each of the years, considering the projected availability of resources for the coming years. In this way, the National Development Plan is co-ordinated with a broader set of mechanisms and instruments used to plan the main public policies and national strategies in the medium term, as well as the budgetary framework, which facilitates fiscal sustainability and links spending decisions with political priorities (OECD, 2013_[13]).

This process of developing policy frameworks for the medium term is replicated in departments and municipalities. After governors and mayors are elected, their programme must be presented to the Department Assembly or Municipal Council for approval. Their proposed territorial plans must be aligned with the National Development Plan. Non-certified municipalities must co-ordinate their education policy with the Secretary of Education of their respective department which bears overall responsibility for the provision of education in these municipalities.

The design of development plans but also other policy frameworks specific to education at the national level involve processes of democratic participation and legitimacy for sectoral priorities as well as evaluation and monitoring – all key elements for effective governance (Burns and Köster, 2016_[14]). The elaboration of the National Development Plan is actively discussed by the executive and the National Planning Department (DNP), the authority responsible for co-ordinating the design of the plan, must organise stakeholder consultation processes to inform the design of the plan. Representatives of departments and municipalities, ethnic minorities and civil society are thus involved in defining national priorities. Once the ministry of finance has given its approval if the plan is compatible with the country's financial restrictions, the plan must be endorsed by the CONPES, the country's advisory body on economic and social policy, and be presented in Congress to be approved as a law (OECD, 2013_[13]).

In education, the central government develops national ten-year plans (*Plan Nacional Decenal de Educación*, PNDE), which should serve as a guide for the main national policies over that period of time. This creates the potential of a timeframe that is longer than that of a single government, although there is a perception among many actors that past ten-year plans have not met their main objectives in guiding individual governments and creating stability in education policy (Sánchez, 2018_[1]). As the National Development Plan, the design of this plan for the period 2016-26 involved a high degree of dialogue and participation of different actors in society, including schools and students, and across levels of government (see Box 1.4 in Chapter 1).

Another important strength of Colombia's education system is its growing focus on collecting robust information on the achievement of the objectives set by the main education programmes and strategies, as well as improving the professional capacity for monitoring and evaluating education initiatives. The National Planning Department has a system of rigorous and systematic evaluations to monitor progress and difficulties in the implementation of the National Development Plan and provide information for future

spending decisions, gathered by *SINERGIA*, a tool that is considerably more advanced than similar tools in many OECD countries (OECD, 2013_[13]). Recent evaluations have contributed to knowledge about the impact of flexible education models, full-day schooling or *Ser Pilo Paga*, among others.

In addition to the efforts of the DNP, the public sector, especially the Ministry of National Education and the Ministry of Finance and Public Credit, directly carries out or commissions studies from research centres, universities or in co-ordination with international co-operation agencies, such as the IDB, OEI, OECD and the World Bank, all used to evaluate the results of programmes and help improve them. These experiences have made it possible to evaluate the impact of programmes such as *Todos a Aprender* and have contributed to the current discussion to reform the General System of Transfers.

Beyond evaluating and providing information about learning performance, the Colombian Institute for Educational Evaluation (*Instituto Colombiano para la Evaluación Educativa*, ICFES), also has a research office to monitor different initiatives directly or in association with other entities with high technical capacity and prestige. For example, it is currently evaluating the *Aulas Sin Fronteras* (Classrooms without Borders) programme together with the Universidad Nacional, among others.

In addition, there are other public and civic entities which make regular efforts to generate high quality research that has helped to highlight main challenges and to improve the design, implementation and effectiveness of many education initiatives. This includes, among others, the Bank of the Republic (Colombia's central bank), the Comptroller General of the Republic, universities such as the *Universidad de los Andes*, or public-private associations, such as *Corpoeducación* or *Fundación Luker*.

The high priority of education in the National Development Plan for 2014-18 and the importance of education in the Peace Agreement

The National Development Plan for 2014-18, titled All for a New Country (*Todos por un Nuevo País*), for the first time identified education - alongside peace and equity - as one of its three main pillars, recognising education as a powerful basis for improving the quality of democracy, social equality and long-term economic growth (DNP, 2015_[15]).

Beyond the financial instruments to ensure the budgetary priority of the educational commitments set out in the plan, the Colombian government has assigned responsibilities to various institutions and developed legal and regulatory instruments for the production and collection of information to improve the transparency, effectiveness and efficiency of educational policies, and the distribution and use of financial resources – one of the main weaknesses of public education in Latin America.

Similarly, as part of the plan's pillar on building peace in Colombia, education also plays a fundamental role. The most important achievement of the Colombian state and authorities during the period of the National Development Plan for 2014-18 is the signing of the Agreement to End Conflict and Build a Stable and Lasting Peace in 2016 (also see Box 1.1 in Chapter 1) (Mesa de Conversaciones [Conversation Roundtable], 2017_[16]). Among other components, this includes an educational plan for peace and education programmes for demobilised combatants and their families. As one of its main lines, the peace agreement between the government and the Revolutionary Armed Forces of Colombia (*Fuerzas Armadas Revolucionarias de Colombia – Ejército del Pueblo*, FARC-EP) commits the country to a comprehensive rural reform (*Reforma Rural Integral*).

The comprehensive rural reform not only promotes the economic recovery of the countryside through land access and use but also social and economic development through sector-specific national plans to improve public services and infrastructure. This entails the development and implementation of a Special Rural Education Plan (*Plan Especial de Educación Rural*, PEER). This plan will have a 15-year implementation period and is tasked with closing the gaps between the rural and urban population (see Box 1.5 in Chapter 1). The comprehensive rural reform thus recognises that the challenges linked to reducing the enormous gaps in rural development compared to urban areas imply the need to take advantage of synergies between different strategies, such as the creation of economic opportunities and improvements in education.

As highlighted in an upcoming OECD report, education policy alone cannot address all challenges of rural development. Educational policies that target the needs of rural areas should therefore be ideally integrated with broader rural development initiatives to build prosperous and sustainable rural communities (OECD, forthcoming^[17]). In this regard, it is worth noting that the National Development Plan and its initiatives also incorporated some of the suggestions of the Rural Mission for the Transformation of the Countryside (*Misión Rural para la Transformación del Campo*) carried out in 2014-15 (see Box 1.2 in Chapter 1). This also reflects the importance the Colombian authorities have given to incorporating proposals and lessons learned over time about their territorial challenges in their planning strategies (OECD, 2016^[18]).

Development Programmes with a Territorial Approach (*Programas de desarrollo con enfoque territorial*, PDET) constitute another important element within the framework of the Peace Agreement and the comprehensive rural reform. These development plans focus efforts on those zones most affected by the conflict, poverty and weak institutions. The Territorial Renewal Agency (*Agencia de Renovación del Territorio*, ART), created as part of the peace architecture to articulate the efforts of different sectors in rural areas and to manage and supervise participatory planning at the local level, is also responsible for co-ordinating the various Development Programmes with a Territorial Approach. Although the Special Rural Education Plan applies to all rural areas, it will target the 170 municipalities within 16 sub-regions that form part of these programmes.

For example, within the framework of the Special Rural Education Plan, an innovative initiative called Get Down to School (*Manos a la Escuela*) is being carried out to improve school infrastructure in remote or small rural communities. This ministry initiative finances projects to improve infrastructure and equipment in rural schools for an amount of up to COP 50 million (USD 17 000) in any of the 170 priority municipalities.

This initiative can be interesting as a learning process, although it has a very limited scope since in the second round only 140 initiatives were financed, just 9% of the total applications for funding. In addition, it is not co-ordinated with efforts to accelerate the infrastructure investments that are part of the country's Full-Day Schooling (*Jornada Única*) programme. One of the lessons learned by the team working on the National Education Infrastructure Plan (*Plan Nacional de Infraestructura Educativa*, PNIE) was that the Educational Infrastructure Fund (*Fondo de Financiamiento de la Infraestructura Educativa*, FFIE) is effective in highly populated urban and rural areas, but not so much in remote rural areas targeted by *Manos a la Escuela*.

In this regard, the Special Rural Education Plan could become an inter-institutional management model for planning, co-ordinating and implementing the actions needed to reduce the huge gaps between urban and rural areas. However, as observed in other educational policies, such as full-day schooling or the School Meal Programme, and as

highlighted below, its resources are insufficient to fulfil all of the commitments made by the national authorities. Similarly, as for public and education policy in general, the continuity of the Peace Agreement, the Special Rural Education Plan and the Development Programmes with a Territorial Approach across governments is not ensured. The rural education plan still requires ratification by the national authorities to ensure its financing going forward.

Co-ordination between levels of government for territorial management

A recent innovation that allows inter-institutional co-ordination between different levels of government, with enormous potential for the education sector, are the *Contratos Plan*. During the last five years, the National Planning Department (DNP) has developed this new tool for the co-ordination of public investment among various levels of government and between the national, departmental and municipal development plans. The *Contratos Plan*, which have been identified as the best mechanism to achieve territorial collaboration, are promoted through a regional fund (*Fondo Regional para los Contratos Plan*), created in 2016, and managed by the Project Development Fund (*Fondo Financiero de Proyectos de Desarrollo*, FONADE), a financial enterprise under the DNP offering services for the financial planning of development projects (OECD, 2016_[18]).

In education, the *Contratos Plan* are an important financial tool for planning and co-ordination since they have focused on the priorities of the National Development Plan for 2014-18. They have helped to co-ordinate strategic actions within departments and between municipalities or departments, as well as co-ordinating with resources from oil and mining revenues through the General System of Royalties (SGR). Sixty percent of the fund's contributions should come from the national level, while the remaining 40% should be from territorial entities.

At present, *Contratos Plan para la Paz* are being implemented in 13 departments, which are focused on territories where the population has faced violence and armed conflict in the past. In 2016, 7 contracts were signed with close to 100 municipalities for a total of COP 14 trillion, with education being one of the most important sectors.

The funding system promotes financial sustainability and national priorities for quality and equity

Prioritising mechanisms that provide stability in the financing of education and recognising higher costs in the provision of education

As detailed in the previous section, the educational component of the General System of Transfers (SGP) has been, since its creation in 2001, the main source of public financing for the Colombian school system. Including resources to finance social benefits for teachers, this funding represents more than 80% of the total resources of the central government for the sector and over 75% of all resources in the last decade, when contributions by subnational authorities are included.

The fact that the composition of the SGP is highly regulated, that it is annually readjusted and that it includes specific components to finance the education sector, makes it a stable source of revenues for subnational educational entities. Moreover, since fiscal transfers do not require co-financing by the certified territorial entities, financing does not depend on subnational capacities to generate own resources, which tend to be highly concentrated in a few departments and municipalities of the country (Bird, 2012_[81]).

Greater fiscal discipline with the end of automatic sharing of tax revenues in the 1990s improved regulation of subnational government debt, and reforms implemented in the early 2000s, such as the creation of the SGP, have contributed to the overall fiscal sustainability of subnational entities at an aggregate level (Bernal et al., 2018^[6]; Daude and de la Maisonneuve, 2016^[19]), although there is a high degree of heterogeneity within departments and municipalities (Sánchez and Zenteno, 2011^[20]).

Moreover, it is very important that resources provided through the SGP Education allocation explicitly indicate that their main objective is to finance teachers' salaries and administrative expenses through the Provision of Educational Service component. This component is the most important one for estimating the allocation to each certified territorial entity. Given that most teachers are national permanent staff, making for a highly inflexible and permanent expense over time, this SGP funding allocation provides stable financing for the largest part of public expenditure on education.

Since funding for this component is based on staff levels approved at the end of the previous period and certified territorial entities can ask the ministry of education for an increase in payroll funding (i.e. hiring staff) throughout the year, the mechanism has facilitated rapid improvements in educational coverage throughout the entire country. Similarly, the process of approving different payroll expenses for each certified territorial entity enables hiring more qualified teachers, although these teachers with higher qualifications and professional experience tend to be distributed asymmetrically throughout the country, with a lower proportion of higher qualified teachers working in schools in the most disadvantaged territories and the most isolated and rural areas, as analysed in Chapter 4.

It is also important that the design of the General System of Transfers (SGP) includes coefficients for financing educational requirements for certain groups of the population implying a higher cost or programmes entailing additional costs to the ones defined in the educational basket (*canasta educativa*).¹⁵ For example, if a student attends a school in a rural area, the estimated financial allocation based on attended population is increased by 30% with respect to the general allocation. Greater resources are also provided for students with special educational needs or any type of disability (20%), as well as those who attend boarding schools (25%), or who are in the Adolescent Criminal Responsibility System (20%).

Although regulations for the provision of education for these groups of students entail greater responsibilities for Secretaries of Education to ensure their right to education, education authorities receive more resources from the SGP for these students, recognising the higher cost of providing education for these groups. In this regard, as part of the government's commitment to extending instruction time and increasing the coverage of full-day schooling, the SGP provides an additional contribution of 20% for each child attending a full-day school, which partially reimburses Secretaries of Education for the higher operating expenses.

Reform of the General System of Transfers (SGP): Ensuring access to universal free education

Various programmes and policies during the last decade have focused on improving educational opportunities for children and young people, while also increasing coverage. Among these initiatives, prohibiting co-payments by families of public school students between transition year and Year 11 since 2012 was an important milestone in the move

towards universal free public schooling, with the exception of adult education and teacher education in higher teaching schools (*Escuelas Normales Superiores*).

Although the impact of this policy on educational coverage at the national level has not been evaluated, it is clearly an important measure to ensure the right to education of all children and youth and moves towards the adequate public financing of education as a fundamental right. This result is consistent with the evaluation of the early free education policy of the city of Bogotá (Barrera-Osorio, Linden and Urquiola, 2007^[21]), which improved educational coverage for students of the most vulnerable levels in primary education and for those from medium-low socio-economic levels in secondary education (SISBEN 1 and 2 respectively according to the system for targeting social protection).

As previously mentioned, to partially compensate public schools for the resources that they stopped receiving from families, the Quality-Free Education sub-component was implemented within the General System of Transfers (SGP), which distributes funds to all public schools for actions to guarantee free education and improve the quality of education linked to school's educational project (PEI). However, the creation of this sub-component did not imply any additional resources for the SGP, which means the net resources administered by public schools were reduced. Similarly, there was no gradual compensation for the resources previously obtained by schools from students' families, implying an asymmetric effect on the availability of resources among public schools.

Moreover, since the policy was not co-ordinated with the certified territorial entities, its design and implementation followed a logic that strengthened the central government in the decisions on education and reduced the responsibility of subnational education authorities. On the other hand, the small amount of resources available entails the need for disadvantaged families to pay for the provision of complementary services to ensure the regular attendance of their children at school in practice.

It is very important for school leadership teams to participate in decisions that directly affect them, as well as the design of pedagogical and professional teacher development programmes. As shown by the experience of countries participating in the OECD School Resources Review, a certain degree of school responsibility in budgetary matters can provide schools with greater flexibility to use the resources allocated according to local needs and priorities when accompanied by good school leadership, management structures and accountability (OECD, 2017^[22]). This is more relevant in a context where most financial resources are transferred to the Secretaries of Education, which are almost entirely responsible for the distribution of resources and for providing support for the generation of professional capacities in their schools.

In this context, the school communities interviewed for this report highlighted the fact that, since the implementation of universal free education in 2011, each public school in Colombia directly receives resources from the bag for Quality-Free Education. These funds have allowed school directive councils to finance or co-finance various initiatives that are critical for the improvement of the quality of education or the operation of the school in line with their school educational project (PEI). Schools can also generate other sources of income (e.g. through the sale of services, leasing of rooms, among others) or apply for programme initiatives to receive equipment or infrastructure improvements.

However, the total amount of resources allocated directly to schools is quite small. In 2017, the initial budget for the Quality-Free Education sub-component represented only 3.2% of the total resources of the SGP Education, which means the impact school leadership can have on solving their school's main challenges is very limited.

Other important programmes to ensure the right to education and improve access and retention in schools are related to school meals, school transport and textbooks, which receive some funding from the General System of Transfers (SGP). In particular, there is a specific SGP component to partially finance the School Meal Programme (PAE). However, the resources allocated to these items of the SGP are also very small. What is more, the sources of financing and distribution of responsibilities are not clear (as analysed below), especially in the case of the departments that share funding and responsibility for these parts of educational provision with their non-certified municipalities.

