

Report No. 39832-CO

Colombia Decentralization

Options and Incentives for Efficiency

(In Two Volumes) Volume I: Main Report

August 2009

Poverty Reduction and Economic Management
Colombia-Mexico Country Management Unit
Latin America and the Caribbean Region



Document of the World Bank

REPUBLIC OF COLOMBIA FISCAL YEAR

January 1 to December 31

CURRENCY EQUIVALENTS

(as of August 1, 2008)

Currency Unit	=	Pesos (COP)
1 US Dollar	=	1,800.54

WEIGHTS AND MEASURES

Metric System

ABBREVIATIONS AND ACRONYMS

AAA	Analytical and Advisory Activity	FOSYGA	<i>Fondo de Solidaridad y Garantía</i>
ACPM	Gasoline and Diesel Tax (<i>Aceite Combustible Para Motor</i>)	GDP	Gross Domestic Product
ARS	<i>Administradoras del Régimen Subsidiado</i>	HD	Human Development Network
CNSC	National Civil Service Commission	HDM	Highway Design Model
CONPES	<i>Consejo de Política Económica y Social</i>	HR	Human Resources
CG	Central Government	INVIAS	<i>Instituto Nacional de Vías</i>
CR	Contributory Regimes	LLECE	Latin American Laboratory for the Assessment of Education Quality (<i>Laboratorio Latinoamericano para la Evaluación de la Calidad de la Educación</i>)
DANE	National Department of Statistics (<i>Departamento Nacional de Estadísticas</i>)	MHS	Ministry of Health and Sports
DEA	Data Envelopment Analysis	MHS	Municipal Health Secretariat
DHS	Departmental Health Secretariat	MPS	Ministry of Social Protection
DIAN	Ministry of Finance	NBI	Unsatisfied Necessities Index
DNP	Department of National Planning, (<i>Departamento Nacional de Planeación</i>)	PAB	<i>Plan de Atención Básica</i>
EPS	<i>Empresas Promotoras de Salud</i>	PER	Public Expenditure Review
ESE	<i>Empresas Sociales del Estado</i>	PETS	Public Expenditure Tracking Survey
ETESA	<i>Empresa Territorial para la Salud</i>	PICN	<i>Participación en los Ingresos Corrientes de la Nacional</i>
ESW	Economic and Sector Work	PREM	Poverty Reduction and Economic Management
FAEP	<i>Fondo de Administración y Estabilización Petrolera</i>	SGP	General System of Transfers (<i>Sistema General de Participaciones</i>)
FEC	Supplementary Education Transfer (<i>Fondo Educativo Compensatorio</i>)	SISBEN I-III	Social Targeting Instrument
FECODE	Teacher Union	SNG	Subnational Government
FINDETER	<i>Financiera de Desarrollo Territorial</i>	SR	Subsidized Regimes
FNCV	<i>Fondo Nacional de Caminos Vecinales</i>	TIMSS	Trends in International Mathematics and Science Study
FNR	National Royalties Fund (<i>Fondo Nacional de Regalías</i>)	UPC	<i>Unidad de Pago por Capitación</i>
FONPET	National Pension Fund (<i>Fondo Nacional de Pensiones en las Entidades Territoriales</i>)	VAT	Value-added tax

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This is a joint report of the World Bank and Fedesarrollo.



This report was prepared during years 2006 and 2007 with several field visits to Colombia and close interaction with national government agencies as well as selected departmental governments and municipalities. The quantitative and econometric analysis is based on information available up to December 2006. The findings, interpretations, and conclusions expressed in this report do not necessarily reflect the views of the counterpart institutions which kindly collaborated in the elaboration and discussion process.

ACKNOWLEDGEMENTS

This report was prepared by a team led by Jonas Frank (LCSPS) and Christian Y. Gonzalez (LCSPE), co-task managers. Core team members were: Erik Bloom (LCSHE, education), Maria Ivanova Reyes (LCSPE, efficiency analysis), Jeffrey Rinne (human resources), Pablo Roda (consultant, roads), and Diana Pinto (Fedesarrollo, health). Inputs were also provided by Carlos David Beltrán (consultant, roads), Stephen Brushett (LCSTR), Mauricio Cuellar (LCSTR), Nicolás Estupiñán (LCSTR), Rocio Lavallo-Medina (LCSPE), Martha Laverde (LCSHE), Christine de Mariz Rozeira (LCSPS), David N. Sislen (LCSUW), Javier Suárez Pandiello (consultant), and Juan Antonio Zapata (consultant).

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Very helpful logistical assistance was provided by: Judith Abele (LCSPS), Francisco Clavijo (LCCCO), Elsa Coy (LCSHE), Brian Gaffney (LCSPS), Michael Geller (LCSPE), Fatima Galarraga (LCCCO), Patricia Holt (LCSPE), and Patricia Mendez (LCSPS). We would like to thank Diane Stamm (consultant) for editing the report.

The team appreciates the useful comments that were provided by: Jairo Arboleda (LCSSO), Rodrigo Archondo (ETWTR), Felipe Barrera (HDNED), Mauricio Cardenas (Fedesarrollo), Mauricio Santamaria (Fedesarrollo), Maria-Luisa Escobar (Brookings), Santiago Herrera (DECVP), Edgardo Mosqueira (LCSPS), Guillermo Perry (Chief Economist), Cesar Calderon (LCRCE), Kathrin Plangemann (LCSPS), Fernando Rojas (LCSPS), Eduardo Velez (LCSHE), and Raja Bentaouet Kattan (LCSHE).

The peer reviewers for his report are: Jennie Litvack (LCSHD), Remy Prud'homme (Univ. Paris XII), and Eduardo Wiesner (Bogotá).

We would like to thank the Colombian authorities for their cooperation in preparing the report. The main counterparts were the Ministry of Finance and the National Planning Department (DNP).

In the Ministry of Finance we would like to thank Juan Pablo Zarate (Former Vice-Minister), Ana Lucia Villa, Nestor Mario Urrea, and Edgar Guio, for their support and fruitful deliberations with Bank staff.

In the National Planning Department (DNP) we appreciate the continued support provided by Carolina Renteria (Former Director), Andrés Escobar (Former Sub-Director), José Fernando Arias, Felix Nates, Fernando Acosta, Oswaldo Porras, William Jimenez, Luz Stella Carrillo, Jose Lenin Galindo, and Johanna Castelblanco. This study is based on data and efficiency scores provided and developed by DNP. Detailed information about the methodology is contained in the publications “*Metodología para la Medición y Análisis del Desempeño Municipal*” (DNP 2005b) and “*Evaluación del Desempeño Integral*”

de los Municipios” (DNP 2008). The continued support and guidance by the Dirección de Desarrollo Territorial (Department of Subnational Governments) was critical for this analysis.

In the Ministry of Transport we would like to thank Fidel Bojorquez and Edgar Carvajal. In the Ministry of Social Protection we are particularly grateful to Esperanza Giraldo. In the Ministry of Education we appreciate the support by Gloria Mercedes Alvarez and Edgar Robles.

This report would not have been possible without the decisive and continued support of departmental governments and mayors from Antioquia, Bolívar, and Nariño. We would like to thank the many individuals who have contributed this effort.

In Nariño, we would like to thank the Governor, Eduardo Zúñiga, for the warm welcome during the stay of the mission. We also appreciate the support and fruitful deliberations with Angela Trujillo (Secretary of Finance), Patricia Cordoba (Secretary of Education), Sonia Gomez (Secretary of Health), Gilberto Betancourt (Secretary of Infrastructure), and Fernando Viteri (INVIAS). We would also like to thank the support by Jaime Santander, Juan Carlos Vela and Cesar Ruano. Ximena Ruales provided excellent logistical support for the mission. We also would like to thank the personnel of the municipality of Pasto as well as mayors and technical personnel of the municipalities of Tablón de Gómez, San Pablo, Samaniego, El Peñol, Puerres, Ipiales, La Florida, and Yacuanquer for their participation during the workshops.

In Bolívar, we would like to extend a special note of appreciation to the members of the departmental government, in particular Adolfo Periñan (Secretary of Planning), for the decisive support that was provided. We also would like to thank the support by Carlos Alvarado (Secretary of Public Works), Augusto Salas (Secretary of Finance), Arturo Rangel Perez (Secretary of Education), and Nicolas Alvarino (Secretary of Health). We would also like to thank the support by Enrique Mazenett and Roberto Eljadue Martinez. We also thank the personnel of the Planning Department of the District of Cartagena for the discussions held during the mission.

In Antioquia, we appreciate the support provided by Pedro Juan Gonzalez (Secretary of Planning), Juan Fernando Mesa (Secretary of Finance), Margarita Zuleta (Director in Secretary of Finance), Carlos Montoya (Secretary of Health), Claudia Restrepo (Secretary of Education), and Margarita Angel (Secretary of Infrastructure). The continued support of Edgar Arrubla (Advisor, Secretariat of Planning) is greatly appreciated. We also would like to thank the personnel of the Planning Department of the District of Medellín. As well we extend our appreciation to the mayors and technical personnel of municipalities in the department for their participation during the workshops.

We also appreciate the contributions of the seminar participants of different workshops held in Bogotá during March 2007. In particular, Gabriel Misas, Piedad Caballero, Carolina Nieto, Fabio Sanchez, Catalina Cuervo, Jose Diaz, Jorge Fuentes, and Pedro Ibáñez.

Colombia Decentralization: Options and Incentives for Efficiency

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Colombia Decentralization: Options and Incentives for Efficiency

Executive Summary

I. The Challenge

ES.1 Colombia is re-shaping its intergovernmental system and faces a twofold challenge: (a) assuring fiscal sustainability implied in fiscal pressures which, like in the past, again originate in the transfer system; while (b) improving the quality of public services and increasing coverage in all departments. Achieving these two goals simultaneously requires that all subnational governments are more efficient in the use of resources. Colombia is not the only country in Latin America facing these challenges; from Peru to Argentina, from Bolivia to Brazil, many countries in the region endeavor to achieve the same objectives.

ES.2 At 5.3 percent GDP, the *Sistema General de Participaciones* (SGP) is already the most important funding source for subnational governments. It provides centrally funded and earmarked resources for health, education, and water. In 2008 there is an increase of these transfers which will over time imply an additional cost of 0.95 percent GDP. There is the expectation that these additional resources would help the country achieve sector targets that have been set for 2010.

ES.3 In Colombia many services which are key for social and economic development are responsibilities of subnational governments.¹ They collectively execute expenditures worth roughly 8 percent of GDP (about a third of total public expenditures); they also raise roughly 3 percent of GDP in tax revenue (about a fifth of total tax revenue). Given the size of resources managed at the local levels, the country has an interest that they are managed efficiently. Having well-functioning subnational governments is also critical to achieving the service delivery targets that have been set for year 2010.

- In education, enrollment in education is expected to increase from 90.1 percent (2006) to full coverage.
- In the health sector, coverage in the subsidized regime would increase from 73 percent to full coverage.
- In the road sector, the government plans to increase significantly the number of paved roads by 2010.

ES.4 However, an increase in earmarked transfers does not necessarily lead to the desired efficiency gains. Econometric analysis demonstrates that merely increasing transfers without additional measures would reward inefficient subnational governments. On the other hand, the well-functioning departments and municipalities would likely produce even higher social and economic returns with additional resources. Not all subnational governments however are currently at their best level of performance.

1. In this document the terms “department” and “departmental government” are used interchangeably, except as otherwise noted. The term “subnational governments” refers to both departments and municipalities.

The five main message of this report are:

1. The level of efficiency of subnational governments is very heterogeneous. Performance is largely independent from fiscal capacity or the level of income. There are poor jurisdictions which are efficient in providing services, but also some of the rich municipalities and departments have to improve their performance. As in most countries, in Colombia the reasons for the different level of performance can be found both in structural factors—regional and socio-cultural conditions—which can hardly be changed through policy; and in incentive problems related to the fiscal and institutional arrangements among levels of government.

2. The current policy of increasing earmarked transfers is not necessarily going to raise the level of efficiency without resolving the existing incentive problems. Consequently, there is a risk that higher transfers do not lead to desired service improvements in inefficient subnational governments; in turn, the more efficient entities could produce even better outcomes with more transfers. Hence the service targets set for 2010 may not be reached in all departments and municipalities.

3. Addressing the incentive problems requires sequenced reforms. A first area of reforms are related to the institutional arrangements in the sectors: (a) Education: resolve the mismatch between the transfer formula and human resources responsibilities at subnational levels. (b) Health: create more transparency in the arrangements between subnational governments, insurers and hospitals. (c) Roads: Define ownership of roads as precondition for higher accountability and efficiency; create a cost-benefit link at the departmental level first before addressing the problem of volatile transfers at the national level.

4. Once the institutional problems are addressed, complementary fiscal reforms could be implemented. In the current incentive framework, subnational governments are reluctant to use their own revenue to complement centrally-financed expenditures; there is inequity in the distribution of revenue from royalties; and the compensation goals between the different existing transfers are not well coordinated. As well, departments have very little unearmarked revenue that they can spend according to their own priorities. This situation could be improved through: improving tax administration in currently un-earmarked taxes combined with providing the option to adjust tax rates more flexibly (for instance, within centrally defined bands); the assignment of new tax bases; or the creation of an un-earmarked transfer for departments through existing resources. The latter could be achieved by reducing the share of royalty-rich departments, using these resources to create an un-earmarked transfer which compensates for lack of fiscal capacity.

5. The country should continue with gradual implementation and adjustment of the intergovernmental system. Colombia has been advancing in its decentralization path leading to several improvements in key sectors. The country has certainly the potential to improve its intergovernmental system even further in benefit of the social and economic development goals that it aspires.

II. The Current Level of Efficiency of Subnational Governments

ES.5 The report conducts an efficiency analysis of subnational governments in Colombia. Following the methodology and data provided by DNP, the efficiency analysis was based on the Data Envelopment Analysis (DEA) technique and was performed separately for the education, health (both SGP-financed) and road sectors (non-SGP financed).