In sum, universal free education has been achieved in the Colombian public school system through the end of compulsory monthly co-payments as well as other initiatives, such as the School Meal Programme (PAE), which also provides resources to students who are not disadvantaged. But the complementary services needed to safeguard the right to universal free education are not always guaranteed, in particular for students belonging to the most vulnerable groups, even though the coverage of complementary services as part of free education is established by law. On the contrary, complementary services have greater coverage in those certified territorial entities with more resources that prioritise investment in education, implying important asymmetries across the country.

Reducing territorial inequality in the distribution of public resources: The reform of the General System of Royalties (SGR)

The reform of Colombia's General System of Royalties (SGR) shows that it is possible to modify the institutional design of financing mechanisms, which have helped promote greater territorial equality in the distribution of resources. The SGR is an important source of resources for investment by subnational governments, especially for departments that have scarce resources of their own (Bird, 2012_[8]). It is also important for education, being the sector with the second largest number of projects financed with these resources after transportation.

The legislation previously regulating the distribution of resources from the SGR generated multiple weaknesses. Among others, royalties were concentrated in a few departments and municipalities with extractive industries, in particular, Arauca, Casanare, Cesar, Cordoba, Huila, La Guajira, Meta and Santander, where these resources did not contribute to reducing poverty and improving the provision of public services, such as education, also stemming from weak long-term planning capacity (OECD, 2014_[10]). Moreover, resources were not distributed more widely between departments and municipalities, thus also not contributing to diminishing interregional inequalities. Resources were also distributed on a cyclical basis, thus not representing a stable source of funding (Hernández and Herrera, 2015_[23]).

In order to correct these weaknesses, the SGR legislation was modified in 2011 and 2012, providing all territorial entities with more equitable access to funds and making regulations regarding the use of resources more flexible (OECD, 2014_[10]). A Science, Technology and Innovation Fund (*Fondo de Ciencia, Tecnología e Innovación*, FCTI) was created, which receives 10% of the resources; another 10% were allocated to the pension system for territorial entities (FONPET); and 30% of resources were allocated to a Savings and Stabilisation Fund (*Fondo de Ahorro y Establización*, FAE) to mitigate the highly cyclical component of the generation of SGR resources, which depend completely on the fluctuation of international prices of commodities.

Of the remaining resources, 20% go directly to the departments and municipalities where these commodities are mainly produced, as well as the maritime and fluvial ports where these resources or products are transported. The other 80% of the remaining resources are distributed between two funds: 60% to the Regional Compensation Fund (*Fondo de Compensación Regional*, FCR), the purpose of which is to finance projects with a regional or local impact on the poorest territorial entities of the country, according to criteria of unmet basic needs (*necesidades básicas insatisfechas*, NBI), population and unemployment, and with priority given to coastal, border and peripheral zones; the remaining 40% are for the Regional Development Fund (*Fondo de Desarrollo Regional*, FDR), which aims to improve social, economic, institutional and environmental development, with resources distributed by department according to their relative population level and unmet basic needs index (NBI) relative to the national level. Both, the Regional Development and Science, Technology and Innovation Funds are aimed at financing regional projects agreed between territorial entities and the national government.

The redesign of the SGR has also enabled multiple innovations. First, it has facilitated co-ordination between different levels of government, through the creation of a Steering Committee (*Comisión Rectora*) with representatives of the three territorial levels and the National Congress, and the organisation of Affiliated Administrative and Decision Entities (*Órganos Colegiados de Administración y Decisión*, OCAD) responsible for designing, evaluating, prioritising and approving investment projects.

The system furthermore facilitates planning and quality control, as well as the monitoring and evaluation of the system, since 1% of the resources are allocated to the Comptroller General of the Republic for supervising the system. For its part, the National Planning Department performs monitoring and evaluation tasks. It also allows resources to be executed on a multi-year basis, avoiding the incentive to spend resources on unnecessary actions and promoting innovation at a regional level, since it assigns 10% of its resources to this component (OECD, 2014_[10]).

A study by Hernández and Herrera (2015_[23]) shows that despite the pro-cyclical nature of the resources of the SGR, they represent a fifth of the total resources of the departments and an even higher percentage for the most disadvantaged, achieving the main objective of the reform: greater equity among territorial entities through the distribution of resources. If in the period 1994-2009, the poorest departments received 12.8% of resources, they benefitted from 56.1% in 2015-16.

However, this distribution does not correlate with the evolution in education coverage, reflecting that the system for sharing revenues from oil and mining royalties is too small to achieve a significant impact on tackling national challenges. Similarly, the authors indicate that one of the pending challenges is to increase the execution rate of the fund's available resources. When analysing 124 highly vulnerable municipalities with a high incidence of violence, it was concluded that they received a smaller proportion of resources compared to the total population and that resources have not been allocated to the sectors where they are most needed, reflecting the technical difficulties of designing and planning investment projects in vulnerable parts of the country.

Innovation by subnational entities with technical and financial capacity

Despite the high territorial inequality in socio-economic and educational terms, Colombia has some good experiences in the educational management of Secretaries of Education of certified territorial entities, which are generally those with a large amount of their own

financial resources and good management of human resources. These Secretaries of Education have been able to develop innovative and high-impact initiatives to improve educational coverage, pedagogical quality and inter-institutional co-ordination, as well as developing public-private partnerships to advance educational objectives. However, there is enormous potential to improve identifying and recognising the best territorial practices in education and promoting replication in the country's other Secretaries of Education.

For example, the experience of Bogotá during recent decades has been a model of learning in new educational policies, such as free education, the implementation of full-day schooling, intercultural education, the improvement of school meal provision, the development of a school transport programme, and the development of educational infrastructure concessions to expand access to education in a rapidly expanding city. Many pilot programmes have been incorporated in national government programmes. The city also has a tradition of education research programmes, including through its Institute for Educational Research and Pedagogical Development (*Instituto para la Investigación Educativa y el Desarrollo Pedagógico*, IDEP) created in 1994.

Similarly, Medellín's experience in implementing the successful early childhood development policy, *Buen Comienzo*, which provides early childhood education and promotes comprehensive development during the first five years of life, has served as a reference for the national strategy From Zero to Forever (*Cero a Siempre*). Also, the case of the Secretary of Education of the municipality of Manizales, smaller than Bogotá or Medellín, is a reference point with its internationally recognised initiative Active Urban School (*Escuela Activa Urbana*) supporting highly disadvantaged schools. The municipality's Secretary of Education is also characterised by its close public-private partnership in innovation in view of improving educational quality and equity.

The remarkable results shown by the cities of Bogotá, Cali, Manizales and Medellín in the OECD Programme of International Student Assessment (PISA) reflect these efforts. The only four subnational entities in Colombia participating with a larger sample of students in all or some rounds of international assessment between 2009-15, these cities showed a sustained increase in all evaluated competencies. While not strictly comparable, the results of Bogotá in PISA 2015 were higher than the average for Chile, the country with the highest performance in the region (OECD, 2016_[24]).

The central government can promote priorities by investing in education programmes and has developed compensatory schemes for greater equity

In addition to compensatory resources for rural areas, special educational needs and juvenile delinquency, among other types of disadvantage considered in the allocation of the resources from the General System of Transfers for education to the Secretaries of Education, there are three types of programmes and compensatory resources targeting disadvantaged students, schools and territories that require greater funding to access the school system, reduce their dropout rate and close the gap in educational opportunities.

The first type of programmes is financed mainly with ministry resources, whose budget for programmes to improve efficiency, quality and coverage, not considering infrastructure or school meals, more than doubled in real terms between 2010-17 (an increase of 103.9%). While the funding of programmes also has drawbacks, it can help to compensate for educational inequalities, especially if combined with a stable funding allocation that promotes equity, and to generate and disseminate innovative practices as the experience of countries taking part in the OECD School Resources Review suggests (OECD, 2017_[22]).

Among these, the *Programa Todos a Aprender*, supporting teachers in underperforming primary schools analysed in depth in Chapter 4, has a considerable budget, nearly half of the total investment budget of the ministry's quality directorate. After two evaluations that did not show an effect on the learning of students in the participating schools, a third recent study indicated positive effects of the programme in the improvement of performance in the country's standardised assessments (*Pruebas Saber*) in language and mathematics, particularly in rural schools. This is an important outcome as the programme is focused on individual schools rather than the territorial authorities responsible for the provision of education.

A second line corresponds to the design of more flexible co-ordination and financing programmes and mechanisms to support strategic issues between different territorial levels and levels of governance, under the leadership of the ministry of education. These programmes include in recent years the Rural Education Programme and the Full-Day Schooling programme, which are analysed in the following.

Towards the design of a policy for the improvement of rural education

The implementation of the Rural Education Programme (*Programa de Educación Rural*, PER) between 2001 and 2015 was a very important experience (see Chapter 1 for a full description). The programme, which was financed by a World Bank loan, involved a first phase and a second phase. In its first phase, the programme worked with 120 non-certified municipalities in 30 departments; in the second with 36 certified territorial entities, reaching 72% of non-certified municipalities.

Targeting pre-school and school education, the programme aimed to increase access to quality education in rural areas, reduce dropout rates and make education relevant to the needs of rural students. An impact evaluation of the first phase of the programme found that it had increased promotion rates and reduced dropout (Rodríguez, Sánchez and Armenta, 2010_[25]). The analysis of differences in student achievement between urban and rural areas as measured by the OECD PISA 2006 and 2012 also suggests that these initiatives have had an impact on reducing urban-rural performance gaps in Colombia (Ramos, Duque and Nieto, 2016_[26]). The programme has furthermore offered very relevant lessons for improving rural education, which were gathered in the publication *Colombia's Rural Territory: An Educational Policy for the Countryside* (MEN, 2015_[27]).

The Full-Day Schooling programme: An opportunity to improve school infrastructure and equipment, as well as teaching and learning

Although the Colombian government has tried to move from traditional multi-shift schooling to a full school day since adopting the General Education Law in 1994, the high costs of the initiative required for capital investments and staff costs implied that the implementation of this policy was postponed until the adoption of the National Development Plan for 2014-18 through Law 1753 of 2015. The *Jornada Única* programme, which was subsequently regulated mainly through Decree 501 in 2016, aims to extend the time each child spends in school to improve the quality and equity of children's educational opportunities, also in relation to independent private schools which have been offering a longer school day to a greater extent.

In order to implement the infrastructure component of the programme, the ministry of education developed a National Infrastructure Plan (PNIE) for 2015-18 in co-ordination with the territorial entities. This plan has three main objectives: i) to ensure that the infrastructure conditions to implement the full school day are in line with the best

minimum standards; ii) to generate a new institutional framework to manage infrastructure projects that optimises the use of financial resources; and iii) to improve the information and data systems related to infrastructure issues (DNP, 2015_[28]).

For the first objective, a national study was carried out which identified the need to build more than 50 000 new classrooms throughout the country to meet that target by 2030. New quality standards were also set for infrastructure projects, entitled *Colegio 10*. The total costs and the resource implications for the objective of increasing full-day schooling coverage from 11.2% in 2013 to 30% by 2018 were estimated at COP 4.5 trillion (about USD 1.6 billion). The share of students enrolled in full-day schooling remained relatively stable during the period 2014-16. Of the total classrooms to be built in 2017-18, approximately 70% were envisaged as construction of classrooms in new schools, and the remaining 30% as expansion, reconstruction or recovery of existing schools.

To address the programme's second objective, securing the resources to finance the infrastructure and equipment required to provide children with safe and adequate spaces for learning, the Educational Infrastructure Fund (FFIE) was created. This fund is designed to perform three tasks: i) consolidate resources from different sources and channel them towards educational infrastructure investments; ii) manage the resources efficiently; and iii) prioritise and select projects located in areas with the greatest potential impact.

The FFIE is a special account of the ministry of education designed to manage the fund's resources, develop financing instruments, channel funds from different sources, co-ordinate public-private actors at the national and subnational level, and approve public-private projects subject to funding availability. The fund receives regular public resources from the ministry of education¹⁶ to finance educational infrastructure; contributions from the General Royalties System (SGR), with the ministry of education as executor of these resources; contributions of the certified territorial entities; and any surpluses from the education allocation of the General System of Transfers (SGP Education). In the event the infrastructure fund has additional resources, internal or external credit may be requested, with a guarantee from the state; in these cases, financing is established through a Public-Private Partnership (PPP).

The different sources of public financing operate as an instrument called autonomous equity (*patrimonio autónomo*), which is governed by private norms and is comprised of all the resources committed by the various institutions contributing to this initiative. Another advantage is that they can perform credit operations with state guarantees, which makes this the most important instrument for the financing of greater educational coverage, committing future resources that are valid until 2023.

Colombia has long-standing experience of PPP, partnership schemes through which public entities contract with private entities for the construction of infrastructure projects and associated services, involving the operation and maintenance of said infrastructure, generating a return in a period not exceeding 30 years. In the case of the Full-Day Schooling programme, part of the infrastructure requirements will be developed under a PPP scheme, reducing public sector direct investment. Initially, it was estimated that 13% of the new classrooms and additional resources would be financed under this modality.

Under the programme's framework, the certified territorial entities should co-finance 30% of the cost of the initiatives, but for the most disadvantaged departments, that contribution was reduced to 15% and, according to the interviews conducted as part of the review team visit, down to 10% for initiatives in rural areas. The first call for new

initiatives was in 2016 with financing from the ministry of education and Secretaries of Education, but it was of limited coverage and especially aimed at implementing a full school day in schools with extra capacity. Since 2017, the participation of public-private partnerships has also been included.

To fund the higher operating costs involved in the implementation of the *Jornada Única* programme, an additional 20% is provided per student to certified territorial entities in the allocation for the provision of the educational service as described above. However, there is broad discussion in the country regarding the insufficiency of these resources to address the actual costs required for widespread implementation.

This initiative is an opportunity not only to strengthen the conditions of public school infrastructure in the country, which has a historical deficit. As analysed in Chapter 3, the *Jornada Única* programme is also an opportunity to improve teaching and pedagogical management, making it possible to improve teaching and learning within schools. It is also a chance to improve complementary services that are indispensable for the implementation of the full school day, such as school meals, since the programme requires certified territorial entities to ensure that all children attending schools with *Jornada Única* are served lunch, although this is not necessarily financed with resources for the School Meal Programme (MEN, 2018_[29]). At the same time, the programme is an opportunity to test an inter-institutional co-ordination model that can serve in the future to plan and implement various multi-year school improvement strategies.

Moreover, considering differences between rural and urban areas, the infrastructure dimension of the programme can have a greater impact on rural schools where basic conditions such as sanitation, access to gas and electricity, and the availability of libraries or laboratories tend to be much worse than in urban ones. The rapid roll-out of full-day schooling is also more feasible in rural schools given they are more likely to have the space available to accommodate students than urban schools, which are often already at the limit of their current capacity, also given the organisation of the school day into double-shifts (Lugo, Hernández and Colmenares, 2016_[30]).¹⁷

Initiatives to strengthen the demand for education: Más Familias en Acción

In addition to the programmes of the ministry of education, which focus on individual schools as well as co-ordination mechanisms and financing at different territorial levels, a third line of national programmes focuses directly on families, youth and children.

Since 2001, following the country's economic crisis at the end of the 1990s, Colombia has implemented the programme *Más Familias en Acción*, conditional cash transfers that provide payments to the poorest families on the condition they take up education and health services. Funded and managed by the Department of Social Prosperity (DPS), with a budget in 2017 of more than COP 2 trillion, which more than doubles the total resources of the ministry programmes for educational coverage, quality and efficiency, the programme has proven to be an important instrument to reduce poverty and promote access to education and other social services for children between 5 and 18 years of age from disadvantaged families, particularly in rural areas (Baez and Camacho, 2011_[31]; DNP, 2012_[32]; OECD, 2016_[33]).

For example, the DNP (2012_[32]) found that *Más Familias en Acción* has positive impacts on several indicators. The programme significantly improves the nutrition and height of children and reduces food insecurity in the beneficiary households. In addition, children from beneficiary families are more likely (6.4 points) to finish secondary education and

children aged from 7 to 11 are less likely to be working (1.3 percentage points). On average, participation in the programme increases the education of young people aged 18 to 26 by 0.6 years. Fitzsimons and Mesnard (2013^[34]) found that *Más Familias en Acción* also helps to counteract the negative effects of the permanent departure of the father from the household on school enrolment of children and labour participation in rural areas. Such positive results have led to programme changes over the years. Initially, the programme was limited only to enrolment in basic education (primary and lower secondary) but has recently been extended to include upper secondary education.

However, the programme's results have not found a long-term impact on student achievement as measured by standardised assessments (Baez and Camacho, 2011^[31]). Higher attendance, therefore, does not necessarily translate into better learning, making it necessary to complement this type of programme with interventions in the classroom (García, Maldonado and Rodríguez, 2014^[35]). There is also room for further improvements to the programme, for example by creating greater synergies with rural programmes such as *Oportunidades Rurales* (Moya, 2016^[36]), or by further improving conditions and incentives to remain in school education as suggested by the National Planning Department (DNP).

An institutional and legal framework is in place for the collection of data about education management and for monitoring resource use in education

A range of information systems supporting decision-making

Since 2002, the ministry of education has been improving and strengthening information systems to facilitate decision-making, although there is still considerable scope for the integration of different systems (OECD, 2016^[7]). Sectoral information is centralised in the ministry's Advisory Office for Planning and Finance (*Oficina Asesora de Planeación y Finanzas*, OAPF), which supports processes of planning, analysis, formulation, evaluation and monitoring of education policies.

Regarding financing, the Law 962 of 2005 created the Single Territorial Format (*Formato Único Territorial*, FUT), which centralises financial, economic and social information collected on all territorial entities in order to control, monitor and evaluate their performance. The General Accounting Office (*Contaduría General de la Nación*), a government entity in charge of the preparation of National Accounts, consolidates this information at the national level for the fiscal supervision of government entities. In addition, based on information from the Single Territorial Format, legislation allows the ministry to measure and evaluate how the sector is financed, as well as the composition and efficiency of public spending, among other indicators (Law 1753 of 2015).

Territorial and national authorities also receive updated information on enrolment (Integrated Enrolment System, SIMAT), school infrastructure (Interactive School Infrastructure System, SICIED) and students, teachers and schools (National Directory of Schools, DUE, and National Primary and Secondary Education Information System, SINEB). Meanwhile, the Educational Quality Management Information System (SIGCE) is highly developed and brings together information from schools (school educational projects, PEI), Secretaries of Education (school improvement support plans, PAM) and the ministry (about the quality and performance of teachers and students). These databases support the work of schools, Secretaries of Education and the ministry of education by providing critical information on management processes in the education system (for further details about these databases, see Sánchez (2018^[1])).

Traditionally, Colombia's educational evaluation institute ICFES has evaluated the performance of students in the last year of secondary school, with the results of these examinations used by most tertiary institutions to select applicants. However, since 2009, examinations for Year 11 students have been complemented with standardised assessments for students in Years 3, 5 and 9, all of which provide information that is used to guide public policies. Since 2015, the ministry, together with ICFES, have calculated a school performance index (*Índice Sintético de Calidad Educativa*, ISCE) annually. This index which is calculated for each level of education in each school can be used to target improvement efforts by Secretaries of Education and provide information for schools and Secretaries in their joint reflection on school improvement (Sánchez, 2018_[1]).

However, the ranking and evaluation of schools based on standardised assessments such as Colombia's *Pruebas Saber* can have counterproductive effects on teaching and learning, and care must be taken to ensure that Secretaries of Education, schools and parents understand that assessments are resources to monitor progress and challenges and are not the objective of the educational process itself, as analysed in depth in Chapter 3.

Monitoring and control mechanisms for financial management at all levels of governance of school education

There are multiple mechanisms at different levels of the system to monitor and control the use of resources in school education, which are important in a context with a high risk of corruption and waste (OECD, 2016_[7]). In addition to the ministry's sub-directorate for financial oversight with responsibilities related to the monitoring of resources transferred to the certified territorial entities, the ministry, together with the Directorate of Fiscal Support (*Dirección de Apoyo Fiscal*, DAF) in the ministry of finance, monitors the resources distributed by the General System of Transfers (SGP) to identify situations of risk. In a third function, the ministry supervises labour debts in education.

The ministry audits and supervises different components of the Secretaries of Education and realises visits to provide technical support in financial aspects, human resource management and enrolment processes, in order to improve school effectiveness, avoid corrective measures and reduce risk in the use of resources transferred from the central to the subnational level. In order to control the management of the certified territorial entities, the ministry has created a Global Index of Educational Management, which includes indicators of coverage, quality, personnel and financial management that are used to annually evaluate the Secretaries of Education. For their part, Secretaries of Education are responsible for administering and managing their own resources, including regular accounting and budgetary reports on schools and non-certified municipalities in the case of departments, which creates the possibility to generate strategies for redistributing available resources.

The Directorate of Fiscal Support (DAF) in the ministry of finance also collaborates in the monitoring, supervision and control of the certified territorial entities. While the ministry of education develops the diagnostics, the directorate conducts field visits to the certified territorial entities identified as having the greatest administrative and financial risk to investigate the causes, and later discusses its findings and recommendations with the ministry of education. If the problems are not resolved, corrective actions can be proposed to the certified territorial entities. The information is provided to the national oversight agencies, such as the Comptroller General (*Contraloría General de la República*, CGR) and the Office of the State Attorney (*Fiscalía General de la Nación*), to determine administrative or legal sanctions, if applicable.

In some cases, the corrective measures have led to the temporary suspension of the management of education. In these cases, a team designated by the ministry of education assumes temporary responsibility for the provision of education in the department, district or certified municipality, as was the case in the department Chocó for the last eight years. Since 2017, the department of La Guajira has been under temporary administration by the ministry of education.

In addition, since 2006, the Directorate of Sustainable Development (DDTS) in the National Planning Department (DNP) has used an Integral Development Index (*Índice de Desempeño Integral*, IDI) to evaluate public management and decision-making in the use of municipal resources, which includes three indicators related to education that represent a combined 25% of the total index score (DNP, 2017^[37]).

The Comptroller General has administrative control of financial resources, including performance audits, but only with respect to national resources, since there are specific entities for each department and municipality. For its part, the Ombudsman and Prosecutor General (*Procuraduría General de la Nación*, PGN) monitors the proper functioning of the education system in order to protect the rights and interests of citizens, while the State Attorney (*Fiscalía*) acts as the judicial arm of the executive to investigate possible crimes in educational management and, if necessary, prosecute these before the courts.

As a general rule, the Ombudsman and Prosecutor General and the Comptroller General supervise all public administration processes, but there is also control at the local level where *veedurías*, local oversight committees, also monitor the use of public resources. Each committee has limited powers, but they can pass on information about any illegal activity to the corresponding authorities, such as the State Attorney, for disciplinary or penal action. The Ombudsman and Prosecutor General may impose administrative sanctions, for example by removing a person from public office or prohibiting him/her from holding a specific position for a certain period of time. Local monitoring and control processes, such as those carried out by the *veedurías*, have the potential to ensure that the use of resources responds to local needs for educational improvement, provided there is the capacity to hold local authorities accountable (OECD, 2017^[22]).

Challenges

During the last decade, the financing of the Colombian school system has focused on improving education coverage and quality. Despite important achievements in coverage since the 2000s, there are still important challenges in early childhood education, secondary education and especially in rural education (see Chapter 1). Various programmes aimed to improve quality and equity in education for all students, regardless of their place of residence, ethnicity, socio-economic level or any other disadvantage, in line with the goals of the National Development Plan for 2014-18 (see Chapter 3).

However, despite some progress, there remains an imbalance between the multiple policy objectives and the availability of financial, human and institutional resources, especially in a context where the financial and management capacities of certified territorial entities – departments, districts and certified municipalities – responsible for administering public education are highly asymmetrical, and the country has run a fiscal deficit with significant spending restrictions since 2017 (Bernal et al., 2018^[6]). At the same time, there is a growing demand for more public funding for tertiary education as analysed at

the beginning of the chapter. All of this represents important challenges to balance objectives of equity and quality with the adequate design of policies and funding.

Public funding for education is insufficient to achieve set goals of educational coverage, quality and equity

The National Development Plan for 2014-18 set important goals for Colombia's education system, not only for coverage in early childhood and secondary education but also in terms of reducing geographical gaps in areas with greater difficulties linked to armed conflict and social disadvantage. The plan also put in place an ambitious infrastructure programme and a programme to extend instruction time. However, the amount of resources allocated by the central government to school education in the last decade is not consistent with these goals. Although public resources for school education have increased slightly in real terms, they have actually been reduced with respect to total spending in the public sector (from 13.9% in 2010 to an estimated 13.7% in 2017) and also relative to the size of the economy, falling from 3.8% to 3.3% of GDP in that period.

This inconsistency between national commitments and resources is repeated in early childhood education, which has a low public financial priority as could be seen above, despite its strategically important role in ensuring opportunities are equal for children throughout their lives. In fact, the current low participation has generated criticism as has low spending per child which does not ensure high-quality provision (OECD, 2016). Evidence clearly shows that early childhood is the period of life when there are the greatest opportunities to improve the present and future opportunities of children, particularly the most disadvantaged, and maximise the positive effect of new investments in education and other social sectors in later life (Berlinski, Galiani and Gertler, 2009^[38]; Cunha et al., 2006^[39]; Heckman, 2017^[40]; Heckman and Kautz, 2014^[41]).

The inconsistency at this level of education appears again considering agreements between the central government and the largest teacher union (FECODE) to expand coverage with comprehensive care from one year of pre-school in the compulsory transition year to three years of pre-primary education, or the commitment of the Peace Agreement to guarantee universal coverage for early childhood education in rural areas. There is, however, no budgetary allowance to meet these goals.

At the same time, the multiple goals of the school system and early childhood education compete for resources with the challenge of increasing coverage in tertiary education, as well as greater public financial aid to allow more students from lower socio-economic levels and the middle class to attend tertiary institutions. This is reflected in the asymmetric increase in national resources allocated to both sectors already highlighted above. Between 2010 and 2017, real public resources for school education increased by only 12.8%, while resources for tertiary education increased 42.1%. It is also reflected in the 2016 tax reform, which increased sources of tax revenues to finance tertiary education, while revenues to finance school education did not receive an explicit increase. In fact, contributions to school education that used to be provided by co-operatives were reduced and redirected to tertiary education (MinHacienda, 2016^[42]).

This inconsistency between set goals and resources allocated for achieving them has been exacerbated in the 2018 budget, where the resources for school education have not increased in real terms. This is not only due to the change that has occurred since 2017 in the formula used to determine the resources of the General System of Transfers (SGP) - the main source of public financing of school education - but is also due to lower growth

in public spending as a result of the economy's lower growth and efforts to comply with the country's fiscal rule (MinHacienda, 2017_[4]). Unless there is a boost to economic growth, the fiscal situation will be highly restrictive in the years to come.

In addition, compliance with national goals for the school system is further restricted by the negotiations that have been carried out by the national government and the largest teacher union (FECODE) as described in Chapters 1 and 4. These agreements have not been accompanied by an increase in financial resources from the national government. On the contrary, since the resources required to implement the agreements will come from the General System of Transfers, they reduce the amount of resources available for other programmes and expenditures beyond payroll expenses. Payroll already accounted for 93% of the total available resources before the negotiations (Villar et al., 2016_[43]) and represents a high level of inflexibility in distributing resources for education (see below).

These severe restrictions explain the difficulties observed in recent years to advance in closing gaps in educational coverage and quality, as well as in obtaining a budget that ensures the implementation of the commitments of the Peace Agreement, including a Special Rural Education Plan, solving the problems observed in recent years in the School Meal Programme, or in improving the low level of coverage of full-day schooling.

The institutional framework to ensure the continuity of education policy and the long-term sustainability of programmes is weak

Meanwhile, some of the policy initiatives are not financed with a regular budgetary framework, but rather form part of a pool of common resources, reducing their financial and operational sustainability over time as well as limiting control mechanisms, monitoring and public accountability. Many policies that should have a permanent status, lack a specialised institution or dedicated responsibility for their management and implementation, as is the case for rural education, the School Meal Programme (see below) or the *De Cero a Siempre* strategy. This criticism has also been raised by the Commission on Public Expenditure and Investment (Bernal et al., 2018_[6]).

More generally, education policy in Colombia faces a challenge of ensuring more sustainable and long-term policies in practice. As highlighted above, the National Development Plan receives high political priority at the central level, facilitates medium-term planning, and includes long-term goals beyond a single presidential term. A National 10-year Plan for Education developed with broad social participation provides a longer-term vision for education specifically. But the National Development Plan requires political approval from each government, meaning that its continuity is not necessarily assured. There is also a tendency for individual governments to implement changing programmes to further their goals for the sector, reducing the stability of programmes over time. Education policies and reforms however take time and require sustainability to have an impact on teaching and learning in classrooms (Burns and Köster, 2016_[14]). As suggested by an analysis of educational reforms in the United States, the most significant effects were seen between 8 and 14 years after the start of a reform (Borman et al., 2003_[44]).

This same lack of stability is seen in rural education policy. Despite its important achievements, the Rural Education Programme (PER) did not receive additional financing from the ministry of education after using up the two credits from the World Bank for its design, implementation, improvement and evaluation, reflecting the need for sustainable funding, long-term planning and a budgetary framework in the national budget.

Nevertheless, the natural heir of this initiative is the Special Rural Education Plan which is contemplated in the Peace Agreements analysed above.

The experience of the Rural Education Programme highlights furthermore risks of dependence on international sources of funding, both from multilateral organisations and various foundations. If not scaled up or integrated into national or local policies and practices, and financed with resources from the Colombian school system, such initiatives fail to create lasting opportunities for schools and their communities. Other sources of funding may also not always be well articulated among each other, missing opportunities to create synergies and greater impact.

Part of the problem is the lack of an institutional framework within the ministry of education that gives continuity to policies and programmes as has already been mentioned. Such an institutionalisation would also be necessary to address the specific challenges of rural education in terms of coverage, quality, pedagogical development, human resources, infrastructure, financing and territorial co-ordination. These are all issues where rural areas are more precarious than urban areas, and which must be addressed in a comprehensive and sustained manner that does not depend on temporary government programmes that may be discontinued. The Special Rural Education Plan with its model of social and inter-institutional co-operation may be the initiative that develops the necessary experience to respond to these requirements at a national level.

Multiple national policy objectives do not adequately consider estimated costs and face difficulties in solving structural problems identified in evaluations

The various instances of monitoring, auditing and control, such as the General Comptroller of the Republic, the Ombudsman and Prosecutor General or the ministry of finance, regularly provide an exhaustive evaluation of the administrative, legal and financing processes of public education as highlighted above. However, in many cases there is difficulty in initiating legal and administrative processes to resolve the structural problems identified in these instances, as has been observed in the difficulties experienced in solving the problems identified in the School Meal Programme (PAE), in the redesign of the revenue sharing mechanism SGP, or in closing the significant gaps in education between rural and urban areas.

The ministry of finance's financial impact assessment, which provides the basis for discussing new initiatives and legislation that affect the funding of public education, seems inadequate. There seems to be a lack of quality and timely information to evaluate the long-term impact of policies, which in turn affects the feasibility of new policies and programmes that demand financial resources. For example, it seems inconsistent to approve new agreements between the ministry of education and the largest union that imply additional funding from the SGP Education from 2018 onwards given that the SGP Education's resources have not increased in real terms in the 2018 budget (MinHacienda, 2017^[4]).

As a result, the legislative branch, the executive and the territorial authorities do not always have access to timely and sufficient information, which would enable them to avoid financial problems and difficulties in the implementation and future sustainability of the policies and programmes they have approved.

Moreover, although information systems in the education sector have improved and become more complex as described above (Villar et al., 2016^[43]), their quality and articulation still need to be improved considerably to support strategic decision-making

and improve the levels of transparency and inter-institutional co-ordination. This lack of transparency and co-ordination makes it difficult to adequately identify infrastructure requirements, allocate resources to the School Meal Programme (PAE), or for Secretaries of Education to distribute their budgets for the provision of education or teacher resources (MinHacienda, 2015^[45]; PGN, 2016^[46]; Sánchez, 2018^[1]). The information system on school infrastructure (SICIED), for example, did not yet provide updated information to the different levels of governance at the time of writing.

One of the difficulties is that these systems are not easily accessible to the public, although the DNP has, for instance, made progress in developing a public portal with territorial information including statistics, financial information and service provision. In addition, there is a backlog of requests for information from schools and Secretaries of Education, as this information is not automatically shared by the different databases, which implies outdated data on enrolment, coverage and infrastructure, especially in the most disadvantaged, rural and remote areas. The existence of many sources of financing for various initiatives - the School Meal Programme has six different funding sources, for example - not only generates important co-ordination problems, but also creates difficulty in oversight, as well as an overload of work in responding to the administrative requirements of each source of resources (Sánchez, 2018^[1]).