Input-Output Efficiency Analysis of Subnational Governments

The DNP methodology for measuring efficiency of subnational governments is based on the Data Envelopment Analysis (DEA) technique. This technique identifies “peer subnational governments” for an individual subnational government; it then estimates the efficiency of the subnational government by comparing its performance with that of the “best practice” entity chosen from its peers. This leads to an empirical approximation of the production possibility frontier, defined as the maximum attainable output of a subnational government for a given input level; and inefficiency is defined as the distance from the observed input-output combinations to the efficiency frontier.

ES.6 Education. In education, there were two different analyses. The first analysis assessed how successful municipalities were in increasing coverage; and the second, how well they do with regards to improving learning outcomes. Most municipalities are indeed able to show good results in coverage. In turn, obtaining good education quality seems more challenging as more than half of the municipalities are achieving less than 50 percent of the outcomes of the best comparable municipalities.

ES.7 Health. In health, the first analysis assessed how efficient municipalities are in providing immunization as a basic management capacity indicator; and the second analysis assessed how successful they are in enrolling more people into the subsidized health regime. In both cases, most municipalities can achieve a better outcome with the same amount of resources. While there is quite a large number of municipalities with relatively good performance in enrolling people into the health regime, the analysis also highlights basic management deficiencies: in immunization more than half of the municipalities are achieving less than 50 percent of the outcomes of the best comparable municipalities. On the other hand, a municipality efficient in the affiliation to the subsidized regime is not necessarily efficient in the provision of vaccinations (and vice versa).

ES.8 In both education and health, the level of performance is independent from poverty levels or fiscal capacity, contrary to common thought. There are poor jurisdictions which are performing well; but also some of the richer municipalities and departments would need to improve their performance.

ES.9 On the other hand, a municipality or department providing relatively efficient services in education does not necessarily provide efficient services in health, and vice versa. This result is surprising since one would expect that at least that the largest and richest municipalities would be performing well in both sectors. This creates the need to continue with very specific institutional strengthening activities.

ES.10 Roads. In the road sector, resources are not managed efficiently. Only roughly 50 percent of Colombia’s roads are in good condition, a share substantially lower than in other Latin American countries with lower income, for instance Guatemala or Honduras. However, resources are managed suboptimally.

- Earmarked revenue is unrelated to maintenance needs: Antioquia, for instance, has three times more earmarked revenue than what it would need to keep its roads in good conditions. Valle del Cauca, on the other hand, has only about a fourth of this revenue available.
- Spending is wasteful: some departments spend more than what they would actually need in order to maintain their road network in good conditions. For instance, departments like Quindío or Valle del Cauca spend about 50 percent more than the optimum level.

ES.11 **Assessment.** Although there were significant increases in service coverage in the past, these improvements have turned out to be expensive. Not addressing these problems either puts at risk the service delivery targets that have been set for 2010, or it could cost the central government much more than what it currently estimates in the form of additional transfers. This requires an analysis of the underlying incentive problems in the intergovernmental system.

III. Incentive and Management Problems for Achieving Higher Efficiency

ES.12 The current intergovernmental system is the result of several adjustments that were introduced over two decades. The national government has constructed the present system from the best of motives. It was aware of the efficiency problems of several subnational governments and it has attempted to guide policies through expenditure earmarkings; transfers were established to compensate poorer subnational governments; local tax revenue was earmarked in order to increase and guarantee funding for health or, in the case of roads, to protect the scarce funding source from declining even further. Some of these policies might be debatable, but they were undertaken in order to implement what was seen as a sensible development path. The problem now is that some of these arrangements have turned out—in the incentive framework that has existed or that has developed—individually, to be flawed and collectively, to be mutually contradictory.

ES.13 The sector-specific and main incentive problems are the following.

Health Sector:

- **Limited use of own revenue.** Subnational governments are reluctant to use own revenue as complementary funding to SGP-financed services. In demand subsidies, local resources are only about a tenth of total resources in 2005.
- **Oversupply of first-level health hospitals.** The occupancy rate is only about a third, while second- and third-level hospitals seem to be operating at full capacity with occupation rates above 80 percent.
- **Overlapping responsibilities.** There are overlap responsibilities that occur in financing, provision, and oversight functions among the different levels of government.
- **Market distortions.** Public hospitals are partially protected from market competition—which was one of the core reforms of the health sector reform—by requiring minimum or preferential contracting on the part of insurers and, more recently, by departments.
- **Low economies of scale.** Public health interventions are often fragmented, thus losing economies of scale.

Education Sector:

- **Supply-driven transfers.** The formula of the SGP education transfer was meant to create the incentive to increase enrollment while keeping payroll costs down. However, the financing gaps—intended to create a fiscal incentive at local levels—have been filled permanently with additional revenue (complemento); as well, the “per capita” formula still only works at the margin, for newly enrolled students. Subnational governments also do not manage responsibilities in human resources that would allow them to rationalize teacher personnel. The transfer was perfectly well designed for a system in which

subnational governments have control over teachers, but this is not the case in the current system.

- **Important decisionmaking areas that could contribute to higher allocative efficiency remain centralized.** Subnational governments largely serve as human resource supervisors with some role in determining need for new teachers; however, the central government sets most of the human resources policy.
- **Low own revenue contributions.** Most local governments rely extensively on the central government for financing, particularly through the SGP, and their own budgets contribute only about 10 percent of the cost in providing services. Many subnational governments however spend nothing at all on the education sector—in 2000, only 10 out of 32 departments spent any of their own resources on education. Even more puzzling is the fact that own-revenue contributions are even lower in certified municipalities compared to the non-certified ones.
- **Unclear responsibilities.** Although there have been several legal reforms in the past to achieve a better division of responsibilities, this issue has not been solved properly in some areas: in theory municipalities are responsible for school infrastructure, but it is often not clear which level of local government owns the schools.

Road Sector:

- **Poor definition of earmarking.** The earmarking of revenue for the road sector is only vaguely defined: the legal framework allows expenditures on mass transportation and investments in urban streets and hence funds often do not reach the departmental and tertiary road network.
- **Suboptimal allocation of expenditure.** Only about 40 percent of the resources for inter-urban roads are allocated to maintenance. The rest is usually invested in improvements and construction of new roads.
- **Political factors and vote-seeking.** Municipalities often prefer to invest in visible urban areas instead of putting resources into tertiary road network. This further deteriorates the condition of the road network.
- **Volatile expenditures.** The variation in expenditure levels comes mainly from irregular central government transfers. There was very high funding during the 1990s through co-financing schemes, but national funding decreased thereafter. Today, it is fragmented across a number of different sources.

IV. Policy Options to Improve the Intergovernmental System

ES.14 The following are key policy options that would help disentangle the impact of these various initiatives individually and collectively; and constitute steps that might better deliver on the government's own priorities.

- **Education:** Resolve the mismatch between the transfer formula and human resources responsibilities at subnational levels. The two options are: (a) departments obtain more human resources responsibilities (setting pay at the margin), combined with more comprehensive fiscal responsibility rules; or (b) the center transparently assumes the full cost of payroll.

- **Health:** Continue with the improvement of hospital performance combined with a deepening of human resources reform. Once the relationship to frontline providers—insurers and hospitals—is better regulated, transfers should be improved in order to resolve over-supply for first level providers.
- **Roads:** Define ownership of roads as precondition for higher accountability and efficiency. Create a cost-benefit link at the departmental level first before addressing the problem of volatile transfers at the national level.

ES.15 Once these sector issues have been addressed, selective fiscal reforms are important complementary measures.

- **(i) Provide more un-earmarked resources for departments.** The two main reasons for increasing the share of un-earmarked resources are the following. First, subnational governments manage effectively “two budgets” with little resource mix of SGP-financed expenditures and other resources. This has negative effects on equity and efficiency in resource use as well as on the level of funding required to maintain service quality in the sectors. Departmental sectors financed by non-earmarked resources such as roads are relatively small. Likewise, municipalities do not finance non-earmarked responsibilities sufficiently. Second, earmarking of both revenue and expenditures is relatively high. In contrast to departments however, municipalities have the option of increasing the share of their non-earmarked resources by improving their tax collection through the adjustment of tax rates; departments are not allowed to change rates.
- More un-earmarked resources could be provided through: (a) improving tax administration in currently un-earmarked taxes combined with providing the option to adjust tax rates more flexibly (for instance, within centrally defined bands); (b) the assignment of new tax bases; or (c) the creation of an un-earmarked transfer for departments through existing resources. The latter could be achieved by reducing the shares of net contributor departments and with these resources create an un-earmarked transfer compensating for lack of fiscal capacity.
- **(ii) Higher integration and resource mix between SGP-financed sectors and non-SGP sectors.** This would allow for better allocative efficiency because resources can be better used in sectors that reflect the needs of the population. However, there needs to be in place incentives so that subnational governments do not “work around” the overregulated SGP system; this most likely requires a more balanced level of regulation between SGP-financed sectors and non-SGP sectors.

ES.16 Moving forward, the country should continue with its gradual reform path. The above-mentioned policy options include changes in the short, medium, and long term as sequenced measures. It would be desirable that measures are catered to the great heterogeneity in conditions and levels of efficiency that have developed at subnational levels; this requires selecting those mechanisms and incentives that can be most effective in each case.

ES.17 Colombia has been advancing in its decentralization path leading to several improvements in key sectors. The country has certainly the potential to improve its intergovernmental system even further in benefit of the social and economic development goals that it aspires.

Chapter 1: Introduction

1. Objective of the Report

1.1 This report is intended to support the analysis and implementation of reforms aimed at a strengthening of the intergovernmental system in Colombia. In mid-2007 Congress approved a Legislative Act as constitutional amendment that increases the level of the main transfer to subnational governments, the *Sistema General de Participaciones (SGP)*. However an adjustment of the regulations and institutional arrangements within the sectors is still pending. The report is intended to provide empirical evidence and technical inputs for a design of these complementary measures that are required. It will focus on examining how efficient subnational governments are in service delivery within the existing intergovernmental arrangements and incentive framework. It will also analyze the underlying causes of low performance and suggest options for the government to address this challenge. The emphasis is on three sectors: education and health, which are both financed primarily by the SGP; and the road sector, which is financed outside the SGP. This focus will make evident the different types of intergovernmental management systems and the implications for efficiency.

2. Background

1.2 Colombia is a unitary country divided into 32 regions, called *departamentos*,² which are headed by a popularly elected governor who is also representative of the President of the Republic in his or her jurisdiction. There are also departmental councils composed of locally elected councilors the responsibilities of which include approving the department budget. In addition, there are about 1,100 municipalities with elected mayors and municipal councils. Ten of these municipalities have the status of Districts, which manage the expenditures of departments.³ Subnational governments collectively execute expenditures worth roughly 8 percent of GDP (about a third of total public expenditures) and raise roughly 3 percent of GDP in tax revenue (about a fifth of total tax revenue). While Colombia has more than 20 years of decentralization, it continues to adjust its intergovernmental framework as it struggles to find the right balance between central control and local autonomy, equity in resource distribution, and higher efficiency in public spending.

1.3 The past decentralization process had its own particularities and challenges, which explain the issues Colombia is facing today. The initial decentralization reforms were driven by political objectives. The motivations that triggered the process were the enhancement of state legitimacy, the deepening of democracy, and the achievement of peace. Popular elections for mayors and governors were introduced in 1986 and 1991, respectively. As a result of the political reforms, new actors have entered the political arena, leading to more competition.

2. In this document the terms “department” and “departmental government” are used interchangeably, except as otherwise noted. The term “subnational governments” refers to both departments and municipalities.

3. Bogotá is the only District which also manages the revenue of the respective department.

Today, there is more political pluralism at subnational levels, which has gradually eroded the duopoly of the Conservative and Liberal parties.⁴

1.4 However, similar to other countries in the region where political objectives were the driving forces behind decentralization, in Colombia the main goals during the take-off period were not service delivery improvements. The changes to types of service delivery that were introduced following the elections of mayors in 1986 did not lead to better delineation of responsibilities among departments and municipalities. Some sectors were decentralized only partially. It became clear early on that the bargaining power of teacher and health unions was so strong that decisions on hiring and firing and pay levels remained centralized, limiting allocative and productive efficiency at subnational levels, blurring roles and responsibilities across levels of government, and creating fiscal pressures on the center through higher transfers that were first introduced on a temporary basis and later made permanent.⁵ The many participatory mechanisms⁶ that were established above all at the municipal level did provide citizens a say in decisionmaking. In many cases, however, these proved insufficient to break the inertia of an inefficient public sector, which remained largely intact. Colombia early on was not able to lay all the foundations necessary for improved decentralized services.

1.5 By the end of the 1990s it was fiscal concerns that overshadowed and limited efforts to improve services. As a consequence of higher public spending through progressive revenue-sharing,⁷ additional transfers to cover increasing costs for the education payroll, and increasing subnational expenditures, the national government experienced increasing fiscal pressures. Between 1987 and 2004, transfers increased four times as a share of GDP: from 1.6 percent of GDP in 1987 to about 5.8 percent of GDP in 2004. By the end of the 1990s Colombia had already developed into one of the most decentralized unitary countries in the Latin America region, providing nearly 45 percent of current revenue to subnational governments in the form of transfers. As can be observed in Figure 1.1, compared to other countries the decentralization process in Colombia was particularly transfer driven: between 1986 and 2005 there is a higher share of subnational expenditures, but a smaller share of public expenditures is financed through subnational tax revenue.

1.6 These different factors all limited the center's efforts at adjustment in 1999—precisely at a time when the national deficit increased above 7 percent GDP (Figure 1.2). On the other hand, subnational governments engaged in higher but under-regulated borrowing. There was no effective ex ante control of cash advances from banks, and subnational debt with the banking sector rose from 2.6 percent of GDP in 1991 to 4.6 percent of GDP in 1997.