Important challenges remain in the implementation of the Full-Day Schooling programme, which requires monitoring and improvement

Many challenges have been identified regarding the implementation of the *Jornada Única* programme, which are not only specific to this educational policy but illustrate again the common challenges the country faces to improve the long-term planning and implementation processes of key national policies in education.

The first has to do with the sustainability of the programme since it is a policy that must be ratified by the new government in the context of a tight fiscal situation while drawing on lessons learned during the implementation of the initiative during the period 2014-18. A second important challenge is to update the guidelines for its implementation since these guidelines (estimating the classroom deficit for example) were initially developed based on existing educational provision and not on those needed to solve the current coverage problems, especially in secondary education. For example, the number of Year 11 classrooms is equivalent to only 68.7% of the Year 9 classrooms or just 39.7% of Year 5 classrooms (DNP, 2015^[28]), even though children will remain in full-day schooling during the entire educational cycle and the extension of compulsory education will mean schools require additional classrooms through to Year 11.

A third challenge is to adequately solve the financing of the programme's complementary services, such as school meals. In its current form, the Secretaries of Education are responsible for providing a lunch service only. Since the programme requires students to be at school for a longer time, students, especially the most disadvantaged, will require more than one meal to ensure proper nutrition and improve the potential contribution of the programme. This challenge is even more complex considering that it must be resolved in a context in which the School Meal Programme (PAE) is severely underfunded in most certified territorial entities.

It is also important for the ministry of education, Secretaries of Education and teacher education institutions to develop strategies for pedagogical improvement to make good use of the longer classroom time through teaching-learning processes. These challenges

are analysed in depth in Chapter 3. Otherwise, the additional hours spent in school will not necessarily imply better quality in the educational outcomes of schools and children.

As concluded by different actors during a meeting in Bogotá, not only must schools have sufficient financial resources, but they must also focus on pedagogical processes, classroom environments and local technical capacities so that the programme impacts educational quality in a positive way (Bayona and Ballén, 2017^[47]). These considerations have been established as conditions for schools to participate in the programme (MEN, 2018^[29]), which may imply that the speed of its implementation is reduced to below that initially proposed in the National Development Plan 2014-18.

If the programme does not focus on pedagogical aspects, such as the effective use of teachers' time and sufficient school leadership capacity to manage teachers' schedules, it is possible that a reform of this size will not only involve substantial public resources to finance capital costs, greater pressure on school meals and costs of maintaining the new infrastructure but could also result in postponing investments in the quality of teacher education. The implementation of full-day schooling could quickly require an increase in the number of teachers, and thus payroll expenses, to cover additional teaching hours.

Another point is that the programme's impact on the deficit of required classrooms must be monitored, since it was based on an estimate considering a number of children per classroom that is considerably higher than the current situation, with numbers expected to continue declining as the school-age population falls by about 10.5% by the year 2030.

Finally, better school infrastructure and equipment must be accompanied by a mechanism for the regular financing of maintenance and replacement costs. Since these costs are not adequately considered in the existing financing system, some districts, municipalities and schools must allocate part of the resources from the SGP Education Quality component for these expenses.

Existing financing mechanisms do not adequately consider existing inequalities as well as the context of territories, schools and students; and the complexity of current funding arrangements leads to inefficiencies

The main source of education funding has multiple territorial objectives, but meeting the objective of territorial compensation is still pending

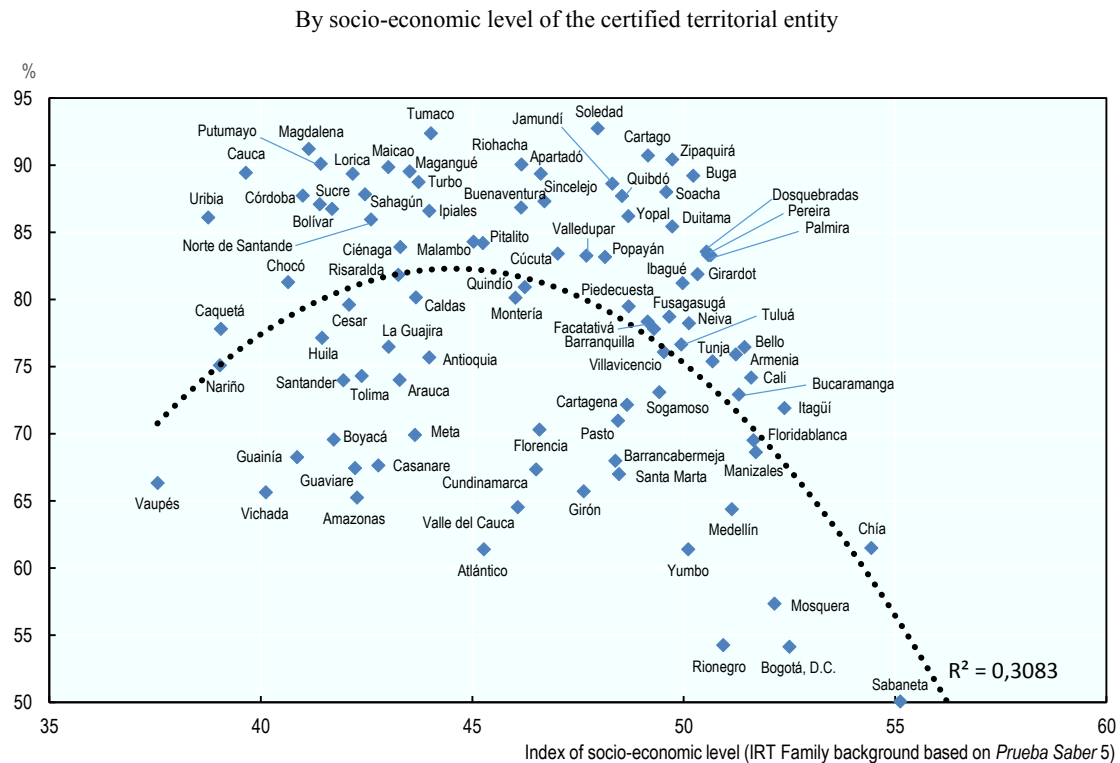
The system of sharing revenues between the central and subnational authorities, the General System of Transfers, SGP, created in 2001 and reformed in 2007, was one of the main mechanisms that helped Colombia emerge from the fiscal crisis of the late 1990s, and it contributes to multiple public finance objectives.

On the one hand, it aims to solve part of the vertical fiscal imbalance in a country where most tax collection is done by the central government. In addition, it is a tool for territorial and social compensation since it redistributes resources among departments, districts and municipalities according to their level of disadvantage. It provides funding to cover operating expenses in the poorest municipalities in the country since 11.6% of the total resources distributed through the SGP are allocated to districts and municipalities for general purposes without the specified use of funds.

However, most of the annual budget of the SGP is earmarked for financing education and health services, which receive 58.5% and 24.5% of resources respectively. In the case of education, the SGP Education is the main source of funding, as shown in Figure 2.8. For

70 of the 95 territorial entities certified to provide education in Colombia, funding from the SGP Education represented 70% or more of the total resources invested in public education in 2017, a percentage that is even higher among those Secretaries of Education serving more disadvantaged students, such as the departments of Cauca, Chocó or Magdalena, where it represents more than 80% of total funding.

Figure 2.8. Share of resources provided through the SGP Education of the total expenditure on public education, 2017



Note: The resources of the departments include the respective resources of non-certified municipalities.
Source: Data provided by the Ministry of National Education (MEN), based on the Single Territorial Format (*Formato Único Territorial, FUT*) for 2017.

In only nine entities, the contribution of SGP Education was less than 65% of their total resources for education. These are the capital district Bogotá; the Atlántico and Valle del Cauca departments; the certified municipalities of Medellín, Rionegro and Sabaneta in the department of Antioquia; Chía and Mosquera in the department of Cundinamarca; and Yumbo located in the department Valle del Cauca. Most of these Secretaries of Education serve less disadvantaged students.

Despite the many objectives of the revenue sharing mechanism, neither this system nor other central government funds, with the exception of the General System of Royalties, meet the objective of providing territorial compensation based on social disadvantage and fiscal capacity in the generation of resources by municipalities and departments.

As a result, fiscal territorial asymmetries are not compensated adequately in the school system. Recent estimates of the Comptroller General for the General System of Transfers

show that its territorial distribution of funds is mainly according to student numbers, without greater compensation for the degree of social and economic disadvantage of the departments (CGR, 2017^[9]). After incorporating other sources of transfers, and the contributions made by the certified territorial entities from their own resources to complement the financing of public education, there are important gaps between different departments (Heras Recuero and Olaberría, 2018^[48]; OECD, 2016^[7]). For example, the highest spending per student is in the capital city, Bogotá, which spends almost twice as much per student as the national average, followed by the cities with the largest populations and highest standards of living, such as Cali, Manizales and Medellín.

The departments with the lowest expenditure per student are those in the Amazon region (Caquetá, Vaupés and Vichada), which are all vulnerable departments, with large rural and remote populations. This is explained because the municipalities that concentrate 20% of the population with the lowest index of unmet basic needs (INBI) account for 39.9% of tax and 42% of non-tax revenues of local governments, while those municipalities with the 20% of the population with the highest index only collect 8.2% of tax revenues and 3% of non-tax revenues (CGR, 2017^[9]).

An additional estimate for the 95 certified territorial entities with data from 2017 shows a relatively similar result to the one provided by the analysis of the Comptroller General. While the total expenditure on education per student of the certified territorial entities tends not to be linked to the level of social disadvantage of the attended population, there is a high heterogeneity among the most vulnerable departments and municipalities. For example, in Guainía and Vaupes, public spending per student is about double that of the certified municipality of Uribe or the department of Caquetá, which serve a similarly disadvantaged student population. Similarly, the certified territorial entities that provide education to less advantaged students, on average, show a high variation in per capita spending, although with a tendency for higher spending overall.

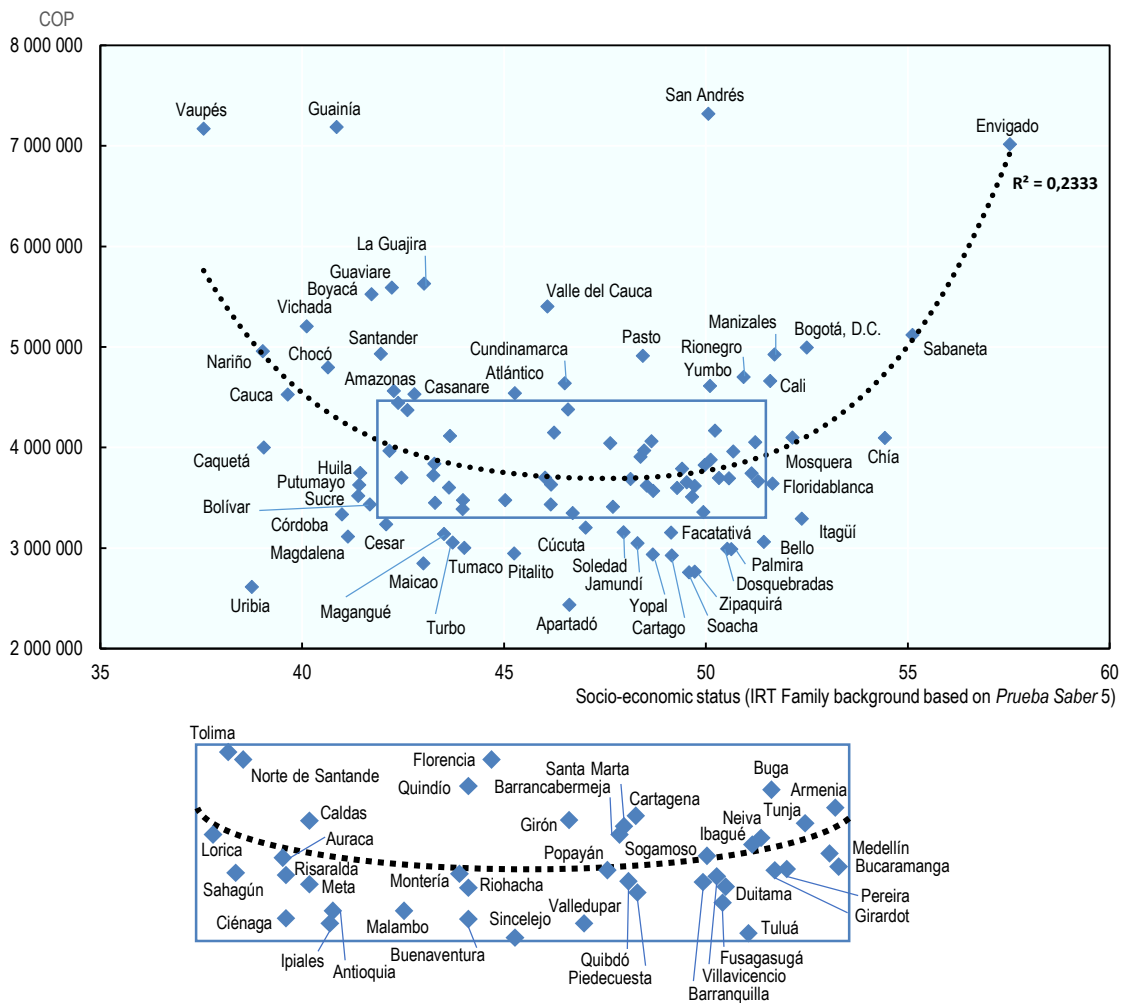
In sum, greater disadvantage does not necessarily entail a greater allocation of public resources. For example, the total spending per student in the district of Bogotá is very similar to the level observed in the departments of Chocó, Nariño or Vichada, which are among the poorest of the country (Figure 2.9).

This asymmetry is mainly due to two factors. On the one hand, the low financial capacity of the SGP Education, which effectively delivers more resources per student to the most vulnerable Secretaries of Education, but with such a small differential that, as previously noted, they have not reduced territorial gaps in the educational opportunities of Colombian children and young people. For example, students in the department of Chocó receive only 12% more than those in Cali or Manizales (see Figure 2.10). The second factor is due to the asymmetry in the contributions from the territorial entities' own resources. Only some of the certified territorial entities are able to make significant contributions to complement transfers from the central government for education.

This asymmetry of resources by territory, mainly explained by the different capacities in the generation of funds by certified territorial entities, has meant that there is no convergence over time in the educational performance of students at the municipal level, considering the average results of the school leaving examination in Year 11. However, there is a gradual convergence in educational coverage, although closing only half of the existing gap would take 17.6 years in primary and lower secondary education and 32.5 years in upper secondary (CGR, 2017^[9]).

Figure 2.9. Total expenditure per student in public education, 2017

By socio-economic level of the certified territorial entity

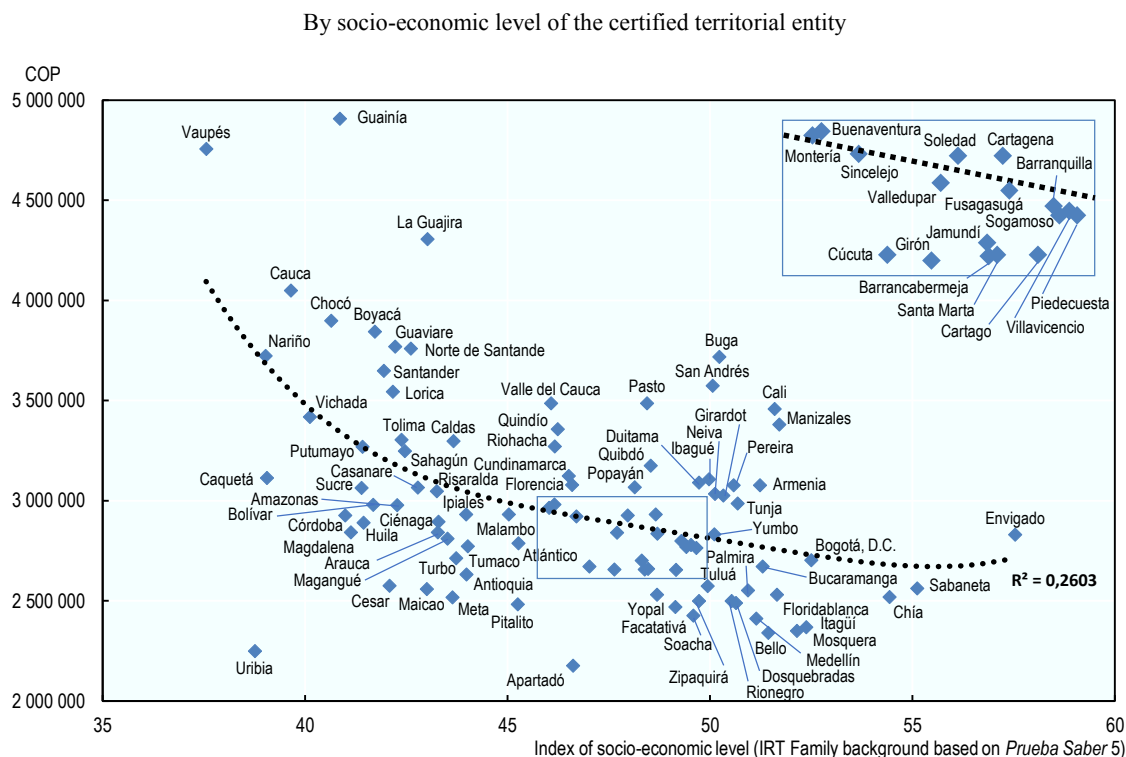


Note: The resources of the departments include the respective resources of non-certified municipalities.
Source: Data provided by the Ministry of National Education (MEN), based on the Single Territorial Format (*Formato Único Territorial, FUT*) for 2017.