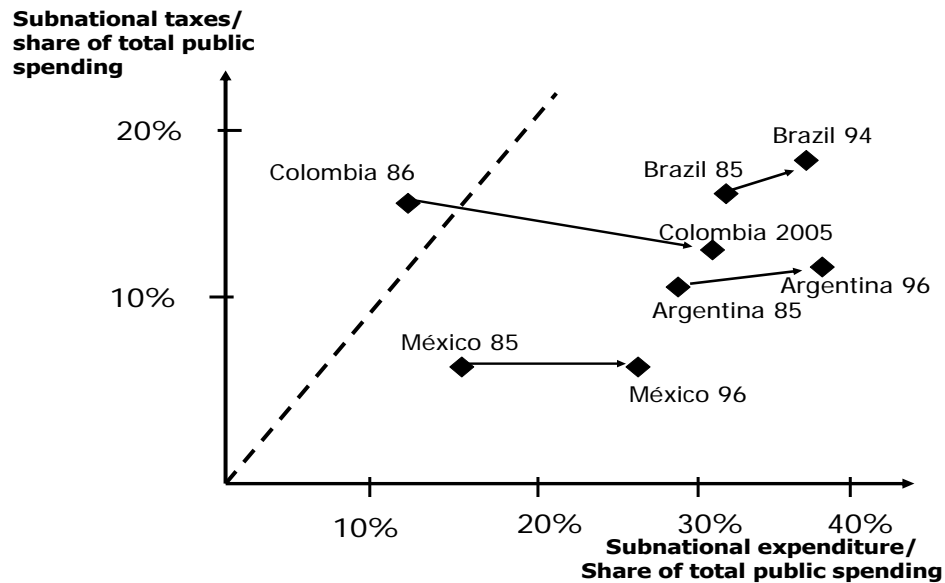
4. The Liberal Party had 552 mayors in 1990 and 228 in 2003. In the 1992 and 2003 municipal elections, there were more candidates from “other” and smaller parties (often pursuing specific regional, gender, or ethnic preferences) and *movimientos políticos* than from the Conservative Party. In 2003, there were 493 candidates for mayor from “other” parties, while there were 228 candidates from the Liberal Party and 158 from the Conservative Party.

5. An example of the latter was the Fondo Educativo Compensatorio (FEC).

6. These mechanisms include *plebiscito*, *referendo*, *revocatoria del mandato*, *iniciativa legislativa*, *consulta popular*, *cabildo abierto*, *audiencias públicas*, and *veedurías ciudadanas*. Most of these mechanisms are regulated in Law 134 of 1994. There are also other sector-specific participatory mechanisms, including *Juntas Municipales de Educación*, *Comites de Participación Comunitaria en Salud*, and *Consejo Municipal de Desarrollo Rural*.

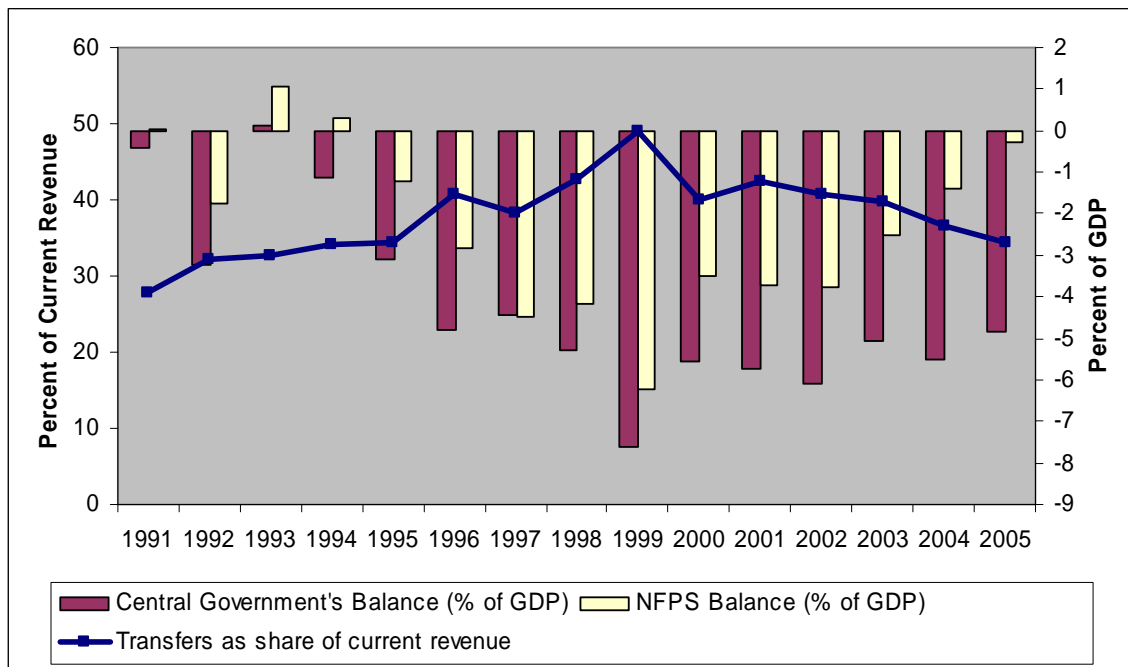
7. There were two transfers: (a) *Participaciones*: general-purpose transfers, regulated through Law 60 (1993) based on a progressive and increasing revenue-sharing formula; and (b) the *Situado Fiscal*: earmarked transfers for education and health.

Figure 1.1 The Path of Decentralization in Selected Latin American Countries



Source: World Bank, based on estimates and IMF Government Statistics. Data except Colombia from Giugale and Webb (2000).

Figure 1.2 Fiscal Balances and Intergovernmental Transfers in Colombia, 1991–2005



Source: World Bank, based on information provided by DNP and the Ministry of Finance.

1.7 As the pressure for adjustment increased, the central government responded with a package of fiscal reforms that would temporarily ease the fiscal burden for the national level. Law 715 and the *Acto Legislativo* of 2001 ruled that the growth of transfers be de-linked from

the growth of the economy. Measures for fiscal responsibility were established through Law 617 and the Fiscal Responsibility Law, followed by a series of complementary rules and decrees. Fiscal behavior of subnational governments was closely monitored. These measures combined have brought down the aggregate level of subnational debt and provided temporary relief. Today, the overall balance of departmental governments is in surplus; however, this is due not only to better fiscal performance but also due to unspent resources from royalties in some departments. The central government did not similarly adjust its finances to the same extent.

1.8 The intergovernmental system that has emerged as a result of the different adjustments borrows features from several decentralization “models”: the education and health sectors financed through the SGP are best described as a “principal-agent”-model with subnational governments spending nationally regulated, earmarked, and financed resources; on the other hand, in sectors like roads the division of responsibilities is often less clear and many arrangements remain informal. The capacity to tax, and to use tax money freely, is significantly restricted for departments; it is higher for municipalities but most are still dependent on transfers to a high degree. Fiscal responsibility rules primarily cover the cost of subnational administration while sector and service delivery expenditures are still covered under national rules. Political decentralization is in place and several participatory mechanisms have been introduced. Overall, decentralization is merely partial in some sectors—for instance, important responsibilities like in human resource management are still centralized in education—as well as asymmetric—not all subnational government manage newly adopted responsibilities in equal depth and scope.

1.9 The political economy has affected the shape of the intergovernmental system. The erosion of the party duopoly and lower barriers to entry into the policymaking arena for smaller groups make negotiating and bargaining among levels of government more complex. Parties, which are themselves still not fully decentralized, face competing incentives for decentralization. However, it is clear that the strong regional interests are channeled to the national level through the Senate and Congress, often without being mediated. The president’s legitimacy relies on, among other things, visible infrastructure investments. This creates tendencies to blur the roles and responsibilities of the different levels of government, with a negative consequence for efficiency in service delivery. Finally, the lack of opportunity to be re-elected immediately at local levels eliminates a powerful tool for the citizens to reward efficient subnational governments and their leaders. These incentives keep the intergovernmental system in the equilibrium of partial and asymmetric decentralization, ruling out some of the desired efficiency gains (Box 1.1).

Box 1.1 Governance and the Political Economy of Decentralization in Colombia

Colombia has historically been a country in which regional interests were particularly strong, articulated, and assertive (Moncayo 2002; Chamorro 1997). Political decentralization in 1986 and 1991 to some extent has contributed to a division of the national from subnational levels that had existed previously. In fact, regional rivalries among different departments are not as significant as, for instance, in Bolivia, Ecuador, or Peru, implying that decentralization was in Colombia always more a game of the regions against the national level. As a result of the political reforms enacted more than two decades ago, there are now lower barriers to entry; new actors have entered the political arena leading to more competition. This increased political pluralism at subnational levels has gradually eroded the duopoly of the Conservative and Liberal parties, with a stronger role of smaller parties (Escobar-Lemmon 2003, 2006). On the other hand, the entry of narco-traficantes and right-wing paramilitary groups implies that nongovernmental military organizations continue to be a de facto part of the political system (Monsalve and Gaviria 2004). Sánchez and Chacón (2005) claim that decentralization has facilitated the capture of subnational governments

to these groups.

Political parties are an important vehicle in how regional interests are mediated (Gutiérrez 2007). The open list election creates incentives for a “personal vote.” As a consequence, internal party discipline is weak. In addition, the automaticity of the revenue-sharing systems (until 2001) or regular budget transfers (Law 715) reduces the incentive for subnational politicians to assure that the president is a member of their party (Dillinger and Webb 1999). On the other hand, most parties, except for the Liberal Party, still rely on national systems (assemblies or other mechanisms) for candidate selection. Hence, parties themselves are still not fully decentralized, ultimately creating competing incentives for decentralization on one hand, and more centralized control on the other.

The electoral system, however, clearly reinforces local interests. Elections for mayors and governors are held at different times and usually in different years from the national elections, a pattern that typically leads to more autonomy from national politics. Mayors and governors are elected for four-year terms, and cannot be reelected immediately, which—compared to the political systems in, for instance, Argentina or Brazil—limits their influence. This system creates incentives for short-term benefits or other policies with little long-term payoff. The powerful rationale followed by other parties in Latin America—that they negotiate the intertemporal tradeoff implied in decentralization—“parties give today in order to receive tomorrow” (O’Neill 1998)—does not hold very strongly in the case of Colombia, at least not anymore, since the ability to plan for the long term has clearly disappeared with the decay of the Party Duopoly. The exercise of power has become less predictable and incentives for short-term measures have become more dominant.

Institutionally these regional pressures are above all channeled through the bicameral Congress. Rules governing the election of congressional representatives in Colombia tend to undermine party discipline and reduce the likelihood that they will support national, as opposed to regional, interests. Senators and Congressmen are usually very responsive to local demands and act as brokers for regional interests at the national level. Presidents are often pitted against these strong and assertive regional interests, which creates incentives to enhance its legitimacy through direct interventions at local or departmental levels. Because the Constitution and party structure limit the president’s power to push legislation through Congress, he often seeks other ways to pursue his political agenda. More recently, local ad hoc planning exercises, termed *Consejos Comunitarios*, which depends on the personal presence of the president, have become typical and effective means to show local presence and build legitimacy.

3. The Double Challenge: Improving Public Services While Assuring Fiscal Sustainability

1.10 Colombia now faces a different set of problems that emanate from earlier decisions, but come to bear today in a different context. The initial motivations behind decentralization were political in nature; at the end of the 1990s decentralization essentially became a fiscal challenge seriously challenging macro stability. Today the challenge is twofold: (a) assuring fiscal sustainability implied in fiscal pressures which, like in the past, again originate in the transfer system; while (b) improving public services and increasing coverage in all departments. Achieving these two goals simultaneously represents a daunting challenge. Colombia is not the only country in Latin America facing these challenges—countries like Peru and Bolivia, and earlier Argentina and Brazil, also endeavored to achieve them—but the particular circumstances prevailing now in Colombia reduce some of the options that the country has to achieve them.

1.11 In mid-June 2007, Congress approved a new reform to the transfer system, which can be summarized as follows:

- The General System of Transfers (*Sistema General de Participaciones*, SGP) would grow at 4 percent in real terms during 2008–09, at 3.5 percent in 2010, and at 3 percent during 2011–16 (Box 1.2). After 2016 the increase in *participaciones* will equal the average growth of the central administration’s current revenue during the previous four years.

- In addition, subnational governments will receive an extra amount of resources earmarked for education, in particular for coverage and quality. In 2008 they will receive 1.3 percent of the SGP of 2007, in 2009 they will receive 1.3 percent of the SGP of 2008, in 2010 they will receive 1.6 percent of the SGP of 2009, and in 2011 they will receive 1.8 percent of the SGP of 2010, and will continue like that until 2016.
- If real GDP growth exceeds 4 percent in any transition year, the SGP would increase proportionately, and these additional resources will be earmarked for infant care.

Box 1.2 Transfer Growth and Rules

SGP 2008 = SGP 2007 * ((1+inflation)*(1+0.04)+(0.013))

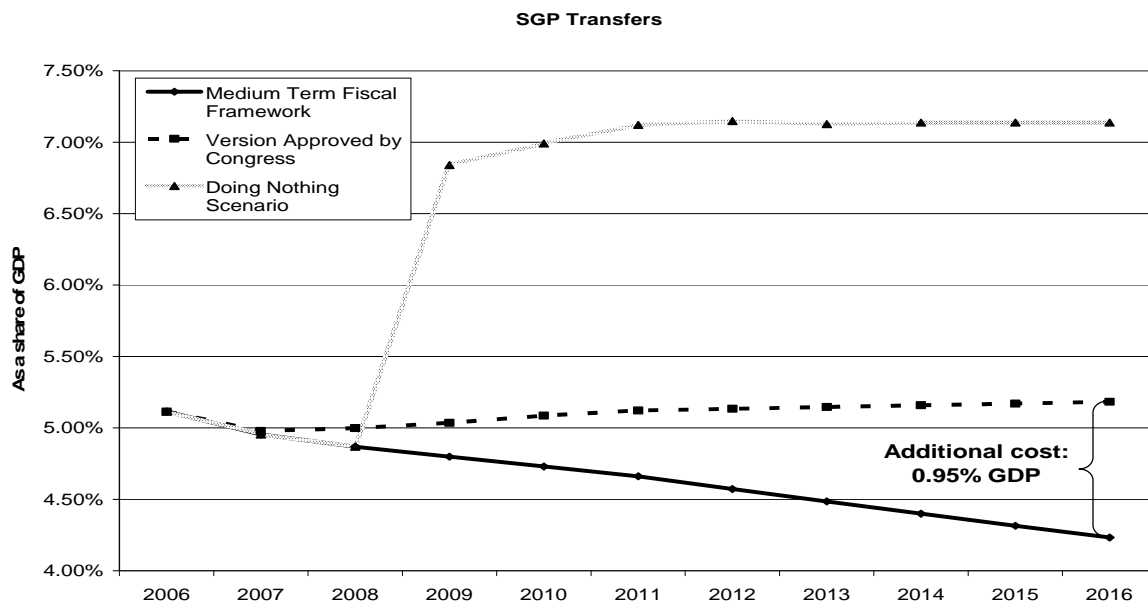
SGP 2009 = SGP 2008 * ((1+inflation)*(1+0.04)+(0.013))

SGP 2010 = SGP 2009 * ((1+inflation)*(1+0.035)+(0.016))

SGP 2011 = SGP 2010 * ((1+inflation)*(1+0.03)+(0.018)), continued until 2016.

1.12 The fiscal impact of the reform gradually reaches about 0.95 percent of GDP assuming growth rates of the Medium Term Fiscal Framework of 2006. In case of a recession the fiscal impact might be greater. This result is much less strenuous on public finances than the “Do-Nothing Scenario,” which would have implied an immediate fiscal cost of up to 3 percent of GDP. However, the transfer reform will cost the central government more than what it assumed initially and projected in the Medium Term Fiscal Framework (see Figure 1.3).⁸

Figure 1.3 Projections of the Transfer System



Source: World Bank.

1.13 Beyond the challenge of making the fiscal space to cover the fiscal cost implied in the reform of the transfer system, the government has to manage additional fiscal pressures. These

8. The Figure assumes GDP growth rates as described by the Medium Term Fiscal Framework of 2006.

are likely to arise in order to meet its national service delivery targets for 2010—one key goal of the current administration defined in its Agenda 2019 (DNP 2006b), the *Plan Nacional de Desarrollo*, and the Constitutional Reform proposal for the transfer system:⁹

- In education: Enrollment in education would increase from 90.1 percent in 2006 to full coverage in 2010.
- In health: Coverage in the subsidized regime would increase from 73 percent in 2006 to full coverage of the eligible population¹⁰ in 2010.
- In urban water and sewage systems: Coverage would increase from 97.4 percent in 2006 to about 98.5 percent by 2010; in rural areas: coverage would increase from 68.6 percent to 75.1 percent by 2010.
- In the road sector: The government plans to significantly increase the number of paved roads by 2010.

1.14 There is the expectation that the additional resources from the increase in transfers would help the country achieve its coverage targets for 2010. However, econometric analysis that was performed in the scope of this report suggests that an increase in earmarked transfers will not necessarily lead to the desired efficiency gains. Merely increasing transfers without additional measures would reward inefficient subnational governments. But it is also clear that the well-working departments and municipalities would likely produce even higher social and economic returns with additional resources. Not all subnational governments, however, are currently at their best level of performance.

1.15 The key policy questions are the following:

(a) What actions are required so that subnational governments do reach the service delivery targets with the given amount of resources?

(b) Conversely, what explains the inefficiency of subnational governments and what can be done to improve their performance?

1.16 There is indeed evidence that key sectors, including health, education, and roads, which together constitute the bulk of subnational spending, display marked efficiency problems. The efficiency analysis was performed separately for the education, health (both SGP-financed), and road sectors (non-SGP financed). Although there were significant increases in service coverage in the past, these improvements have turned out to be expensive. Not addressing these problems either puts at risk the service delivery targets that have been set for 2010, or it could cost the central government much more than what it currently estimates in the form of additional transfers. This requires an analysis of the underlying incentive problems in the intergovernmental system.

9. “Exposición de motivos al Proyecto de Acto Legislativo por medio del cual se modifican los artículos 356 y 357 de la Constitución Política,” 18 September 2006.

10. Only for the subsidized regime (Population in Sisben 1 and 2).

4. Focus of the Report

1.17 **Structure of the Report.** The report is divided into two Volumes. **Volume I** is the **Core Report**, while **Volume II** contains the **Sector Annexes** with more detailed information.

1.18 Volume I is structured as follows:

- Following the Introduction, **Chapter 2** explains the current intergovernmental fiscal framework regarding expenditures and revenue and the underlying incentive problems in raising more taxes.
- **Chapter 3** focuses on the education sector.
- **Chapter 4** focuses on the health sector.
- **Chapter 5** focuses on the road sector.
- **Chapter 6** presents the summary of findings and policy options.

1.19 **Areas of analysis.** The report will analyze the intergovernmental system beyond the transfer regime. The report assumes the recently approved transfer increases as given. Therefore the focus is on what other areas can contribute to higher efficiency, which include: the system of subnational taxation; revenue from royalties; resource management within subnational governments, a key area of which is human resources; and the division of responsibilities, among others, because important areas of the decentralized system need to work in a complementary fashion to achieve the desired service delivery improvements.

1.20 Given the types of efficiency problems in the current intergovernmental system, the report will follow the flow of funds and analyze each of these areas:

- Arrangements between the national level and subnational governments;
- Resource management within subnational governments;
- Arrangements of subnational governments with frontline providers (schools, hospitals).

1.21 This report thus has primarily a fiscal focus. Other arrangements which are potentially also drivers of efficiency—for instance participatory and social control mechanisms—will not be analyzed in-depth in this report.

1.22 **Concepts of Efficiency.** The emphasis in the report will be on the relative efficiency of subnational governments rather than on abstract notions measuring absolute efficiency. The emphasis is on productive efficiency, which is defined as the distance from the observed input-output combinations to an efficiency frontier (refer to Annex on Methodology in Volume II). This frontier, in turn, is defined as the maximum attainable output for a given input level. The report will also refer to allocative efficiency—the ability of subnational governments to tailor services to the needs of the population—but it will not be measured due to the complexity in methodology. Hence the report will not always be able to present precise quantitative measures in line with all its findings.

1.23 **Policy options.** Finally, it bears noting that in Latin America, but particularly in Colombia itself, decentralization is an ongoing, gradual process that requires constant adjustments to the intergovernmental system. The policy options laid out in this report take into account this fact and are meant to take place within the existing decentralization “model” that has developed. Proposals that include changes in the responsibilities of the levels of government are intended to be seen as refinements to the current system, rather than implying changes that cannot realistically take place in the near future.

1.24 **Bank reports on subnational governments and regional development in Colombia.**

This report is part of a series of studies in Colombia on the subnational sector to be performed by the Bank or by the government. This report focuses on education, health, and roads. Separate studies on water (the Annex in Volume II presents a summary of the findings of the water study), financial management, and regional competitiveness are being prepared.

5. Case Studies

1.25 The report analyzes three departments to shed light on how subnational governments deal with the incentive problems of the intergovernmental system in practice. The three selected cases display different regional and socioeconomic conditions and which are representative of the very heterogeneous nature of subnational governments in Colombia: Antioquia, Bolívar, and Nariño. Conducting case studies is an important methodological step to analyze efficiency in service delivery. They are useful to:

- Illustrate how much decisionmaking space subnational governments have both within the “principal agent” model of the SGP (education, health) as well as outside (roads);
- Demonstrate how subnational governments deal with the efficiency and incentive constraints in practice;
- Inform policy options in terms of feasibility and sequencing.

1.26 The three departmental cases have different degrees of income, size of population, poverty rates, and differences in geographic location (Table 1.1). The Sector Chapters as well as Annexes provide more detailed information on the situation of service delivery in health, education, and roads, in each of the departments.

Table 1.1 Basic Social and Economic Indicators in Selected Departments

Selected Indicators	Nariño	Antioquia	Bolívar
Departmental GDP per capita (in US\$)	1,243	3,213	2,163
Total surface km ²	33,265	63,612	25,978
Number of municipalities	64	125	45
% poor population, 2004	67.3%	54.1%	54.6%
Water supply coverage (%), 2005	84%	75%	82%
Rural water supply coverage	53.15	17.9	
Total population (million) DANE projections, 2005	1.8	5.7	1.8
Population density (pop per km ²) 2005	53	89	84
% urban population, 2005	45%	73.5%	69%

Source: DANE.

1.27 Antioquia has among the highest incomes of the regions of Colombia, with a per capita GDP of US\$ 3,213 per capita. This compares to some Eastern European (Bulgaria with US\$3,995) or Asian countries (Thailand with US\$3,136). However, Antioquia also has some of the poorest municipalities in Colombia, with poverty rates close to 90 percent. Much of the department is mountainous, with a large geographic extension. It has rich social capital and traditionally well-functioning institutions. It has high fiscal capacity, which facilitates local revenue creation.

1.28 Nariño is among the poorer departments of Colombia. Its poverty level is almost 17 percentage points above the national average. It has a departmental GDP per capita of US\$

1,243, which is similar to the income level of Bolivia (US\$1,125) and Nicaragua (US\$908), which are both Highly-Indebted Poor (HIPC) Countries. Nariño is a border department; however, it also has access to the Pacific Ocean through the harbor of Tumaco. Like Antioquia, most of its population is concentrated in the Andean area. Almost 90 percent of its road network is located in mountainous terrain. It has an important proportion of indigenous populations, who have particular health needs and service delivery requirements. Its low level of fiscal capacity implies that Nariño has higher constraints for own-revenue generation. It also has a lower population density and a higher proportion of rural population compared to the other two departments.

1.29 Bolívar has a departmental GDP per capita of US\$ 2,163 and is representative of a series of middle-income departments in Colombia. The level of income is comparable to those of countries like Ukraine (US\$2,274). As a result of territorial divisions that took place on the coast during the 1950s, the department has a relatively small territorial extension. This has important consequences for communication within the department: it is divided among its Northern and coastal areas—where Cartagena and other larger municipalities are located—and its South, a very poor region where agriculture is the main economic activity. The center of the department is covered by marshlands. There is no continuous road that connects these different areas, significantly challenging service delivery.

1.30 All departments face problems with displaced populations, either within the department or populations coming from neighboring departments. The problem is particularly severe in Nariño; since the 1990s the department has experienced an increment in illicit plantations and a rise in conflict between national forces and armed groups.

1.31 These different socioeconomic and geographic conditions have important consequences for how service delivery is organized and the challenges that are faced by the subnational governments.

Chapter 2: Subnational Resources and Responsibilities

2.1 This Chapter analyzes the current system of intergovernmental relations in Colombia. The objective is to highlight the basic setup of responsibilities on the revenue and expenditure side. It also highlights the underlying incentive structure for the management of revenue, particularly regarding taxation. An analysis of the three departmental cases illustrates the different patterns of fiscal management that have emerged in practice, and which have implications for efficiency and equity.

2.2 The Chapter is structured as follows. Section 1 provides an overview of subnational government expenditures. Section 2 deals with resources and funding of subnational governments as related to transfers, own revenue, and royalties. Section 3 portrays the fiscal management in departmental cases. Section 4 presents the conclusions.

1. Subnational Government Responsibilities and Expenditures

2.3 Subnational governments account for almost one-third of government spending (about 8 percent of GDP). In 2006, municipal governments spent almost 3.5 percent of GDP. Municipalities are responsible for a wider range of responsibilities than departments (see Figures 2.1 and 2.2). By contrast, departments execute a higher share of subnational spending: in 2006 they spent nearly 4.5 percent of GDP.

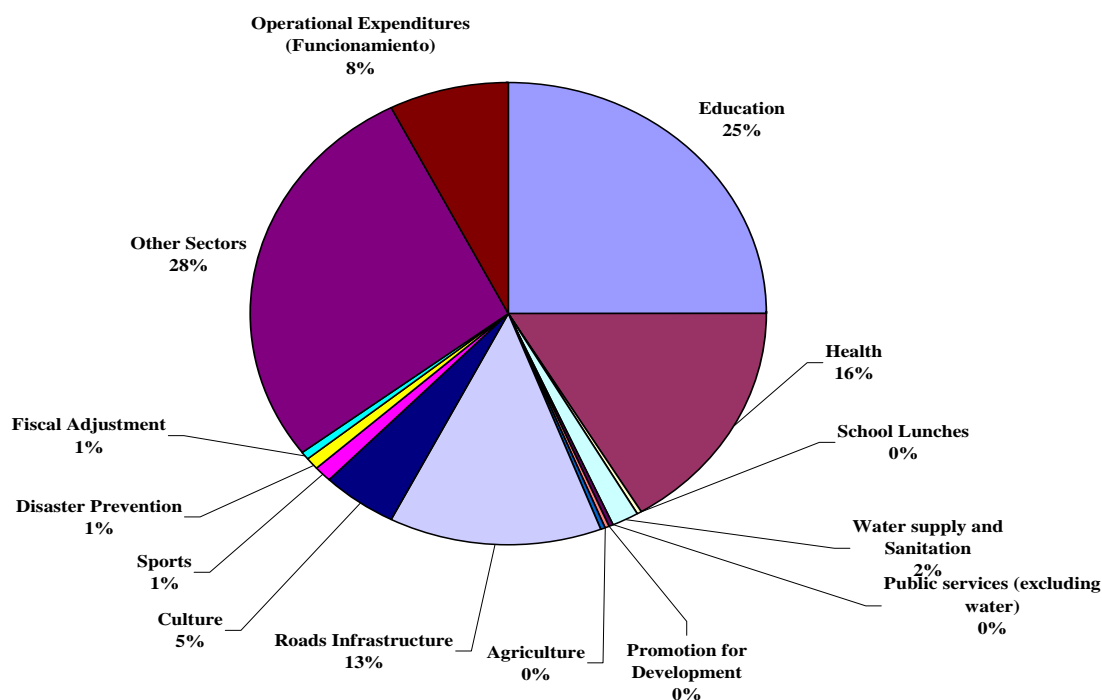
2.4 Although departmental governments spend more than municipal governments, most of their expenditures are payments for the teachers' payroll, which can be considered merely a pass-through of transfers from the central government to teachers. Therefore, municipal governments have in practice a higher level of control over resource allocation.