Various national policies do not include new financing mechanisms, which is jeopardising their sustainability and increasing the level of centralisation in education policy

In recent years, the central government has promoted multiple structural reforms to improve the coverage and quality of education provision. First, the National Development Plan for 2014-18 calls for the implementation of a full school day, increasing the time that all students in public school spend in the classroom. This policy has entailed an increase of 20% in the per-student allocation of the Provision of Educational Service component of the General System of Transfers (SGP Education) to finance the operating costs of this policy. Some certified territorial entities have also used a budget surplus in resources from the SGP Education to co-finance investments in infrastructure (MEN, 2018_[29]).

Figure 2.10. Spending of the SGP Education per student, 2017



Note: The resources of the departments include the respective resources of non-certified municipalities.

Source: Data provided by the Ministry of National Education (MEN), based on the Single Territorial Format (*Formato Único Territorial, FUT*) for 2017.

Additionally, the ministry has promoted the inclusion of children with special educational needs and with a disability into the education system, steadily increasing the enrolment of this group of students. A further policy aims to provide education to young people in the juvenile criminal justice system, which also entails an increase in the allocation of the SGP Education's component related to educational service. Chapter 3 provides a discussion of initiatives to provide education to these groups of students.

Meanwhile, the ministry has agreed to work with Secretaries of Education to administer the School Meal Programme, facilitating the delivery of contributions from the funds of certified territorial entities for co-financing the programme. The ministry has matched the payment per child enrolled in kindergarten, the second year of pre-school, with a similar contribution to the one in the transition year, the compulsory pre-school year (DNP, 2017^[11]). Furthermore, the ministry has held negotiations with the largest teacher union to improve working conditions of teachers, with the agreement reached in 2017 set to have multi-year effects on the resources of the SGP Education (Decree 2015 of 2017).

In each of these cases, additional resources have not been included in the financial allocation for SGP Education, nor in other funding items that would provide permanent contributions for the financing of these policies. On the contrary, these initiatives, which reflect a growing degree of centralisation in educational policies, are financed with the existing resources of the SGP Education, which imposes greater budgetary demands, lower flexibility in the use of resources by the certified territorial entities, as well as an increase in the probability of future deficit situations. This problem has been exacerbated

since, in 2017, the SGP Education lost 1.8% of the resources that it had temporarily received from the central government since 2011, and its resources are now calculated based on the average growth of national income in the previous four years.

Moreover, even though the basic basket of educational provision (*canasta básica educativa*) financed by the SGP Education includes materials for students, such as textbooks, infrastructure maintenance expenses, transport and food services, these are only provided through the Provision of Services component once payroll expenses for teachers and administrative staff have been covered, which means an increasingly reduced amount of financing for these complementary services that are very important to improve access, retention and learning of students, especially the most disadvantaged.

Costs of policies and their institutional management are underestimated in determining adjustments in the distribution of the SGP resources

Despite the remaining challenges to improve coverage of early childhood, secondary and rural education, most of Colombia's main challenges are related to reducing inequality and improving the quality of public schools, which requires a stronger institutional framework and financing mechanisms that ensure progress in these objectives.

There are various challenges related to the increasing priority given by the central government to educational policies, such as the *Jornada Única* programme, and the related investments in infrastructure, human resources and school meals. Other challenges include the discussion about the expansion of the transition year to a compulsory second or third year of pre-primary education and the coverage of secondary education. The multiple objectives related to reducing educational inequality, such as closing urban-rural gaps, inclusion policies for children with special educational needs or the indigenous population, which entails an autonomous system in the design and management of their communities (SEIP), require effective financing and management to ensure that these policies offer more equal opportunities to different groups of students and territories.

For example, according to the technical teams of the ministry of education interviewed during the review team visit, the additional allocation of 20% per child to cover the higher operational cost for the implementation of full-day schooling was not based on an empirical estimate of the actual costs required, but on an estimate that would ensure the programme's financial sustainability.

A recent simulation estimates that the higher cost for teaching staff would exceed the 20% additional allocation per student (Simpson, Delgado and Trujillo, 2016_[49]). Even this estimate could be low since the authors assume that the requirements of additional teaching hours could be implemented with part-time contracts for teachers. This presents difficulties as permanent teachers in Colombia are employed on contracts of 40 hours, of which between 20 and 25 hours are allocated to classroom teaching in schools with full-day schooling depending on the level of education as ratified by the ministry and the largest teacher union in Decree 2105 of 2017. The decree also sets limits to the flexible allocation of teachers' teaching assignment by school leaders.

In the same vein, adequate costing is required for the necessary funding allocation for the inclusion of children with special educational needs, adolescents in conflict with the law and for ethnic minority students. There is also no empirical analysis of the costs required to ensure a quality education for rural students and students with socio-economic disadvantage nor for the higher cost involved in the provision of vocational upper

secondary education compared to general education. Both types of programmes currently receive the same level of funding.

At the same time, the allocation of additional resources for children with special needs creates an incentive for schools to identify children with these needs to obtain additional resources in the absence of strong protocols to diagnose special learning needs as analysed in Chapter 3. This not only risks labelling students but also an increase in costs if this allocation is not combined with rigorous monitoring and control (OECD, 2017_[22]).

There is no regular funding model for educational infrastructure in urban or rural areas and financing lacks co-ordination at the territorial level

Secretaries of Education are responsible for maintaining the infrastructure and equipment in public schools, but in most of the country, there is an investment lag of decades, which is a situation that is even more precarious in rural schools.

In 2015, it was determined that classrooms in 70% of school sites offering secondary education in urban areas were overcrowded, 41.6% did not have a library and 30.3% did not have laboratories. Although the problem of overcrowding is somewhat lower in rural school sites (55.6%), 55% of rural school sites did not have a library and about 90% did not have a laboratory (Lugo, Hernández and Colmenares, 2016_[30]).¹⁸ Even more critical is the evidence from the draft Special Rural Education Plan, which suggests that, in 2014, 80% of rural school sites did not have a connection to a gas network and 70% did not have sewerage services (MEN, 2017_[50]).

The difficulty of the public sector to resolve educational infrastructure problems is also reflected in the fact, given the lack of capacity to provide education directly in public schools, Secretaries of Education have to contract educational services by funding private providers. In urban areas, more than 330 000 students were enrolled in such government-dependent private provision in 2017 (6.1% of the total urban enrolment).¹⁹ Similarly, precarious infrastructure conditions in public schools could be part of the reason for the steady increase in independent private school enrolment without public funding between 2010 and 2017, both in rural and urban areas, together with other factors such as a growing middle class. In the same period, enrolment dropped in both rural and urban areas in public education (Sánchez, 2018_[1]).

The poor state of educational infrastructure is explained, in part, by the historically low amount of funding available from the central government for investments in school infrastructure, which accounts for less than 2% of its annual expenditure in the sector. It is estimated that in the period 2010-14, these resources allowed the annual construction of only 300 new classrooms per year and that the projects financed with these resources were only implemented by a third of the country's Secretaries of Education, including the construction of so-called *megacolegios*, large schools providing education to many students, located in the largest urban areas of the country (DNP, 2015_[28]).

These resources are complemented by the contributions from the General System of Royalties (SGR), which financed its second-largest number of projects in education, after transport (2012-14). These resources, however, represent a lower amount than the funding provided directly by the ministry of education with high volatility.

The most important source of investment in public education infrastructure has been the contribution from municipalities and departments. For example, in 2013 they allocated close to COP 830 billion to co-finance educational infrastructure projects, with 60% of the resources coming from their own resources and loans, and the rest from the quality

component of the revenue sharing system SGP (DNP, 2015_[28]). This is more than twice the resources contributed by the ministry and royalties combined.

However, these resources are highly concentrated in those territorial entities with the highest enrolment and with the greatest capacity to generate their own income. For example, even though the central government was unable to implement a longer school day between 1994-2002, some municipalities with the largest resources, such as Bogotá and Cali, have implemented full-day schooling gradually on their own initiative since the 2000s. In 2019, Bogotá is expected to achieve 30% enrolment in the *Jornada Única* programme and 35% in the extended day provision (Bayona and Ballén, 2017_[47]).²⁰

In other words, there is no permanent funding for the maintenance of infrastructure and equipment of schools from the central level, despite the fact that it is considered one of the components of the basic educational basket (*canasta básica educativa*) that the General System of Transfers (SGP) must finance. In addition, prior to the *Jornada Única* programme, there was no multi-year funding programme with inter-institutional co-ordination for the maintenance, expansion or construction of new schools or school sites. In the case of departments and non-certified municipalities, these investments and expenditures must also be co-ordinated between authorities since the non-certified municipalities receive the resources from the quality component of the SGP.

The reforms of the General Royalties System (SGR) are a step in the right direction and serve as an example for the reforms to the SGP (Hernández and Herrera, 2015_[23]), but this fund is reduced in magnitude, unstable over time and does not solve the asymmetry of technical capacities between the territories to elaborate and present the projects that are required to solve the problems of the educational infrastructure.

These weaknesses are exacerbated in rural areas due to greater difficulties in developing projects that are technically feasible given that, in many cases, property rights on the land where schools need to be repaired or built are not identified. Secretaries of Education in different parts of the country may also face technical challenges in ensuring adequate temporary learning spaces for their students. As reported during the review team's visit, climatic conditions may make it difficult to use temporary structures such as containers due to heat and humidity.

Another problem in these areas is that various policies, such as the Full-Day Schooling programme, do not only include less ambitious goals for achieving general coverage in rural areas (e.g. a difference of five years for universal coverage in full-day schooling between rural and urban schools). Lastly, bidding for central infrastructure funding require territorial entities to provide a minimum of matching funding, a disadvantage for those with fewer resources.

The School Meal Programme (PAE) requires structural reform

The School Meal Programme is one of the oldest education programmes in Colombia, which complements the food that parents provide their children for school, and which seeks to improve access to and retention in education. Under Decree 1852 of 2015, the ministry of education provides co-financing to the certified territorial entities to implement the programme. In 2017, almost 6.5 million daily rations were given to disadvantaged students, of which about 800 000 were for school meals as part of the *Jornada Única* programme.

The Colombian Institute of Family Welfare (ICBF), which was previously responsible for the School Meal Programme, had already set the goal of achieving universal coverage of the programme (Law 1176 of 2007), starting with the most disadvantaged municipalities and giving priority to schools serving rural and indigenous communities, and those with the highest share of vulnerable population as defined by the SISBEN (levels 1 and 2). Once the provision of school meals for these groups of students would be assured, the programme would increase coverage to other students.

However, for 2016, the Ombudsman and Prosecutor General indicates that coverage still reached only 37.5% of students, considering all students in the education system and not only the most disadvantaged (PGN, 2016_[46]). In addition, there is lower coverage among the poorest parts of the country (La Guajira, Magdalena or Santa Marta) since the programme does not consider that it is children's right to access the school system, nor does it compensate students in poor areas (CGR, 2017_[51]).

The programme is funded by resources from many sources (making up a joint bag of resources) shared by multiple public authorities. This includes the general national budget, the General System of Transfers, the General System of Royalties, *Contratos Plan*, the territorial entities own resources, as well as other additional sources. This creates different timeframes for planning, decision-making, execution and regulation, and requires complex models of co-ordination, monitoring and control which entail a high level of administrative and technical difficulty.

The greater fiscal restrictions facing the central government in recent years are reflected in the fact that the resources allocated to the programme have only increased slightly in real terms, from COP 770 billion in 2010 to an estimated COP 820 billion in 2017, according to ministry data. Half of the programmes' budget is financed from other sources. In 2016, the ministry of education's contribution to directly finance the programme was reduced by 50%, although in 2017 it increased again. This reflects an enormous instability in the sustainability of the programme. Given the need for greater coverage of school meals, and the restriction of ministry resources for the programme, the increased demand for resources from the certified territorial entities has made it more pressing to reform the programme. Some departments have even threatened to return shared management to the ministry.

However, the most significant challenges of the programme do not only stem from the insufficient resources transferred from the central government to the territorial entities, certified or not, and the difficulty of co-ordinating the diverse sources of financing. They are also related to problems of governability, management, lack of transparency and corruption (CGR, 2017_[51]; PGN, 2016_[46]), although the ministry of education provides training to the Secretaries of Education of the certified territorial entities in different aspects of the programme (e.g. operational, financial, judicial), as well as to school communities to exercise social oversight at a local level.

The Comptroller General establishes three factors as the structural causes of this situation: i) inefficient control by the ministry of education since neither the ministry nor the territorial entities have indicators to monitor compliance with the programme's objectives, nor do they have a reliable information system; ii) the lack of government co-ordination, especially among municipalities and departments, showing that certified territorial entities are not able to adequately co-ordinate sources of financing to manage contractual processes or provide quality services; and iii) insufficient training of the territorial entities in the management of the common pool of resources – composed by the

multiple sources of financing – or in the general administration of the programme, from the pre-contractual process to the meal contract (CGR, 2017_[51]).

In order to improve the control and monitoring of the programme, the Comptroller General has worked closely with communities to strengthen local accountability, organising 49 *veedurías* (local oversight committees) in 24 municipalities of 10 departments, training thousands of citizens and providing a tool so that the *veedurías* can detect problems in the provision of the service (CGR, 2016_[52]). This process has shown that problems in the administration of the programme are in fact widespread.

Moreover, reports by the Ombudsman and Prosecutor General on the School Meal Programme indicate that it fails to meet its nutritional goal, since it does not ensure that minimum standards are met; it does not take a rights-based approach, but only provides social assistance; and there are no guidelines for contracting providers, complicating control. Similarly, multiple financial and management problems were detected, which have not been resolved over time (PGN, 2016_[46]).

For example, there are no resources to carry out follow-up studies, resources are lacking to expand programme coverage, the value of the food serving defined by the Secretaries of Education is insufficient to cover the technical and nutritional requirements, no cost differences are considered for urban and rural areas, and private providers are hired that repeatedly fail to provide an adequate service. The prosecutor general also identified management problems in the ministry of education to adequately monitor all the financial, technical, administrative and operational aspects

Finally, despite the minimum conditions defined by the ministry of education for the school meal provision required for the implementation of the Full-Day Schooling programme in a new school, the technical difficulties in provision significantly affect the viability of the *Jornada Única* programme. Due to the high budgetary restrictions of the School Meal Programme, it has been agreed that the operation of full-day schooling will only require ensuring the provision of lunch for each student – representing 30% of students' daily nutrition. However, this does not imply that it should be financed by the School Meal Programme as it is assumed that many families could provide lunch.

This condition seems insufficient for children of 5-17 years to attend a long day at school, especially for the most disadvantaged children, who may not have the minimum resources to ensure their right to adequate nutrition and health. As a result, securing financing for this component of the *Jornada Única* programme, as well as financing the increase in teaching hours, have been defined as two important restrictions to expand coverage of full-day schooling in 2018 (MEN, 2018_[29]).

There are few incentives for territorial entities to improve the quality of education

In addition to the lack of compensatory resources for the most disadvantaged territories, schools and students, the current financing system offers few incentives aimed at improving the quality of provision. The existing incentives, on the other hand, have not been evaluated in terms of the fulfilment of their objectives.