2.5 It is also worth noting that departments fulfill an intermediary role by constitutional mandate. In practice, this implies that departments often complement municipal expenditures. Not always, however, are responsibilities clearly delineated.

2.6 Nearly half of subnational spending is in the education and health sectors. These are mostly financed with earmarked resources. Nevertheless, as discussed in the following sections, these are the sectors in which the subnational governments have very limited control over resource allocation, but particularly departments.

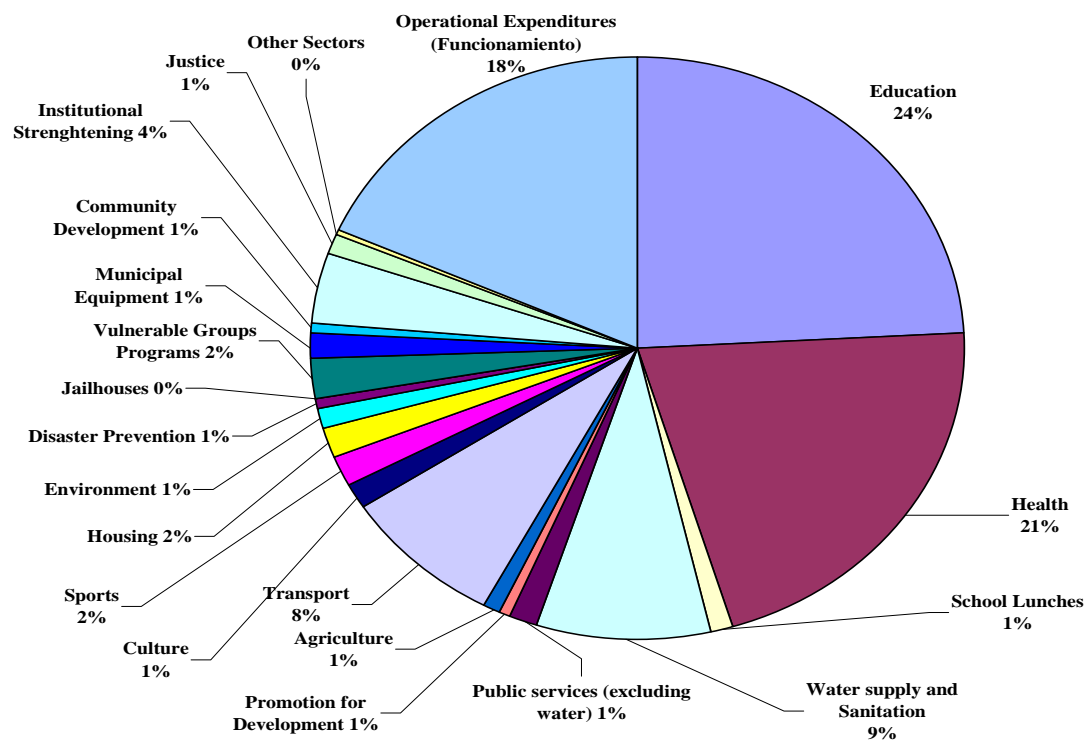
2.7 The following sections will illustrate that a particular pattern of fiscal management has emerged. Departmental sectors financed by non-earmarked resources such as roads are relatively small. It can be seen that those departments that have a larger share of non-earmarked resources invest more in roads; this shows that in practice departments do not combine revenue from the different sources to a high degree. Own revenue is rarely used to finance SGP-funded expenditures. Municipalities, on the other hand, do not finance non-earmarked responsibilities sufficiently. The one sector that most municipalities finance with own revenue sources is water and sanitation (see Figures 1.1E and 1.2E in Volume II).

Figure 2.1 Departmental Public Expenditures, 2006



Source: World Bank, based on data from DNP.

Figure 2.2 Municipal Public Expenditures, 2006



Source: World Bank, based on data from DNP.

2. Revenues of Subnational Governments

2.1. The Transfer System

2.8 **Overview.** Almost 80 percent of the revenues of subnational governments in Colombia are transfers. Table 2.1 below shows the most important transfers received by subnational governments in Colombia. The bulk of the resources come from the *Sistema General de Participaciones*, direct royalties and so-called *rentas cedidas* (as explained further below, these are previously central government taxes which are now earmarked and managed locally). The different sections on health, education, and roads describe with more detail how these revenues are used for service delivery.

Table 2.1 Most Important Transfers of the Subnational Governments

<i>Sistema General de Participaciones</i>	Transfer to Subnational Governments mostly earmarked for the service delivery of education, health and water supply and sanitation.
Direct Royalties	Transfer to producing subnational governments and serving ports.
<i>Fondo Nacional de Regalias</i>	Transfer to subnational governments to finance specific projects.
<i>COPARTICIPACION</i>	Transfer to subnational governments to finance specific projects.
<i>Fondo de Ahorro y Estabilización Petrolera (FAEP)</i>	Transfer to subnational governments to finance specific projects.
<i>FOSYGA</i>	A fund that pools resources for the Subsidized Regime.
<i>Rentas Cedidas</i>	Central Government taxes on liquors, lotteries and other games that were given to the departments to finance health.
<i>ETESA (Empresa territorial para la salud)</i>	Revenues from taxes on gambling and chance are transfer to subnational government for pension debt (health sector), research and demand subsidies.
<i>Cajas (employee benefits funds)</i>	A fraction of the revenues of the payroll tax is transfer to subnational governments to finance demand subsidies.
<i>Transfers from private Sector</i>	Discretionary contributions given to co-finance demand subsidies.

Source: World Bank.

2.9 **The *Sistema General de Participaciones* (SGP).** The *Sistema General de Participaciones* (SGP) is the largest of the intergovernmental transfers worth roughly 5.3 percent of GDP in 2006. The transfer is intended to compensate for different expenditure needs. The lion's share of SGP resources is earmarked; however, all of the resources are earmarked for the departments. The transfer has several categories, each establishing different distributional criteria. These criteria have been altered recently through Law 1176 (2007). Table 2.2 lists the criteria existing until the end of 2007; the analysis and data of this report are based on these criteria. Table 2.3, in turn, shows the new distributional criteria effective since January 2008.

2.10 The sections of this report on health and education will explain the transfer system and the working of the formula in more detail.

Table 2.2 The SGP System (Law 715) and Distribution (until December 2007)

SGP Component	Description	Percentage of SGP	How it is Distributed to Subnational Governments	Percentage Received by Departments	Percentage Received by Municipalities
A. First Bag: Resources for Service Delivery (96% of Total SGP)					
Education	Component earmarked toward payroll of teachers and school maintenance	58.5% (of first bag)	Six categories (see description on the education section).	53.4%	46.6%
Health	Component earmarked to public health, subsidies to health network, and insurance coverage for the poor.	24.5% (of first bag)	Three different categories (see description on the health section.)	28.7%	71.3%
General Purpose	Component that is mostly earmarked for water and sanitation, sports, culture, and leisure activities. About 40 percent of it is free disposable.	17.0% (of first bag)	40% based on the unsatisfied necessities index. 40% based in the proportion of urban and rural population 10% based on fiscal efficiency 10 percent based on administrative efficiency	0%	100%
B. Second Bag: Assignments for Expenditure Programs and Territories (4% of Total SGP)					
School lunches	Component earmarked toward school restaurants.	0.5% (of total SGP)	40% based on the unsatisfied necessities index 40% based in the proportion of urban and rural population 10% based on fiscal efficiency 10 percent based on administrative efficiency	0%	100%
Magdalena River Region	Component earmarked toward the Magdalena River Region Municipalities	0.08% (of total SGP)	Based on the proportion of the area that is part of the municipality	0%	100%
Indigenous Reserves	Transfer earmarked for health, education, water and sanitation, housing, and agriculture of the indigenous people.	0.52% (of total SGP)	Based on the proportion of indigenous people living in the entity.	0%	100%
Fondo Nacional de Pensiones en las Entidades Territoriales (FONPET)	Contribution to cover the pension liabilities in health, education, and other sectors.	2.9% (of total SGP)			

Note: Data and analysis of this report are based on these distributional criteria.

Table 2.3 The SGP System and Distribution as of 2008 according to Law 1176

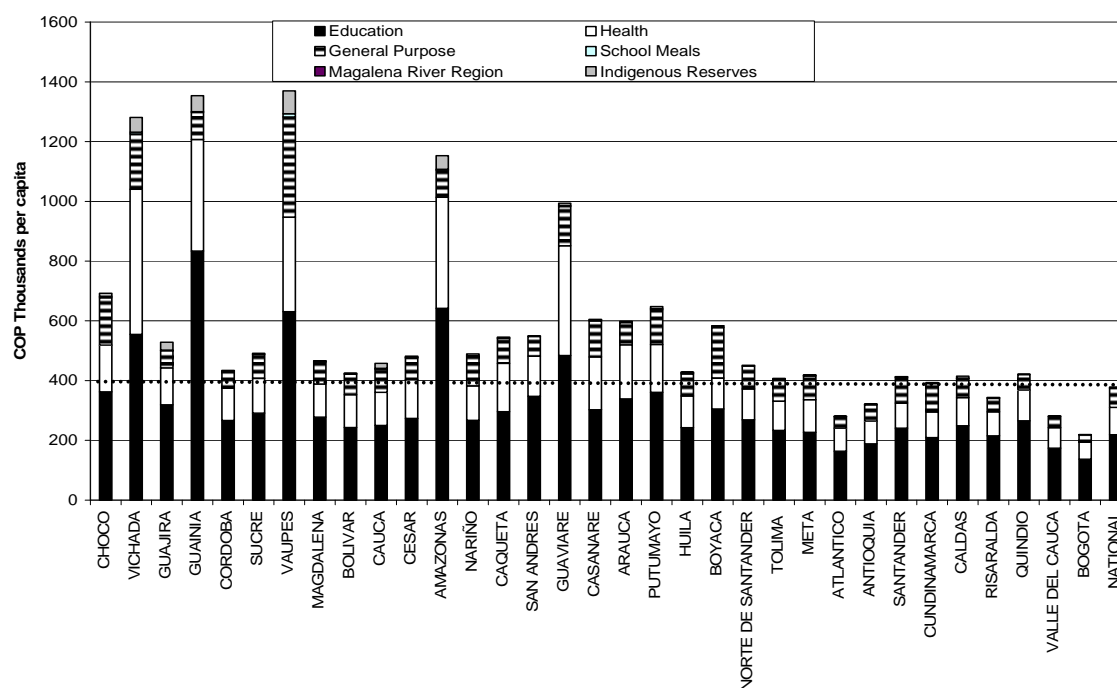
SGP Component	Description	Percentage of SGP	How it is Distributed to Subnational Governments	Percentage Received by Departments	Percentage Received by Municipalities
1. First Bag: Resources for Service Delivery (96% of Total SGP)					
Education	Component earmarked toward payroll of teachers and school maintenance.	58.5% (of first bag)	Six categories (see description on the education section).	53.4%	46.6%
Health	Component earmarked to public health, subsidies to health network, and insurance coverage for the poor.	24.5% (of first bag)	Three different categories (see description on the health section).	28.7%	71.3%
Water and Sanitation	Component earmarked to water and sanitation investments including subsidies, and servicing debt in this sector.	5.4% (of first bag)	<i>For municipalities:</i> Coverage deficit; population served; improvement in coverage increases; unsatisfied needs; fiscal and administrative efficiency. <i>For departments:</i> Share of department in the criteria mentioned above.	15%	85%
General Purpose	Component that is mostly earmarked for water and sanitation, sports, culture, and leisure activities. About 40 percent of it is free disposable.	11.6% (of first bag)	40% based on the unsatisfied necessities index. 40% based in the proportion of urban and rural population. 10% based on fiscal efficiency. 10 percent based on administrative efficiency.	0%	100%
B. Second Bag: Assignments for Expenditure Programs and Territories (4% of Total SGP)					
School lunches	Component earmarked toward school feeding programs.	0.5% (of total SGP). Additional resources will be defined for year 2009.	95% based on number of children enrolled, weighed by population dispersion and unsatisfied needs. 5% for efforts in reducing school drop-out rates.	0%	100%
Magdalena River Region	Component earmarked toward the Magdalena River Region Municipalities for reforestation, water services and management.	0.08% (of total SGP)	Based on the proportion of the area that is part of the municipality.	0%	100%
Indigenous Reserves	Transfer earmarked for health, education, water and sanitation, housing, and agriculture of the indigenous people.	0.52% (of total SGP)	Based of the proportion of indigenous people living in the entity.	0%	100%
Fondo Nacional de Pensiones en las Entidades Territoriales (FONPET)	Contribution to cover the pension liabilities in health, education, and other sectors.	2.9% (of total SGP)			

SGP Component	Description	Percentage of SGP	How it is Distributed to Subnational Governments	Percentage Received by Departments	Percentage Received by Municipalities
C. Third Bag: Child Assistance (Amount of Resources will be defined by CONPES)					
Child Assistance	Programs for early childhood (zero to six years in age) development.	Resources defined by CONPES (according to Art. 4 of Acto Legislativo 04 from 2007)	Unsatisfied needs index (weight established by CONPES).	Will be defined by CONPES.	Will be defined by CONPES.

Note: Data and analysis of this report are not based on these distributional criteria.

2.11 SGP funds are distributed fairly equally in per capita terms (Figure 2.3). Because of the high costs of providing health and education services in areas with high population dispersion, transfers to these areas are not equal in per capita terms. These are mostly departments located in the Amazon lowlands. However, the country's poor departments receive at least the national average. This is not the case for the richer departments—there is the presupposition that they would use their own revenue to complement central financing. As will be discussed below, this is not always the case, indicating that the major problems regarding the SGP are not equity problems but the particular incentives the formula generates. This has led to equity problems in the sector expenditures by departments and municipalities which are discussed in the corresponding chapters of the report.

Figure 2.3 Distribution of SGP Per Capita, 2006



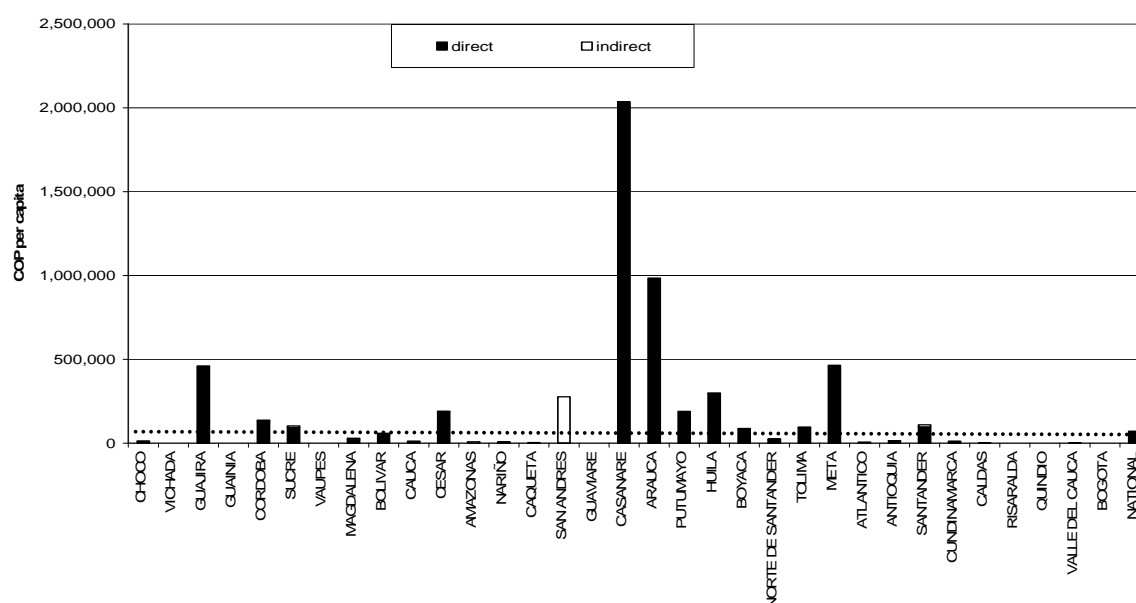
Source: Bank staff based on DNP and DANE data. The departments are rank according the unsatisfied necessities index (NBI) and the poorest department is the one on the left-hand side.

2.2. Royalties

2.12 The 1991 Constitution maintained the right of producing subnational governments and serving ports to participate in natural resource royalties. It also mandated that the amounts not given to subnational governments/ports would be used to create the National Royalties Fund (*Fondo Nacional de Regalías*), which would finance mining development, environmental protection, and regional development projects in any region. Under Law 756 of 2002, the royalty rate is based on the level of production and royalties are distributed among producer regions (*departamentos*), producer municipalities, port municipalities, and the Royalties Fund depending on the natural resource and the value of production in the entity. No more than 32 percent of the value of production is assigned to the National Royalty Fund, which implies that the main share remains in the “producing” region (see corresponding Tables in the Fiscal Decentralization Annex).

2.13 The royalties distributed directly—that is, which remain in the “producing” region and are not distributed through the National Royalty Fund—to subnational governments are earmarked for investment in contributions to the National Pension Fund (*Fondo Nacional de Pensiones en las Entidades Territoriales*, FONPET), education, health (infant mortality and health-for-the-poor projects), and water supply and sewerage.¹¹

Figure 2.4 Distribution of Royalties, Per Capita, 2006



Source: Bank staff calculations based on DNP and DANE data. The departments are rank according to the unsatisfied necessities index (NBI), and the poorest department is the one on the left-hand side.

2.14 Clearly, the distribution of royalties does not meet horizontal equity criteria (see Figure 2.4). Resources are distributed to only a few middle-income departments. Creation of the National Royalties Fund in 1994 improved somewhat the equity of distribution by allowing

11. Law 756 of 2002 specifies only that 5 percent of the royalties should be used to contribute to FONPET, but it does not specify how much should be allocated to education, health, or water supply and sewerage. Royalties could also be used to pay pensions as well, but the amount cannot exceed 10 percent of it.

partial access to royalties to non-producing areas. Yet inequity remains high, with about 75 percent of the resources from royalties remaining in “producing” regions (*departamentos*), municipalities, or ports. A review conducted by the Comptroller General in 2002 concluded that not only royalty distribution was inequitable, but that royalties were poorly spent, whether distributed directly to producer regions or through the National Royalties Fund (see Ossa 2002).

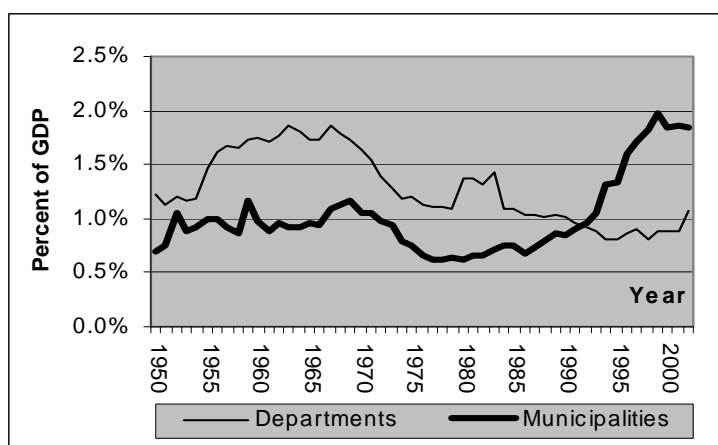
2.15 The size of the royalties received by producing regions creates a disincentive for these regions to collect own tax revenue. As will be shown, most of the producing regions collect on average less than the non-producing regions (with the exception of Santander and Casanare).

2.3. Departmental and Municipal Tax Revenue

2.3.1. Overview

2.16 Departmental and municipal taxes have fluctuated within 2.0 to 2.5 percent of GDP over the past four decades (Figure 2.5; also refer to Annex on Fiscal Decentralization for further details). The share of total subnational taxation to GDP is about the same as it was during the 1960s. Over the past decade municipalities have increased their share compared to departments. Today, subnational taxes represent about 18 percent of total public sector tax revenues (DNP 2006). This reflects the fairly limited degree of revenue decentralization in contrast to the relatively high degree of expenditure decentralization in the country. However, it is also important to bear in mind that departments have an own-revenue base that is higher than most other regional governments in unitary countries in Latin America (Table 2.4).

Figure 2.5 Tax Revenues of Departments and Municipalities: 1950–2003



Source: Staff estimates from DNP data.

Table 2.4 Transfers and Revenue of Regional Government in Selected Countries (percent)

	Own Revenue as Share of Total Revenue
Colombia (2005)	23 percent on average for departments (21 percent on average for municipalities)
Bolivia (2005)	3.4
Venezuela (2000)	1.61
Ecuador (1998)	8.8
Peru (2000)	6.2
Spain (2001)	23.31

Source: World Bank.

2.17 Subnational taxation in Colombia also involves two noteworthy mechanisms that are usually not found in other unitary countries in Latin America¹² but are common practice in some European countries (France, for instance):

- (a) Tax-base sharing: gasoline is a shared tax base for departments and municipalities;¹³ in addition, both subnational levels establish taxes on vehicles.
- (b) Revenue-sharing: the tax on vehicle ownership is collected by departments; they retain 80 percent of the collected revenue and share 20 percent with municipalities.

2.18 On the other hand, the institutional arrangements for some taxes qualify them as central government transfers. This is the case for the diesel sales tax (*sobretasa a la ACPM*) since tax base, rates, and administration are handled by the national government, which shares 50 percent of the revenue with departments. Commonly the diesel tax is referred to as “own local revenue,” and the analysis below takes this into account.

2.19 Departmental taxation includes the so-called *rentas cedidas*—previously central government taxes—which are earmarked to specific sectors: excises on liquor, beer, lotteries, and the registry.¹⁴ Departmental revenue also includes excises on tobacco. In general, departmental tax bases are narrow, with the bulk of resources being raised by taxes on alcohol and liquor, while in some departments the tax on vehicle ownership is important.

2.20 Municipalities collect the property tax, a well-accepted instrument of local taxation that accounts for about a third of aggregate municipal revenues; a tax on gross business receipts (*Impuesto de Industria Comercio*), a poor tax in terms of economic efficiency, particularly given its cascading nature, but good in productivity (accounting for about another third of aggregate municipal revenues); and a host of other, minor taxes (accounting for about another third of aggregate municipal revenues).¹⁵

2.3.2. Incentive Problems

2.21 Although departments have an own revenue base that is substantially stronger than that of other regional governments in Latin America, overall subnational governments are fairly transfer dependent. It is clear that raising more subnational taxes is a desirable goal: it is an essential element to stimulate local accountability and increase expenditure efficiency. Increasing transfers, in turn, implies lowering the quality of decentralization; the political cost of raising taxes is borne at the center and not the local administration. These issues have been debated in Colombia ever since decentralization was enacted in the mid-1980s. Following are the main incentive problems that explain why many subnational governments are relatively inertial about revenue-raising efforts, or in the broader sense, engage in only limited resource mobilization.

2.22 **(i) Increasing Transfers: “Fiscal Laziness” and the “Flypaper Effect.”** Given the fact that transfers have quadrupled in GDP terms since the early 1990s, several studies have tried to

12. Revenue-sharing among subnational governments (from provinces to municipalities) is applied in federal Argentina for some taxes.

13. Information provided by DNP (2007).

14. The central government, with the Superintendencia de Rentas Cedidas in the Ministry of Social Protection, monitors earmarking of taxes, but faces several limitations in information access on subnational budgets.

15. These taxes include public transport taxes, telephone, publicity, public events, slaughter taxes (*degüello de ganado menor*), a firefighter tax (*sobretasa bomberil*), stamps (for different sectors), public lighting, and weights and measures, among others.

verify empirically whether subnational governments have had the incentive of “fiscal laziness” (*pereza fiscal*); that is, whether increased transfers have resulted in reduced local taxes. While the findings are diverse, most studies conclude that subnational governments were not significantly affected by “fiscal laziness.” While some studies have found empirical evidence to support the hypothesis that national transfers tend to reduce fiscal efforts (Slack and Bird 1983; Chaparro, Smart, and Zapata 1995), others do not find conclusive evidence to support the hypothesis of fiscal laziness (Sanchez, Torres, and Gutierrez 1994; Torres, Sourdis, and Parra 1995; World Bank 1996; DNP 2002); some studies in turn stress the great differences among municipalities (Acosta and Bird 2005).

2.23 More evident seems to be the “flypaper effect,” an incentive that implies that transfers tend to increase total expenditures by about the amount of the transfers because local taxes are not reduced. Iregui and others (2004) find that subnational taxation has responded only weakly to added expenditures¹⁶ (with the exception of two or three departments, some larger cities, and a number of intermediate municipalities). Similarly, Melo (2002) finds that subnational governments are affected by the flypaper effect when transfers represent more than 50 percent of revenue; in these cases intergovernmental transfers tend to stimulate more local public spending than do comparable increases in regional income. In contrast, when taxes are the main source of income the opposite result is found. When the main source of income is tax revenue rather than transfers, a reduction in per capita transfers causes a reduction in subnational spending.

2.24 **(ii) Departments have no autonomy to set tax rates.** Departmental governments have no autonomy to set tax rates. In departments willing to raise more tax revenue this is a major disincentive because centrally fixed rates leave no room for local decisionmaking. On the other hand, municipalities—which have some autonomy to set tax rates—may engage in competition with departments over tax rates in ways that could be suboptimal. The case of the Capital District of Bogotá¹⁷ illustrates this dilemma (Box 2.1).

2.25 These might be isolated cases and not enough is known about whether all departments and municipalities in the country do in fact apply tax rates as mandated by national regulations. However, this episode clearly illustrates, on one hand, that there is in fact too little room to set tax rates autonomously (even within centrally defined bands) and that subnational governments are quite eager to obtain more decisionmaking autonomy in this area. On the other hand, it also shows that inefficiencies may arise if too much autonomy is provided at once and without national regulation. A simple regulation in this regard is to establish a floor for the tax rate.

Box 2.1 Competition over Tax Rates among Subnational Governments: The Case of the Bogotá District and the Department of Cundinamarca

The Capital District of Bogotá has used its ability to set tax rates in competition with the neighboring Department of Cundinamarca with regard to the vehicle tax. A discount of 50 percent was offered to owners of new vehicles to register their vehicle in the city of Bogotá. In addition, the local circulation restriction (termed *pico y placa*) for vehicles registered outside the Capital District was extended for half an hour, putting them at a disadvantage. With these measures, Bogotá had indeed registered more new vehicles and consequently raised more own revenue.

Source: World Bank.

16. Iregui and others (2004) calculate an elasticity of property tax collections with respect to lagged expenditures of 0.3.

17. The Bogotá municipality is the only District which also manages the revenue of the respective department.

2.26 (iii) **High Level of Earmarking of Revenue.** Another incentive problem for departments is the fact that about a quarter of departmental taxes are earmarked to specific sectors (Table 2.4). Decisionmaking space on own revenue is different according to the revenue structure and specific taxes collected in each jurisdiction. In general terms, however, it is clear that in light of different spending needs, national earmarking of scarce revenue discourages departmental efforts to increase tax collection.

Table 2.5 Earmarking of Departmental Taxes (in billion C\$), 2005

Earmarked Taxes	Estimated Value	Percent of Total	Sector
Liquor tax	137.9	4.5	Earmarking applicable to IVA cedido (8% of 48% total): 70% Health, 30% Sports
Beer tax	147.6	4.8	100% to health, corresponding to IVA cedido (8% of 48% total)
Tobacco tax	28.7	0.9	16% to sports
Gasoline tax	263.0	8.5	Transport
Stamps	217.0	7.0	Different sectors: social assistance, infrastructure, rural electrification
Total Earmarked	794.1	25.8	
Non-earmarked Taxes			
Liquor tax	673.1	21.8	All resources except IVA cedido (40% of total of 48%)
Beer tax	720.4	23.4	All resources except IVA cedido (40% of total of 48%)
Tobacco tax	258.3	8.4	Equivalent to 90% of revenue to be allocated freely
Vehicle tax	279.0	9.0	
Registry	297.0	9.6	
Other taxes	62.0	2.0	
Total non-earmarked	2289.9	74.3	
Total	3084.0	100.0	

Source: World Bank calculation, based on information provided by Ministry of Finance (2006).