Currently, there are two components in the part of the General System of Transfers dedicated to education which are related to quality: Enrolment and Free Education. However, only the first one recognises efforts to improve performance in educational management by granting territorial entities more flexibility in spending their resources. The second component, Free Education, grants greater autonomy to each school in implementing its educational project and provides resources to guarantee free education.

The Quality- Enrolment sub-component is nevertheless small since it is equivalent to only 4% of the total resources of the SGP Education. Although it allows a fairly flexible use, with the exception of financing the payroll of educational staff, it is transferred to certified and non-certified districts and municipalities. This seems inconsistent since non-certified districts and municipalities are not responsible for the improvement of the quality of the schools in their respective departments. The Secretaries of Education of the respective departments (with the exception of Amazonas, Guainía and Vaupés), on the other hand, do not receive resources for this component.

This represents a missed opportunity to incentivise improvements in their financial management, the professional development of their teachers, ensure territorial co-ordination and improve the quality of education. These Secretaries of Education, however, serve the most disadvantaged students in the country and receive about half of the resources of the operating component of the SGP. As with the allocation for the Provision of Services component, the higher cost in the provision of rural education is not fully recognised since the additional contribution for this attribute amounts to only 10%.

Providing incentives to improve the quality of education management seems to be a low priority, which also reflects the increasing fiscal constraints. The allocation of resources for the component for the Provision of Services of SGP Education in 2017 did not consider quality and efficiency as one variable to determine the allocation (DNP, 2017^[11]). Unlike in previous years when this contribution was allocated to all the certified territorial entities, including departments, these resources have been allocated to assure the financing of the regular payroll of the teaching staff. This quality component within the SGP bag for Provision of Services was considerable, accounting for 14% of all resources allocated to the SGP Education in 2015 (Villar et al., 2016^[43]). This was more than double the resources for Quality-Free Education and Quality-Enrolment combined.

However, most of the variables used to distribute the resources for quality in the Provision of Service component put the most disadvantaged and rural Secretaries of Education at a disadvantage: six of them are linked to the average performance of each certified territorial entity, and three related to their improvement. This represents a lost opportunity to improve the performance of these certified territorial entities where efforts to improve coverage, decrease repetition and increase retention should have a greater impact in rural and disadvantaged areas.

As it stands, 70% of the indicators were linked to concrete achievements, where the most vulnerable Secretaries of Education systematically present a more precarious structural condition. This shows that the allocation of these resources was not adequately designed. Again, the distribution of resources did not consider an adjustment for the conditions of the territories, especially regarding disadvantage and rurality, nor had the resource allocation been evaluated in terms of achieving its objective.

The General System of Transfers (SGP) generates disincentives for Secretaries of Education in the efficient use and management of their resources

The distribution of the SGP Provision of Service component is based on a specific model for each certified territorial entity, which combines enrolment with the effective payroll costs. This generates incentives to maintain a permanent number of teaching staff since efforts to adjust their number of staff made by each Secretary of Education do not result in a greater degree of freedom in the use of available resources.

In addition, the Resource supplement sub-component within the Provision of Service component, which represented almost 5% of the total of the SGP Education in 2016 (DNP, 2016_[53]), ensures the payment of the payroll for teaching staff in case of a deficit. This reduces the efforts of the Secretaries of Education to maintain a balanced fiscal situation.

Regular changes to the formula to distribute resources of the SGP Education, both in its Provision of Service and Quality components, also affect financial management in education. These regular modifications reduce the predictability of available resources as well as the interest in improving the efficiency of provision within the framework of a multi-year work plan. They furthermore limit objective of ensuring the financing of the payroll of the teaching staff, especially in those Secretaries of Education with fewer resources.

Lastly, an important indicator of efficiency in financial management is the total expenditure of resources available during the fiscal year, which promotes the execution of all annual resources, instead of encouraging the generation of multi-year and more strategic planning of available resources (Sánchez, 2018_[1]).

Greater flexibility is required for the management of teaching staff that make up the bulk of funding allocated to public education

Although Colombia's capital expenditure in school education is quite similar to the OECD average, with 7% of the total expenditure on primary and secondary education, which is somewhat lower if we consider all pre-tertiary education (see Table 2.6), spending on teachers concentrates a high percentage of total spending as well as current expenditure in education. This situation is even more pronounced in public education where 84% of current expenditure goes to teacher's compensation (OECD, 2017_[2]).

This high share of teachers' salaries in the total spending is expected in a sector like education, which requires a high number of teaching professionals. But spending on teaching staff as a proportion of the total cost is higher in Colombia than in the 28 other countries with comparable information for the OECD *Education at a Glance 2017*, and considerably exceeds the average for OECD countries, which reaches 62% (Table 2.7).

This situation implies a high level of inflexibility in the financial management of public education. Although a relatively large share of teachers is employed on fixed-term contracts, particularly in rural and disadvantaged areas as analysed in Chapter 4, teachers are usually full-time permanent staff. This implies not only permanent costs over time, but also affects the resources required for education considering agreements reached by the largest teacher union (FECODE) and the national government on better working conditions (Simpson, Delgado and Trujillo, 2016_[49]). Moreover, the teacher labour market is segmented across territorial entities and permanent teaching staff are often not willing to work in rural areas, which leads to inefficiencies through the contracting and funding of private providers or teachers on short-term contracts.

The high share of teacher salaries as total expenditure not only imposes a high level of pressure on the permanent increase of new resources for education, but it also reduces the possibility of hiring other pedagogical support and technical staff to support teaching and learning in schools and in the administration of Secretaries of Education. As analysed in Chapter 3 and as shown in review team's visits to schools and Secretaries of Education, Colombia faces a significant shortage of other types of professionals. This is also evident

in Table 2.7, with Colombia only allocating half of the total current expenditure to the compensation of other staff compared to the OECD average.

Table 2.6. Share of current expenditure in total expenditure in Colombia and selected countries, 2014

Primary, secondary and post-secondary non-tertiary education		
	Public	Private
Colombia (1,2)	94	88
Argentina	92	..
Brazil	94	..
Mexico	98	..
Portugal	98	92
Spain	97	94
OECD average	92	91

1. Some levels of education are included with others.
 2. Year of reference is 2015.
- .. : Missing data.

Source: OECD (2017), *Education at a Glance 2017: OECD Indicators*, <http://dx.doi.org/10.1787/eag-2017-en>, Table B6.3.

Table 2.7. Compensation of staff as a percentage of current expenditure in Colombia and selected countries, 2014

Primary, secondary and post-secondary non-tertiary education						
	Teachers		Other staff		Total staff	
	Public	Private	Public	Private	Public	Private
Colombia (1,2)	84	78	8	4	92	81
Argentina	70	..	23	..	93	..
Brazil	73	..
Mexico	80	..	12	..	92	..
Portugal	80	54	13	9	93	63
Spain	73	69	10	8	83	77
OECD average	62	56	15	15	79	72

1. Some levels of education are included with others.
 2. Year of reference is 2015.
- .. : Missing data.

Source: OECD (2017), *Education at a Glance 2017: OECD Indicators*, <http://dx.doi.org/10.1787/eag-2017-en>, Table B6.3.

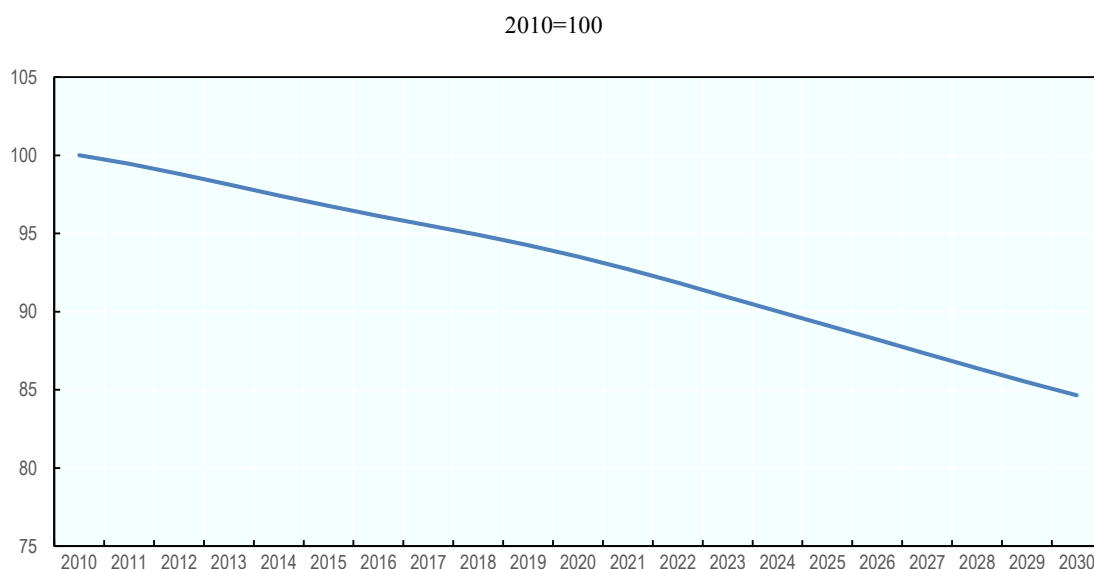
The high share of teacher salaries as part of education spending furthermore implies great difficulty to include more resources for complementary services to improve the conditions for students, such as health and nutrition, continuing professional development, psychosocial support for students or cultural activities, all essential for a quality education, as is also analysed in Chapter 3.

This situation is replicated in financial management at the school level. Although Secretaries of Education and non-certified municipalities have theoretically large degree of discretion in the distribution of resources between the schools (and school sites) under their charge, they have little flexibility in practice since most of these funds finance the salaries of the teaching staff. Secretaries of Education have a low influence on this

component and, in the absence of any considerable increase in official student enrolment, this expenditure will remain over time.

In this context, the demographic transition that Colombia is undergoing, which implies a reduction of the school-age population of 10.5% between 2018-30 (Figure 2.11), requires greater flexibility in the management of teaching staff. Otherwise, instead of being an opportunity to reallocate resources to territories with less educational coverage and additional teaching staff to disadvantaged schools and students, this transition will only entail a reduction in average classroom size without altering the existing territorial asymmetries or the degree of flexibility in educational financing.

Figure 2.11. Projection of the school-age population in Colombia



Note: School-age population refers to 5-19 year-olds.

Source: DANE (2018), Proyecciones de Población [Population Projections], <https://www.dane.gov.co/index.php/estadisticas-por-tema/demografia-y-poblacion/proyecciones-de-poblacion>.

In the same vein, the future reduction of school enrolment may imply a deficit situation in the certified territorial entities if the model of per capita funding is maintained. Teachers cannot be easily distributed between classes and schools. A reduction in enrolment may, therefore, imply an asymmetric reduction in class sizes and schools without a major reduction in costs.

Inequalities between schools and lack of transparency in the allocation of resources

There is also a strong structural inequality between schools in the financing of education, and there is a lack of adequate information on the amount of resources that are allocated to each school in order to analyse the social and territorial inequality in the distribution of resources and to estimate public spending per student (Sánchez, 2018_[1]).

The typology for the distribution of Provision of Service resources for education of the General System of Transfers (SGP Education) is different for each certified territorial entity, based on the specific cost of their respective teacher payroll, defined by the type of qualification, experience and evaluation. A teacher with a master's degree receives a

salary that is double that of a teacher with a qualification of a higher teaching school (*Escuela Normal Superior*, ENS) when they have the same evaluation in the promotion system, not taking into account the degree of disadvantage of the children they teach.

As a result, those certified territorial entities, schools within territories and even sites within school clusters with more qualified teachers, will receive many more resources on a regular basis. Teachers with higher qualifications are not randomly distributed among different parts of the country as analysed in Chapter 4, implying again a lower investment per student in the most vulnerable, rural and isolated territories. The current design of the career structure, but also working conditions and professional environments do not motivate more qualified teachers to settle in the places where they are most needed. The organisation of schools into school clusters, with schools having a different number of sites at a different distance from the main site, also does not seem to be sufficiently taken into account in the distribution of resources at the local level, as analysed in Chapter 3.

Policy recommendations

Address the challenge of increasing public resources allocated to the school system in a more restrictive fiscal context and strengthen conditions for greater continuity in education policy

During the last few years, the ministry of education has incorporated additional reforms to universal free education, such as the *Jornada Única* programme, attention to special groups such as children with special needs and adolescents in conflict with the law. It has, at the same time, negotiated two agreements with the largest teacher union to improve teachers' working conditions. All these goals and commitment have been made using the same General System of Transfers resources and even with a reduction of these resources as a result of the change of the annual adjustment of the SGP resources since 2017.

This has led to complex fiscal situations in several certified territorial entities, and projected deficits in the future. As a consequence, it will be financially difficult to meet the objectives and address the challenges set out by the authorities without increasing the amount of financial resources available for education.

This complex financial situation is only exacerbated when considering efforts to improve coverage, especially at the levels of early childhood education and upper secondary education, but also access to tertiary education for disadvantaged students, and the objective of closing gaps between rural and urban areas. In addition, Colombia is likely to face a more restrictive fiscal situation for the next few years due to its effort to reduce the country's structural deficit.

Therefore, the challenge for the coming years will be to reconcile the allocation of sufficient resources with efforts to gradually move towards closing the gaps in educational coverage and quality that still persist in the country. This should entail the identification of priorities and long-term goals that are feasible to achieve in a restrictive fiscal scenario and with increasing financial demands including in tertiary education. This also requires adequate costing of initiatives and evidence of their effects.

Authorities should furthermore reconsider the allocation of limited available resources to different levels of education. As analysed above, early childhood and school education have competed for limited funds with tertiary education, with a reallocation of funding to tertiary education. Investments should prioritise early years given the higher returns at this level and the potential for equalising opportunities for children from disadvantaged

backgrounds (see Box 2.1). For policy recommendations and options to improve the funding of tertiary education, see OECD (2016_[7]) and OECD/IBRD/The World Bank (2013_[54]).

Colombia must strengthen the institutional and budgetary frameworks at the level of the ministry of education as well as the Secretaries of Education to ensure greater continuity and sustainability of education policy. This would create greater stability for the school system, including individual schools and teachers, to improve teaching and learning and enable policies to have a greater impact over time. For instance, in the country's efforts to close rural-urban gaps in education, the ministry should establish a unit dedicated to leading these efforts. This unit should evaluate rural policies and programmes, such as the Special Rural Education Plan, to advance rapidly and expand the programme beyond the 170 rural communities targeted at the beginning of the programme.

Existing planning mechanisms, such as the National Development Plans, and the National 10-year Plans for Education should be used to promote a more sustainable policy and shared vision for education. The government should re-establish the national education board with its technical secretariat as well as subnational education boards.²¹ These advisory boards have the potential to significantly contribute to greater continuity, social participation, and co-ordination across levels of governance

Opportunities for improving and modernising the management and financing of programmes as well as the funding mechanisms should also be identified. This includes greater inter-institutional co-ordination at the territorial level and commitment from territorial entities to improve their technical and management capacities in education.

The following proposals should be part of steps to address this challenge:

Increase total public resources for school education

It is essential to increase the total public resources available for school education, especially in those areas related to the challenges raised previously. The amount of resources allocated to the school system has been falling in recent years and is currently below the level of other countries in the region and the OECD. This additional financing should draw on a range of funding mechanisms, especially considering the financial constraints in the coming years, as noted above.

Given that financing efforts should be permanent, consideration should be given to a tax reform that facilitates the collection of greater resources both at the national and subnational levels. This should identify specific tax revenues in the departments, which can be assigned to the school system and were not considered in the tax reform of 2016, and which in fact reduced the amount of resources allocated to school education.

Consider horizontal equalisation mechanisms for the funding of school education

The high level of fiscal asymmetry, both between departments and municipalities, and within these entities, should involve the discussion of horizontal equalisation mechanisms for the financing of public education.

The experience of Brazil with the operation of the Fund for the Maintenance and Development of Basic Education and Teaching Assessment (FUNDEF) can be a reference for this discussion. The FUNDEF came into force in 1998 and was subsequently revised in 2007 in the form of the Maintenance and Development Fund for Basic Education (FUNDEB). All levels of government contribute resources to this fund

for redistribution to improve the quality and general conditions of public education. In the analysis of Alcázar and Lovatón (2005_[55]), the system led to a more equitable territorial distribution of resources, and improvements in quality, coverage and teachers' working conditions (see also Morduchowicz (2010_[56])).