2.27 (iv) **Incentives through Revenue-sharing and Tax-sharing.** Departments apply revenue-sharing with municipalities with regard to the vehicle tax. The fact that departments have to share limited revenue with other levels of government might constitute a disincentive for some departments to raise revenue. Both departments and municipalities have a shared tax base (vehicles). This might lead to the common pool problem creating incentives, at least for municipalities,¹⁸ for each level to raise tax rates above a level that is efficient from an economic perspective. An empirical estimate of both of these incentives, however, has not been undertaken in Colombia.

2.28 (v) **Incentives of the *Sistema General de Participaciones* (SGP).** The rules regarding the SGP discourage subnational governments from complementing centrally financed expenditures

18. In the current system departments are not allowed to change tax rates.

with own revenue. In the education sector, coverage increases are financed 100 percent by the central government. On the other hand, subnational co-financing to the health sector is, under recent legal changes, open-ended, which might discourage subnational governments from committing more own revenue as a complement to centrally financed expenditures.

2.29 (vi) The temporary effects of Law 550 of 1999. This Law is part of a set of fiscal responsibility laws in Colombia (refer to Fiscal Decentralization Annex for details). Designed as a “bankruptcy law,” it is to date—from the perspective of allocative efficiency—still the most relevant fiscal responsibility law for subnational governments because it establishes tight controls on resource allocation. The Law establishes a priority list for expenditures: pension contributions, payroll, interest and debt payment, and arrears (*Deficit de vigencias anteriores*), among others. The debt restructuring agreements that were signed between the Ministry of Finance and subnational governments during 2000 and 2001 foresee the use of specific sources of revenue in order to secure funding of priority expenditures. These generally include, among others, non-earmarked transfers (excluding education, health, water, and others), royalties, and own revenue (taxes, fees, and *contribuciones*), as long as securing the operation of “central administrations” (*funcionamiento*) of subnational governments is not required. In addition, the agreements take into account assets and apply a “netting out” of obligations for which subnational governments are the creditor. The Law allows earmarked tax revenue—for instance the liquor tax for the health sector—to be used for debt service.

2.30 When the Law was enacted 10 departments¹⁹ and 61 municipalities²⁰—mostly medium-sized but also a number of departmental capital cities—were part of this fiscal adjustment plan. By April 2007, only 4 municipalities had finalized the adjustment packages “successfully” and still no departments had finalized yet (according to the criteria defined by the Ministry of Finance), while 3 failed due to “incompliance” (refer to Fiscal Decentralization Annex for details).²¹ Some departments, like Bolívar, will finalize the debt restructuring by 2008, while others, for instance, Nariño, will most likely not finalize the fiscal adjustment process until 2015.

2.31 These measures considerably reduce decisionmaking space over resource allocation. The decisionmaking space that is reduced due to earmarking of revenue is further reduced. Temporarily, it may create disincentives in some subnational governments to further raise own revenue.

2.4. Total Subnational Revenue

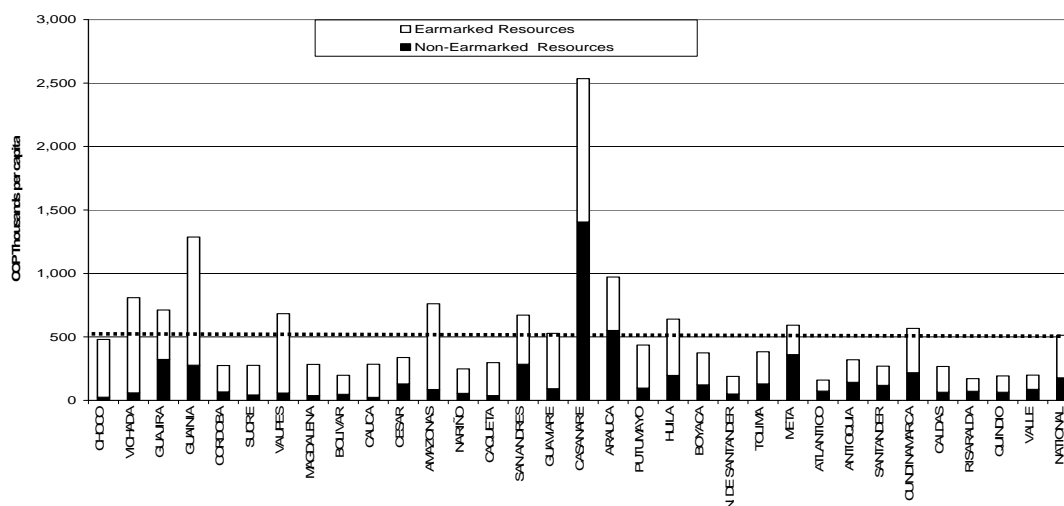
2.32 Overall, the distribution of total public resources in subnational governments in Colombia is very unequal in per capita terms (see Figures 2.6 and 2.7). The largest contributors of inequality are royalties, with a coefficient of variation of 7.7. In per capita terms they are distributed in very unequal fashion, rewarding middle-income departments. At the same time, the National Royalty Fund does not sufficiently address this problem, suggesting the significant need to address this challenge and achieve a better distribution of resources among the departments. It is important to achieve better services in all regions.

19. The departments are: Amazonas, Bolívar, Cauca, Choco, Guainia, Magdalena, Nariño, San Andrés, Tolima, and Vichada.

20. Some of the most important municipalities are: Barranquilla, Buenaventura, and Montería.

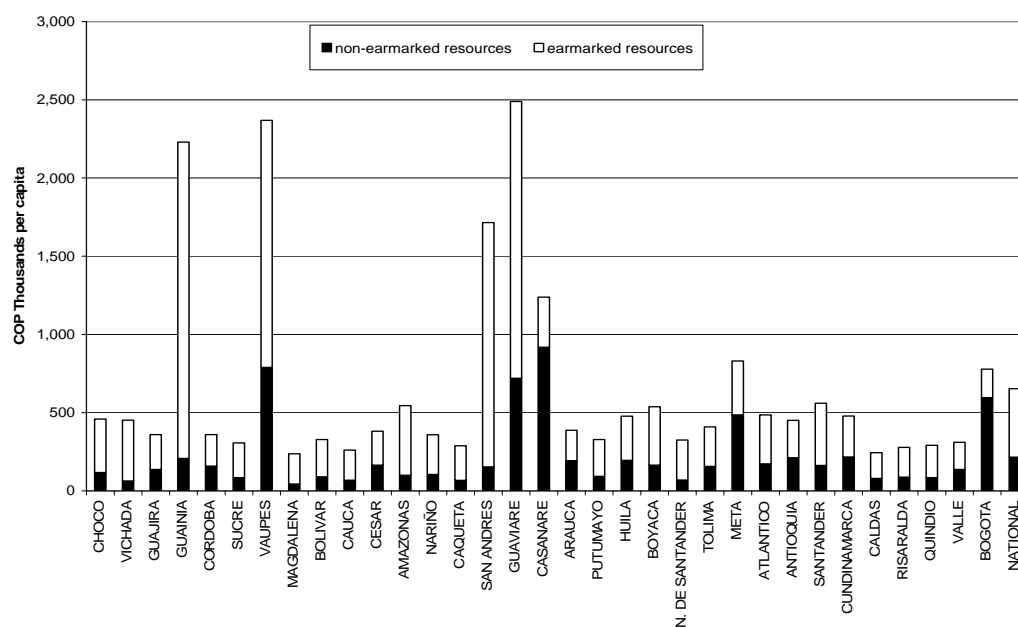
21. By December 2006, debt in the amount of US\$2.6 billion Colombian pesos was restructured under Law 550.

Figure 2.6 Department's Public Resources Per Capita (earmarked and un-earmarked resources), 2005



Source: DNP. The departments are ranked according to the unsatisfied necessities index (NBI), and the poorest department is the one in the left-hand side.

Figure 2.7 Municipalities' Public Resources Per Capita, 2005



Source: DNP. The departments are ranked according to the unsatisfied necessities index (NBI), and the poorest department is the one in the left-hand side.

3. Fiscal Management in Departmental Cases

2.33 The departments of Antioquía, Bolívar, and Nariño illustrate how subnational governments manage resources what type of fiscal management is followed, in light of the expenditure rules and prevailing incentive structure. The following are the main conclusions that can be drawn.

Lesson One: There are enormous differences in expenditure needs, and departments use their limited decisionmaking space for resource allocation.

2.34 Due to their different geographic locations, departments have significant differences in expenditure needs. In the coastal department of Bolívar, the main concern is water, and most of the un-earmarked resources are devoted to this sector. In Antioquia, un-earmarked resources are allocated to financing social assistance, housing, roads, and others. Nariño follows somewhat different priorities: most of the un-earmarked resources are distributed across 11 sectors. These cases clearly illustrate that the reduced decisionmaking space is used fully.

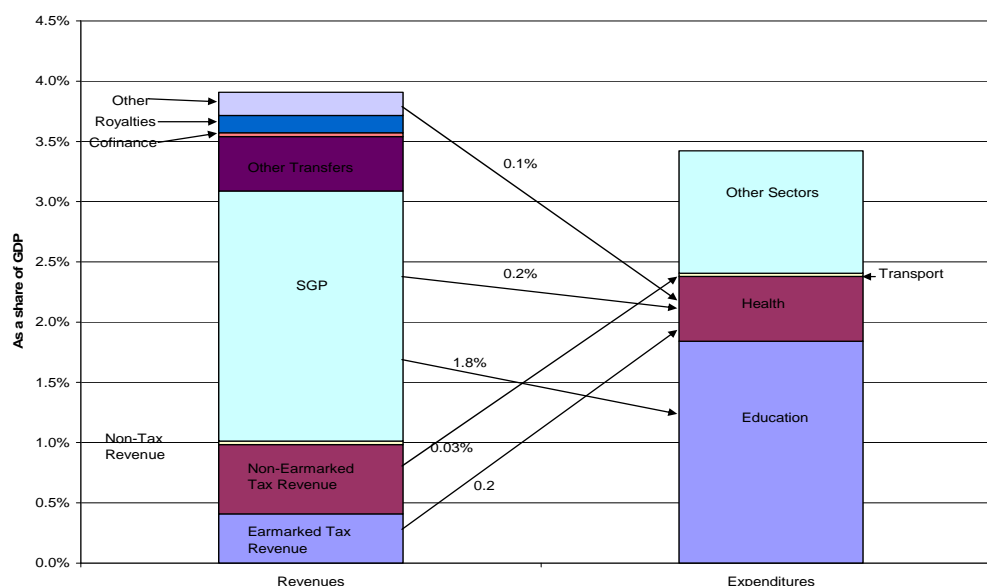
Lesson Two: In subnational governments there are effectively “two budgets” and there is little resource mix of SGP-financed expenditures and other resources. This has effects on equity and efficiency in resource use.

2.35 Antioquia has the largest share of non-earmarked resources among the three departmental cases; the department is not subject to the fiscal adjustment plans of Law 550. Nonetheless, very little of the non-earmarked resources are used to finance education and health (see Figures 2.8, 2.9, 2.10). Beyond the different accounting procedures required by law (for SGP funds), in practice the department manages two separate budgets: one financed by SGP resources and another for all other revenue which is used for non-SGP-financed sectors (roads, among others). Antioquia mixes these two revenue sources only very little; that is, the department devotes most of their non-earmarked resources to other sectors such as roads, housing, social assistance, among others. By contrast, Nariño, which has a smaller share of non-earmarked resources, puts more of its own money to education and health.

2.36 The fact that departments manage “two budgets” has important implications on equity and efficiency.

- **On equity** it implies that low poverty/high fiscal capacity jurisdictions might not fill the gap in per capita resources required to bring spending up to the national average; recall that currently the SGP does not give all of these jurisdictions the national average in health and education (in per capita/per student terms).
- **On the efficiency in resource use**, it implies that subnational governments might not use own revenue to complement centrally (SGP)-financed expenditures.

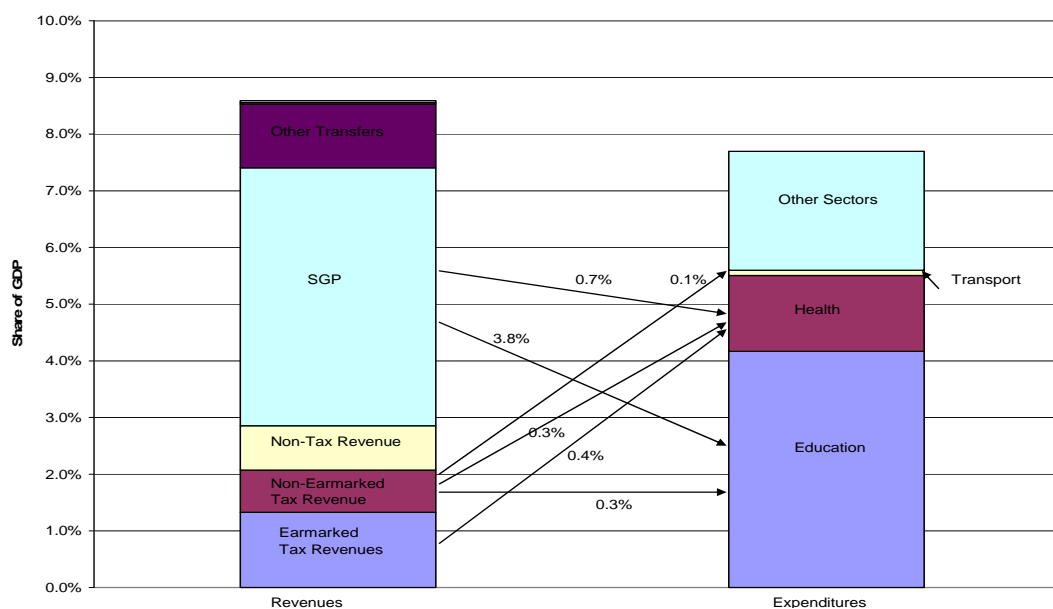
Figure 2.8 Fiscal Management in the Departmental Government of Bolívar (in percent of departmental GDP), 2005



Note: *Gastos de Funcionamiento* is included in the other sectors category.
The department runs a surplus during 2005. Therefore, the resources not allocated to some expenditure category is saved.