The Chilean experience of the Common Municipalities Fund (FCM) is another example, although it is not specifically linked to education. The FCM is financed with part of the taxes and fees charged by the municipalities, due to the extreme territorial concentration of these resources, and with contributions from the central government, redistributing them in such a way as to reduce basic horizontal inequality among all municipalities.

Box 2.1. Increasing resources for early childhood education and care

The OECD report on education in Colombia (2016_[71]) has shown the enormous challenge that the public sector faces to increase the resources allocated to early childhood education and to improve the quality of provision. In the context of important financial constraints and multiple, simultaneous educational policy challenges, it seems reasonable that proposals to extend the current coverage of pre-primary education from one year (transition year) to three should not be contemplated in the short term, as this would accentuate the problems of insufficient resources in the SGP to respond to current requirements. On the contrary, it seems reasonable that the increase in resources and coverage of this level come mainly from inter-institutional agreements to improve programs and coverage in rural areas and encourage the effort of local governments for greater investment with their own resources in early childhood education, and also through alliances with the private sector. Many OECD countries have responded to the need for more public funding through government partnerships with the private sector and with non-governmental organisations. In parallel, it is possible to advance in determining the cost to ensure a higher quality of provision in the transition year, as well as providing an incentive for the *Jornada Única* programme in the provision of infrastructure and equipment in the new facilities for early childhood education, developing pilot initiatives that could be tested and scaled up in the medium term. At the same time, it is important to ensure an articulation of provision between authorities responsible for school education (ministry of education and Secretaries of Education) and early childhood education and care provided through modalities managed by the Colombian Institute of Family Welfare (ICBF), with the goal of ensuring an efficient use of resources to improve coverage and quality. This concerns in particular provision for 3-5 year-olds, who can attend early childhood provision or pre-school education.

Resolve the asymmetry between the centralisation of educational policy and the lack of resources for local financing and implementation

A third important reform refers to the legal guarantee that policies approved by the central government and that permanently affect the cost of public education must be properly financed with additional resources from the central government. This legislative agreement should make it possible to separate the lack of fiscal responsibility of the central government for the educational policies that it approves, but that must be implemented and executed financially by the Secretaries of Education at a regional and local level. This would also help to recognise priorities regarding the level of national

economic development since the source of resources should respond to the type of expense agreed. For example, if they are remuneration expenses, they should be considered in the SGP, while expenses for infrastructure or school meals should depend on specific funds for these programmes.

Develop institutional capacities to improve the effectiveness and efficiency of the school system

The technical capacities of the Secretaries of Education are highly asymmetrical, and greater financial resources do not necessarily ensure an improvement in the effectiveness and equity of children's opportunities. Mismanagement, corruption and the lack of complementary policies to support local capacity to improve schooling prevent the effective use of additional funds to improve performance (OECD, 2017^[22]). Going back to the example of Brazil's experience with revenue sharing through FUNDEF, hampered by pervasive leakage, diversion of funds and misreporting despite its achievements, highlights the need for co-ordinated auditing and monitoring (UNESCO, 2017^[57]).

In Colombia, it seems essential to move towards better quality assurance and capacity development, especially for the Secretaries of Education, and to strengthen existing processes within the ministry of education and the ministry of finance. As was the review team's impression during its visit, for example, corrective measures such as the temporary suspension of responsibilities for education did not sufficiently work on the development of local capacities so that certified territorial entities can regain control under better conditions, avoiding corrective measures in the future.

The number of Secretaries of Education is small, and Secretaries could increase their effectiveness considerably through regular and sufficiently-funded strategies to strengthen their capacity, as well as the sharing of best management practices as elaborated in Chapter 3. Better quality assurance and capacity development should also consider a regular recertification system for the municipalities and the creation of incentive mechanisms for Secretaries of Education to improve management quality.

This approach should be based on the most critical aspects identified during this report: the need for up-to-date and coherent information systems; the design of mechanisms to provide technical-pedagogical to schools; the responsible management of the main educational programmes, such as the School Meal Programme (PAE); and further progress in the goals of coverage, quality and equality.

Moving towards a reform of the General System of Transfers

There is a fairly broad agreement that the General System of Transfers (SGP) should be modified considerably, in order to make it more equitable and improve incentives for efficiency and quality. Villar et al. (2016^[43]) carried out a comprehensive review of various national and international studies on the main funding mechanism of public education, as well as drafting a proposal that seeks to link the problems identified with the international experience of comparable transfer systems.

The national debate regarding the reform of the SGP is unavoidable and the review team shares some elements that could be valuable in this discussion.

Rethinking the permanent fiscal adjustment system

The current system of permanent readjustment, which is linked to the lagged average of the nation's expenditure, seems inadequate, since it entails a dynamic mismatch between

the income and expenditure of the education sector, as mainly required for teachers' payroll. The most appropriate rule, therefore, seems to be an annual readjustment based on at least two additional conditions: i) the inclusion of complementary resources that the central government should commit to implementing approved programmes or additional policies, which require additional and regular financial resources; and ii) a readjustment similar to the average agreed by the central government with the teacher union and approved annually in the respective budget law.

Rethinking the main components for the financing of education

It seems reasonable that the transfer mechanism should contain four main components for financing education: i) financing the regular teacher payroll; ii) financing of the operation of the rest of the education basket (*canasta educativa*); iii) a compensatory fund for greater disadvantage; and iv) the direct transfer of resources to schools.

These components, and the basis for allocating their resources, should be reviewed periodically to ensure that they are in line with political needs (which may change) and to reflect evolutions in data systems. In the design of the components, a balance must be reached between simple formulas, which would not reflect the different needs with total precision, and complex formulas that would be difficult to understand. The selection of indicators for the allocation of resources should be based on i) data that cannot be manipulated at the level of the territories or schools to ensure integrity in the allocation of funds; and ii) studies and evidence of costs and use of funds for the elements that they are intended to finance (OECD, 2017_[22]).

A **first component** should ensure the financing of the regular teacher payroll of the Secretaries of Education, an effort that has been reflected in recent years in the SGP distribution mechanism. However, this mechanism must be adjusted so as not to exacerbate inequalities between the different certified territorial entities. This component provides more resources to those that have more qualified teachers, to the detriment of those in rural and remote areas with a greater disadvantage, which concentrate less qualified teachers and with lower salaries.

Therefore, incentives should be generated for the Secretaries of Education to improve the management of their teaching staff, not losing the resources generated by greater efficiencies in the allocation of their teachers. Likewise, more effective incentives should be created to attract and retain more qualified teachers in the most vulnerable areas. Greater flexibility in the management of the teaching profession by the Secretaries of Education is also needed in order to resolve asymmetries between the need to quickly adapt staffing to changes in enrolment and the availability of resources. Chapter 4 discusses these issues in depth and provides proposals.

A **second component** should be for financing the operation of the rest of the education basket (*canasta educativa*). This component should be estimated based on reliable data and distributed on a per-student basis that is adjusted for the socio-economic background of the students and differences between regions and territories, especially to reflect the different costs of a quality education in rural, remote and disadvantaged areas, which are scarcely considered at present.

The design of this component should also include a reflection on the purpose of this financing and the distribution of responsibilities. The current component that covers the financing of the rest of the education basket, the Quality-Enrolment sub-component, is delivered to both certified and non-certified districts and municipalities, which seems

incoherent since the latter are not responsible for improving the quality of schools in their respective department. It also complicates accountability for fulfilling assigned responsibilities.

Consequently, the allocation of this second component to all the certified territorial entities, including the departments which serve the most disadvantaged groups of students in the country and receive about half of the resources of the operating component of the SGP (Provision of Educational Service), should create the opportunity for these education authorities to improve their financial management, professional learning of teachers, territorial co-ordination and quality of education. However, this does not imply that the non-certified municipalities should be excluded from educational management, rather their role should be rethought.

A **third component** should be a compensatory fund because of the greater disadvantage of students in certain areas. If this adjustment is not considered, it will be impossible to converge in the educational opportunities of students throughout the country, since a quality education has different costs among more or less disadvantaged students. The experience of the Netherlands (Ladd and Fiske, 2011^[58]) or of the Preferential School Subsidy (SEP) in Chile can serve as a reference for its design in Colombia.

This compensatory fund based on disadvantage could also consider the provision of additional resources for the integration of students with special needs, especially for minor or transitory special needs, such as language impairments. This would reduce the incentive for the excessive labelling of children as students with special needs (OECD, 2017^[22]). At the same time, the ministry of education, the Secretaries of Education and the school communities (e.g. the school directive councils) should monitor the use of resources to respond to the needs of these children.

Isolated actions helping certain students will not have an important impact on the educational opportunities of this group of children. To respond to severe special needs, a specific programme should be developed that includes learning strategies in its design and implementation. This strategy should estimate the real cost of delivering a quality education, including the difference between the care of children with permanent and transitory special needs (OECD, 2017^[22]).

A **fourth component** should be that, beyond the Quality-Free Education sub-component, the transfer of resources to schools should ensure their equitable distribution. These resources could be partially distributed to the schools and the Secretaries of Education in such a way as to ensure the co-ordination of multi-year educational improvement strategies and not only the financing of specific actions.

This component could provide an incentive for schools that show progress in reducing inequality during a period of time, which could be delivered as a salary bonus to the group of teachers and school leaders, and/or to the financing of a relevant project for the improvement of the pedagogical activities of the students. Unlike the current incentives considered in the Quality component, these incentives should be based on comparisons between groups of relatively similar schools. At present, they have a high bias towards urban areas and authorities with better performance independent of the socio-economic conditions of their students.

An additional proposed change is related to the allocation to rural schools, especially smaller and more remote schools or school clusters with a large number of rural school sites. These schools should receive fixed funds for their operation in such a way that they count with a minimum level of resources to provide education. This could be calculated

by each school so that the school has enough resources for supervision, collaborative work and support for specialists to visit the schools so as not to jeopardise the educational opportunities of its students. This additional resource would recognise that not all costs are linear. At the same time, it would maintain incentives for efficient organisation of the school network for most schools (OECD, 2017^[22]). Chapter 3 provides an in-depth discussion of the organisation of schools into school clusters and provides proposals for a more effective organisation of clusters.

Simplify the financing mechanisms for functions of education provision that are complementary but strategic for provision

During recent years, the central government, with the support of the Secretaries of Education, has proposed to advance in multiple objectives and programmes of high impact to deliver a better quality, more equitable education. However, some of these initiatives have been previously developed in the most advantaged territorial entities of the country, implying that they cannot be replicated throughout the rest of the country in a limited period of time. As a consequence, these programmes must be prioritised since many of them have a high cost and only a sustained process of economic growth in the country will facilitate their gradual implementation.

In this context, it seems reasonable to identify some national policies that should be managed gradually throughout the territory and be designed using a management model that facilitates efficient management, transparency in the use of resources and the generation of lessons learned for replication and adaptation over time, as well as placing a high priority on the fairness of its territorial distribution between schools and students.

Several initiatives have been identified that should operate within the framework of specific programmes managed by the ministry of education and should count with a regular annual budget. It should be possible to replicate these initiatives for financing and implementation in the different Secretaries of Education. Secretaries of Education should allocate the resources transferred from the ministry on an annual basis and may or may not complement their operation with additional budgetary resources. In other words, as suggested by the Commission on Public Spending and Investment, these initiatives should be regular programmes with a dedicated budget and technical teams, which facilitate the definition of coverage goals, accountability, mechanisms for evaluating results and management in each of the certified territorial entity that implements these initiatives (Bernal et al., 2018^[6]).

These programmes should be 1) the School Meal Programme, and 2) transport, boarding schools and educational materials. Specific proposals have been identified for the Full-Day Schooling and infrastructure programmes further below.

1) School Meal Programme

Previously, the chapter described the multiple challenges that this programme faces, especially in aspects of financial and administrative management, capacity building and inter-institutional co-ordination. The programme should become the responsibility of the ministry of education and actioned by the Secretaries of Education, excluding non-certified municipalities (the programme will be the responsibility of the certified territorial entity). In this context, the annual budget of the programme will define the national resources contributed by the ministry of education. The budget of each certified territorial entity will determine the available resources it has in its territory to allocate to the programme.

The improved management of the programme faces multiple additional challenges, but this organisation should allow its structural improvement, allowing the amount of each food serving to be differentiated by region and the Secretaries of Education to include their own resources in the budget, defining coverage goals and strategies, as well as plans for the coverage by each municipality that can be monitored by the territorial entities.

This programme should also oversee the construction, equipment, maintenance and management of facilities and canteens in each school, which should be included in the programme's budget to solve problems in its implementation.

2) Transport, boarding schools and educational materials

Based on the visits made for this report, it can be concluded that these complementary services, which are highly important to ensure the right to education, as well as minimum quality standards, are offered in a differentiated manner due to the availability of resources of each Secretary of Education.

Given its strategic nature, the ministry of education should fund a programme in each certified entity, which includes annual actions to advance in the expansion of these services in the medium term for the entire public education system. Proposals for school transportation, boarding schools and pedagogical materials can also be found with respect to the provision of education in Chapter 3.

Ensure adequate resources and financial sustainability for the Jornada Única programme, prioritising disadvantaged and rural areas for the further implementation of the programme

This programme entails substantial resources for its implementation, especially in infrastructure and equipment, although it also requires additional resources for operational expenses, linked to additional staff - teachers and non-teachers. Further resources are required for implementation, such as the adequate provision of school meals and the professional development of teachers and school leaders.

The first challenge with respect to the programme is to determine the real costs of its implementation, beyond the identification of investment and equipment costs, which is currently the most advanced aspect. In this regard, it is urgent to determine the effective operating costs, especially linked to greater allocation of teaching hours, and other professionals and staff, since part of the extension of time at school will not involve more hours of academic instruction. An additional 20% contribution was defined in relation to spending per child in a full school day. The experience for Chile, for instance, implied that the additional contribution per student was increased by 35%.

In addition, it is essential to estimate the costs of school meals and transport services so that the full school day can be adequately implemented. These services are currently required for implementation, but only with a coverage of basic nutritional requirements. It also seems important that the initiative forms part of the programme budget in the ministry of education and Secretaries of Education, in order to monitor gradual implementation, coverage to be achieved and resources involved.

Overall, the country should be conservative in the process of implementing the policy beyond the initial public commitments. It is important for this programme to have a sustainable monitoring process in each Secretary of Education, and at the ministry level, since it not only entails huge costs of infrastructure and operation but also because it is not clear it will have a high benefit in terms of learning relative to the enormous costs

involved. Chapter 3 analyses these challenges for the effective use of learning time and makes proposals in this respect. The full school day could also generate pressures on the recruitment of teachers that could put strain on the financial management and staff resources of the certified territorial entities.

The programme should furthermore take into consideration whether the construction of new classrooms responds to the effective demand at different levels of education as far fewer rooms were planned for secondary than primary education in the initial estimation.

In addition, the expansion of the full-day schooling should prioritise rural areas and those of greater disadvantage in the next stages, unlike the current situation favouring urban areas and those with greater financing capacity. In this way, the programme would work as a powerful tool to close the enormous gaps in the educational opportunities of children in these areas, as well as make up for the precarious condition of the educational infrastructure. To achieve this goal, it is essential that bidding processes reduce or eliminate the co-financing contributions of the Secretaries of Education in these areas.

Areas of urban expansion should constitute another priority. Due to the lack of capacity for public education to ensure coverage, government-dependent, as well as independent private schools, assume an important role for the provision of education in these areas. This creates the risk of a greater degree of social segregation in the school system as analysed in Chapter 3. It also leads to a decoupling of the different public initiatives in strategies of greater equality and quality from the school system and impedes a greater degree of social cohesion and improvement in quality through more inclusive schools.

Advance in the generation of sufficient resources for public educational infrastructure

The experience of the Full-Day Schooling programme has shown the enormous historical deficit of infrastructure and equipment in public education in Colombia. Thus, there should be regular resources to fund school infrastructure, which should be outside the budget of the General System of Transfers and respond to an annual investment programme within the budget of the ministry of education and each of the Secretaries of Education, which can also include resources beyond those defined by the ministry.

Colombia has developed various institutional mechanisms for co-ordination of subnational investments, which should be used regularly by the certified territorial entities and promoted and encouraged by the ministry with the delivery of co-financing resources, recognising regional inequalities and national priorities. These initiatives include Public-Private Partnerships (PPPs), which are part of the implementation of the *Jornada Única* programme but also the *Contratos Plan*. These partnerships should become the main tool to identify and finance improvements in the infrastructure and school equipment based on the identification of territorial requirements and improving the standards of educational provision, especially in rural and most disadvantaged parts of the country, through medium-term development strategies.

These tools should generate multi-year investment plans to resolve the deficit of public education coverage in areas of urban expansion, as well as ensuring greater coverage in the most deficient levels of education, such as early childhood and secondary education.

This infrastructure programme, with a steady budgetary framework, should also consider resources to strengthen the technical capacities of the most disadvantaged Secretaries of Education. This would ensure the quality and timeliness of infrastructure investment projects and initiatives, and that the infrastructure deficit is not responsible for the

inequitable distribution in the allocation of resources and educational coverage. The Coverage Plan of the secretaries should be used as a tool in co-ordination with the territorial investment programmes to be developed by the certified territorial entities. At the same time, the Coverage Plan should include the regular revision of the school network and the identification of the effective distribution of schools in rural and remote areas as analysed in depth in Chapter 3.

To allow all territories to benefit from the General System of Royalties (SGR), it is also essential that the central government create technical teams to support more disadvantaged territorial entities in preparing better, more relevant and strategic projects, and in using resources efficiently once they are allocated.

Finally, better infrastructure and equipment should be accompanied by a mechanism for the regular financing of maintenance and renovation costs, and a clear distribution of responsibilities. At present, these resources are not considered in the financing system, and some districts, municipalities and schools allocate part of the resources coming from the SGP Education component for Quality to partially cover these expenses. The solution lies in increasing the funds that go to schools to meet this objective and promote the signing of agreements between Secretaries of Education and schools.

Provide additional educational resources and support improvement at the level of each school

Develop an information system that provides transparency about the resources available for each school and improve general reporting

The Colombian public education system must advance considerably in reducing inequality, not only in educational opportunities but also in the distribution of financial, staff and programme resources. One of the best strategies to facilitate transparency in the progress toward meeting this challenge, and to evaluate the effects of different initiatives on these results, is to facilitate the identification of the final distribution of financial resources by each school (OECD, 2017^[22]).

Colombia has made considerable progress in collecting data and information, especially through the Single Territorial Format (FUT), as well as information on enrolment, teaching staff and infrastructure conditions. Going forward, these different components should be consolidated in a simple public information system, which is regularly updated. The development of a public information system should be the cornerstone of better overall reporting on the resource efforts for school education and evidence about the quality and equity of the system in relation to established policy objectives and targets.

Together with the technical support provided to the Secretaries of Education, the updated database and the use of different indicators based on this information should be used in mechanisms of certification, evaluation and delivery of quality incentives to the certified territorial entities. As previously suggested, the priority should be to help teachers, schools and territorial authorities to transform the growing available information into improvements and to inform policies and practices (OECD, 2016^[7]).

Generate more resources at the school level for management and improvement processes beyond their day-to-day operation

The direct management of financial resources by schools allows the timely implementation of actions to improve management and quality, as well as increasing the

participation of school communities in their school educational project. Each Secretary of Education should work with schools to develop multi-year school improvement plans - for example, four or five years - with an annual update of their progress and outcomes. The resources allocated to the schools by the General System of Transfers as proposed above, as well as resources supplemented by the Secretaries of Education themselves, should be the financial framework for implementing this proposal.

The current resources from the Quality-Free Education sub-component of the SGP are too small in many schools to have an impact on the improvement of quality, and in many cases, they are only enough to cover the multiple requirements for the operation of the school itself. Therefore, it is essential that these resources complement each other and can be co-ordinated with other resources from the Secretaries, to generate economies of scale and move towards longer-term actions that are more binding on quality. At the same time, it is essential to strengthen the leadership of schools as discussed in Chapter 3.

Notes

¹ These data on the funding of school education include resources for pre-school education.

² Data for the OECD publication *Education at a Glance* include primary, secondary and post-secondary non-tertiary education.

³ In Colombia, compulsory education includes one year of pre-school education, referred to as transition year or Year 0.

⁴ Higher teaching schools provide initial teacher education for pre-school and primary education in addition to other levels of school education.

⁵ In Colombia, decentralisation in education has been managed by a process of certification of departments (the regional level) and districts and municipalities (the local level). All departments and large municipalities are certified to provide pre-school and school education and referred to as certified territorial entities. Education in municipalities that have not been certified is under the responsibility of the respective department. Districts are municipalities with an independent legal, political, fiscal and administrative status based on their role for the economy, culture, geography or administration. Districts are part of the local level and counted as part of municipalities. Chapter 1 provides a full description of the governance of school education.

⁶ In past years, the allocation of funding for the provision of service through the *Sistema General de Participaciones* has however only taken the transition year into account.

⁷ The criterion for the attended population refers to the per-student allocation for the previous year's student enrolment. The criterion of the population to be attended efficiently refers to the extension of coverage through the allocation of a residual sum based on a per child allocation that is based on a share of the per-student allocation for the attended population. The criterion of equity refers to a residual sum allocated based on poverty indicators of the National Administrative Department of Statistics (DANE).

⁸ The National Planning Department is an administrative department belonging to the executive branch of government and depending directly on the Presidency of the Republic. It is a technical body responsible for fostering the implementation of a strategic vision for the social, economic and environment development of the country as well as the design, guidance and evaluation of public policy.

⁹ A process has been underway to grant ethnic minorities greater autonomy for the provision of education by developing ethnic groups' own intercultural education systems (*Sistemas Educativos Propios e Interculturales*). Among these systems, the Individual Indigenous Educational System

(*Sistema Educativo Indígena Propio*, SEIP) is the most developed, expected to be finalised in 2018. Once implemented, this system will operate like a certified territorial entity and will be exclusively responsible for the organisation, administration and technical-pedagogical support of education for indigenous communities.

¹⁰ The legal framework of the SGP also included the provision of resources for new school enrolment (population to be attended), since funding for the previous components is based only on school enrolment in the previous year. However, these resources were gradually reduced and, since 2014, no funds have been distributed for this component.

¹¹ Adult education is organised in special integrated instruction cycles (*Ciclos Lectivos Especiales Integrados*) to provide education in primary and secondary education in a shorter time than in regular instruction. Cycle 1 refers to Years 1-3, Cycle 2 to Years 4 and 5, Cycle 3 to Years 6 and 7, Cycle 4 to Years 8 and 9, and Cycle 5 to Year 10 and Cycle 6 to Year 11.

¹² This includes enrolments from the transition year to upper secondary education in public schools and government-dependent private schools. In Colombia, government-dependent private provision is counted as part of public enrolments.

¹³ The *Sistema de Identificación de Potenciales Beneficiarios de Programas Sociales* (SISBEN) is an information system designed to target social protection to families in need in Colombia. Using data from a register about individual and household characteristics and taking into account local circumstances, a set of algorithms computes a continuous index that ranges between 0% (highest vulnerability) and 100% (lowest vulnerability). Within this range, social programmes apply different cut-off points to determine their target group. Groups within cut-off points are referred to as SISBEN levels. The register questionnaire and scoring method are revised every few years.

¹⁴ Numbers are expressed in short scale, one billion meaning one thousand millions (10^9), one trillion meaning one thousand billion (10^{12}). COP 1.4 trillion are therefore COP 1 400 million.

¹⁵ The educational basket represents the technical criteria that define the resources required for providing education. The educational basket includes a basic basket to ensure a complete educational service and a complementary basket to support access and retention in education.

¹⁶ These resources are composed of resources from the national budget and a special fund with resources related to Law 21 of 1982. According to this law, 1% of the monthly salaries of personnel in the territories are deposited in a special fund in the ministry to finance infrastructure.

¹⁷ In the study carried out by Lugo et al. (2016_[30]), on school infrastructure in Colombia, 42% of rural schools were found to have the capacity to implement full-day schooling immediately and another 44% could do so with additional investments. In urban areas, by contrast, this was the case for only 17% and 33% respectively.

¹⁸ In Colombia, public schools are organised in school clusters with a main school site typically offering all levels of education, including higher levels, and a number of smaller school sites offering only some levels of education. For further details on the organisation of schools see Chapters 1 and 3.

¹⁹ Covers enrolment from the compulsory pre-school year (transition year) to upper secondary education.

²⁰ Extended school days (*jornada extendida*) are optional and have been put in place to complement the school day and provide additional time for academic instruction. For further details, see Sánchez (2018_[1]).

²¹ As explained in Chapter 1, the General Education Law established education boards at the national, departmental/district and municipal levels. These include the National Board of Education (JUNE), departmental and district education boards (JUDE) and municipal education

boards (JUNE). JUNE was created as an advisory body to the ministry of education, while the departmental, district and municipal boards have a role of advising, monitoring and even approving policies, plans and curricular frameworks at the level of their respective territories. However, these boards have stopped functioning in recent years. Agreements between the largest teacher union and the government from 2017 envisage re-establishing these boards, but efforts were not yet underway at the time of writing.

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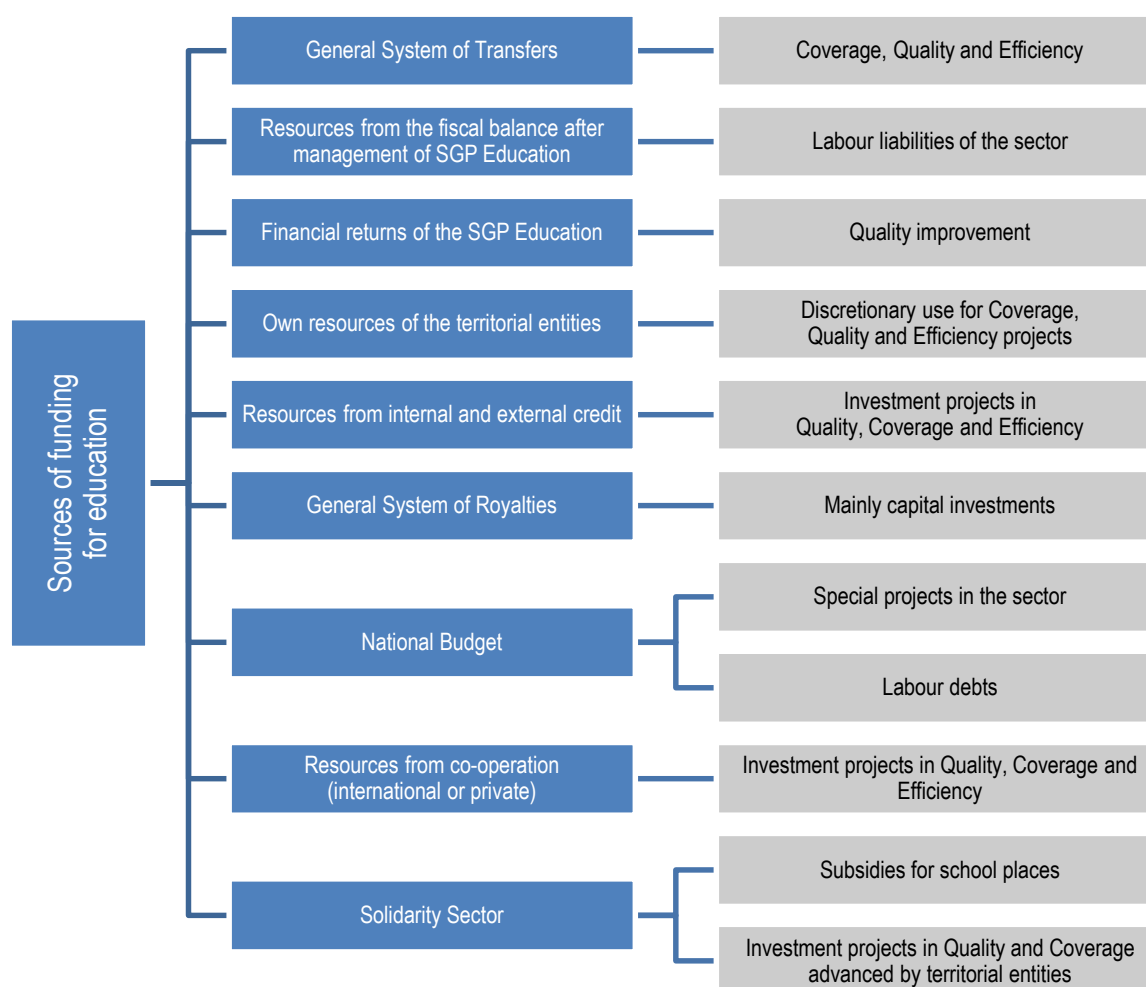
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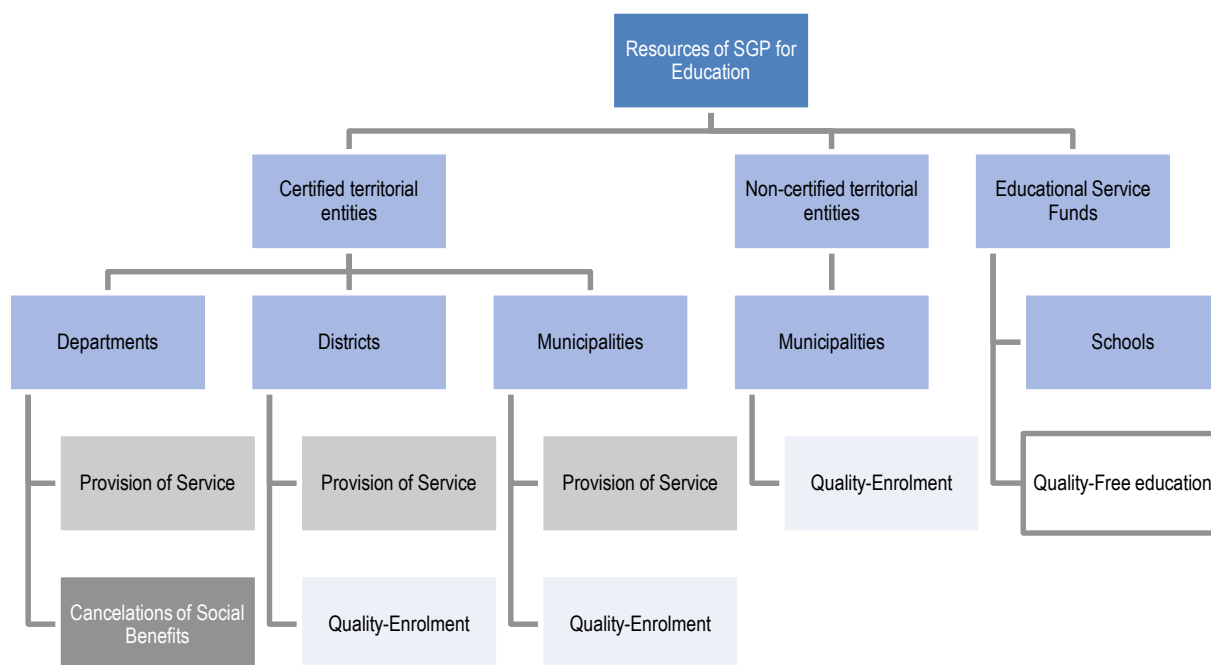
Annex 2.A. Funding sources and flows in school education

Annex Figure 2.A.1. Sources of funding for public education

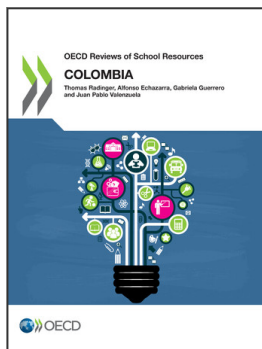


Source: Adjusted from MinHacienda (2013), *Guía para la Ejecución, Monitoreo, Seguimiento y Control a los Recursos del Sistema General de Participaciones [Guide for the Execution, Monitoring, Follow-up and Control of the Resources of the General System of Transfers]*, Ministerio de Hacienda y Crédito Público [Ministry of Finance and Public Credit], Bogotá, DC.

Annex Figure 2.A.2. Funding flows of the General System of Transfers (*Sistema General de Participaciones*) in education



Source: Adjusted from MinHacienda (2013), *Guía para la Ejecución, Monitoreo, Seguimiento y Control a los Recursos del Sistema General de Participaciones [Guide for the Execution, Monitoring, Follow-up and Control of the Resources of the General System of Transfers]*, Ministerio de Hacienda y Crédito Público [Ministry of Finance and Public Credit], Bogotá, DC.



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