Source: Bank staff calculations based on DNP and DANE data.

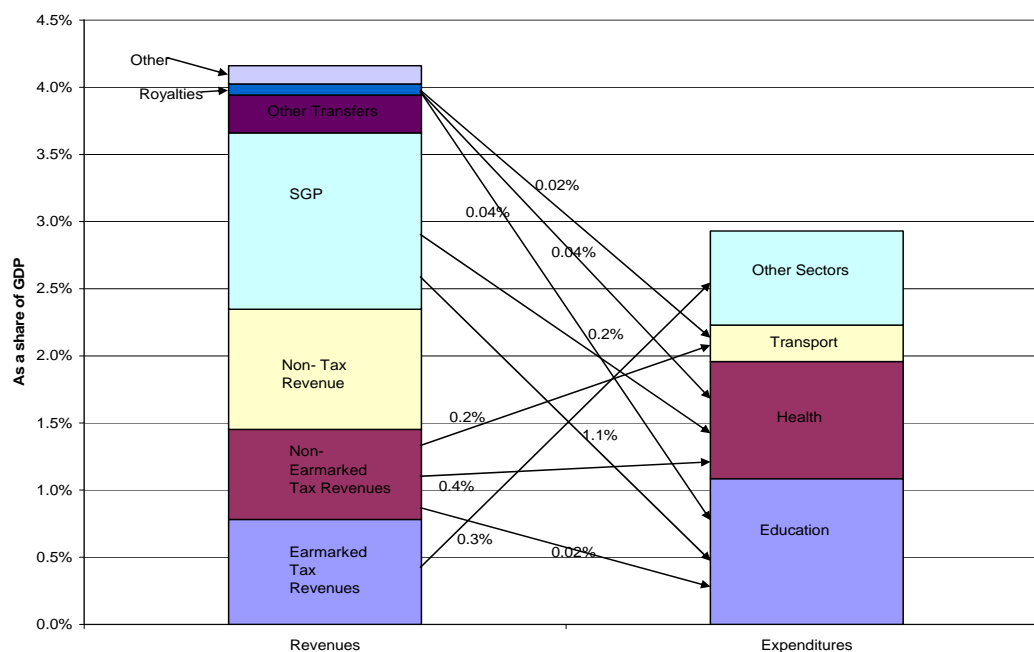
Figure 2.9 Fiscal Management in the Departmental Government of Nariño (in percent of departmental GDP), 2005



Note: *Gastos de Funcionamiento* is included in the other sectors category.
The department runs a surplus during 2005. Therefore, the resources not allocated to some expenditure category is saved.

Source: Bank staff calculations based on DNP and DANE data.

Figure 2.10 Fiscal Management in the Departmental Government of Antioquia (in percent of departmental GDP), 2005



Note: *Gastos de Funcionamiento* is included in the other sectors category.
The department runs a surplus during 2005. Therefore, the resources not allocated to some expenditure category is saved.

Source: Bank staff calculations based on DNP and DANE data.

Lesson Three: Law 550 effectively undermines budget flexibility, but departments can follow different strategies of fiscal adjustment.

2.37 Bolívar and Nariño are departments subject to Law 550. Each has different strategies for how to cover liabilities; Bolívar, for example, has decided to pay off its liabilities in 2007 instead of in 2015. Thus, currently most of the free disposable revenues of Bolívar are in fact used to pay off liabilities. In particular, the gasoline surcharge tax has been used to pay off debt, and very little has been devoted to its road network. Nariño, on the other hand, has chosen a more gradual adjustment path, which gives them more budget space to allocate resources toward their own priorities. More recently, it has managed finances in a responsible way while at the same time investing its free disposable resources in social expenditures.

4. Conclusions

2.38 Given their different levels of fiscal capacity, the different departments and municipalities raise different levels of own revenue. There are several incentive problems that impede subnational governments in raising more tax revenue. This implies that a relatively high share of subnational expenditures is financed by transfers, negatively impacting expenditure efficiency.

On the other hand, the transfer system in Colombia only compensates for expenditure needs, but not explicitly for different levels of fiscal capacity, creating a source of horizontal inequity.

2.39 Earmarking of both revenue and expenditures is relatively high. In contrast to departments, municipalities have the option of increasing the share of their non-earmarked resources by improving their tax collection through the adjustment of tax rates; departments are not allowed to change rates. Also, municipalities have more productive tax bases than the departments. In particular, the property tax has the greatest potential to be used for raising more own revenue; in fact, many municipalities have strived to improve tax administration and to use rates more flexibly. Temporarily, Law 550 clearly constrains the decisionmaking space over the use of revenue in several departments and municipalities even further.

2.40 The distribution of the SGP in per capita terms reflects mostly the cost of providing services in different regions, particularly in regions with high population dispersion. However, the distribution does not punish poorer departments (as measured by unsatisfied needs), which receive at least the national average. On the other hand, not all of the richer departments obtain the national average in revenue. This implies that the SGP implicitly assumes that richer departments complement expenditures with own revenue in order to reach the national average in per capita expenditures. Yet given the incentive problems in raising own revenue, it cannot be taken for granted that these departments do in fact complement SGP-financed expenditures. This leads to an equity problem in expenditures financed by SGP in the richer departments, not in the poorer ones.

2.41 Departments and municipalities, on the other hand, have developed different fiscal management strategies. The case studies illustrate that subnational governments make full use of the reduced decision-making space. In the incentive framework that has developed, subnational governments manage effectively “two budgets” with little resource mix of SGP-financed expenditures and other resources. This has negative effects on equity and efficiency in resource use which would need to be addressed.

Chapter 3. Education Sector

3.1 This Chapter discusses the intergovernmental arrangements in the education sector and the underlying incentives and institutions that behind these arrangements. Colombia has set universal coverage in basic education as target for 2010 while at the same time improving education quality. The chapter asks how the current set of institutional arrangements can be reformed to ensure that the country can meet with these goals with the resources available. .

3.2 The Chapter is structured as follows: Section 1 presents the sector challenges. Section 2 describes the organization of the sector and responsibilities among levels of government. Section 3 assesses the levels of efficiency of subnational governments in enrollment and learning outcomes. Section 4 discusses the main incentives in the education sector. Section 5 presents the main lessons learned from the case studies of Antioquia, Bolívar, and Nariño. Finally, Section 6 summarizes the main findings and conclusions.

1. Education Sector Challenges

3.3 Spending on education has increased dramatically from 1.9 percent of GDP in 1980 to 3.3 percent of GDP in 1993 to around 5.1 percent of GDP in 2004. Starting from a very low base, the national average enrollment rate was about 80 percent in 2005. While Colombia's school enrollment rates are still below the Latin American average, they have increased quickly over the past 15 years. On the surface, it appears that Colombia has seen positive results for its increased spending. Improving the efficiency of the system will facilitate reaching the country's education goals for 2010 within the available resource envelope. This is especially important since it appears that Colombia's enrollment gains have stagnated in the past few years (Table 3.1).

Table 3.1 Selected Indicators of Education Coverage

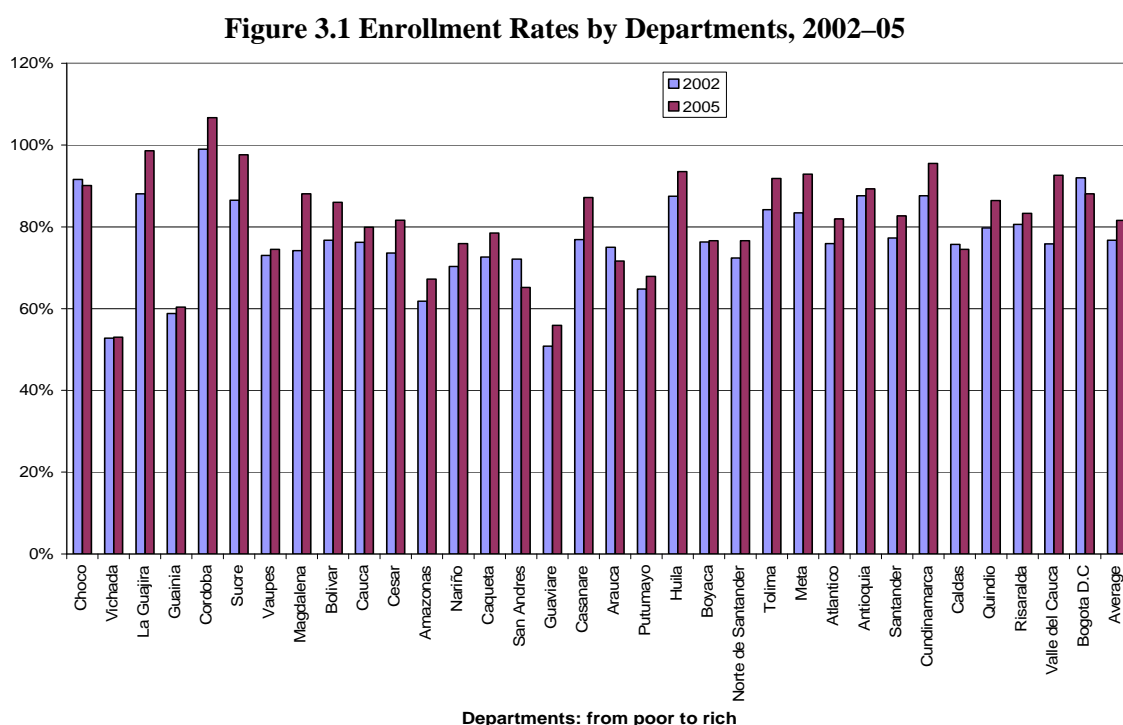
	1991	1999	2000	2001	2002	2003	2004	2005
School enrollment, primary (% net)								
Colombia	68.6	88.1	88.5	86.7	87.4	—	83.2	86.9
Latin America and the Caribbean	85.5	93.4	94.2	94.8	95.9	95.9	94.9	—
World	83.4	—	—	—	—	—	—	—
Primary completion rate, total (% of relevant age group)								
Colombia	70.2	91.4	91.2	88.3	88.3	87.5	94.3	97.6
Latin America and the Caribbean	82.6	96.2	96.3	96.9	98.0	97.1	98.3	—
World	—	82.9	83.6	85.0	85.6	85.0	—	—

Source: World Bank.

3.4 While this overall trend in education reform is clearly positive, international comparisons show that Colombia still has room to improve the quality of its learning outcomes: international

assessments like TIMSS²² and LLECE²³ show that Colombian students are performing below that of international comparators.²⁴ It is challenging to improve both quality and coverage simultaneously; however, international comparisons show that similar countries to Colombia have done better in both.

3.5 As can be seen in Figure 3.1, differences in enrollment rates among Colombia's different departments remain significant. Despite the overall trend toward increasing coverage, these advances are likewise dissimilar across the country. With a few exceptions, low coverage is particularly a problem in the poorer departments, although not all of the richer departments display high enrollment rates. Achieving full coverage as the goal for 2010 that has been set by the government will therefore require additional efforts focusing on certain departments.



Source: World Bank, based on information provided by the Ministry of Education.

2. Organization of the Education Sector

2.1. Responsibilities by Level of Government

3.6 The current organization of the education system is the result of gradual evolution that has occurred over several decades (refer to Education Annex for details). Ending a period of

22. TIMSS is the Trends in International Mathematics and Science Study, which focuses on the math and science skills in the 4th and 8th grade. Colombia also participated in 2007 but data are not yet available.

23. LLECE is the Laboratorio Latinoamericano para la Evaluación de la Calidad de la Educación (Latin American Laboratory for the Assessment of Education Quality), which looks at students in the 3rd and 4th grade.

24. TIMSS has broad international coverage, and Colombia was the second-lowest-ranked country. Among the Latin American countries that participated in the LLECE, Colombia was close to the average in a relatively tight distribution.

sustained centralization,²⁵ the involvement of subnational governments increased substantially after 1982, when they were allowed to hire and pay teachers with their own resources. However, this right was soon suspended (in 1986) due to concerns that local authorities were creating overly generous benefits packages for teachers. The Constitution of 1991 represented a serious attempt to increase the role of local governments and aimed to consolidate and expand previous decentralization efforts. It gave special prominence to the education sector, and centers the responsibility for the provision of education in the hands of municipalities, with support from the departments. Under the Constitution of 1991, the national government does not play any role in providing education.

3.7 To formalize the vision of the Constitution, Law 60 of 1993 established the criteria for the transfers of resources to local governments. It described how resources were to be spent and the amount of flexibility that the local government had. Local government were given the teachers that were based in their jurisdiction with no ability to decrease or transfer excess teachers; on the contrary, the Law created incentives to create new teacher positions.²⁶ By the end of the 1990s it was clear that the number of teachers in many jurisdictions was unsustainable, and there was significant overlap in the provision of different types of services within the education sector.

3.8 Law 715 of 2001 was an effort to address this issue and to better define the roles and responsibilities of each level. Law 715 brought about the following important changes in the assignment of responsibilities among levels of government.

Table 3.2 Education Expenditures by Level of Government (in million pesos colombianos), 2005

	SGP Coverage	SGP Promotions	SGP Quality	Total
Departments	4,512,548	51,757	0	4,564,305
Districts	1,260,968	10,861	0	1,271,829
Certified Municipalities	2,228,151	21,816	105,768	2,355,736
Non-certified Municipalities	0	0	279,231	279,231
Total	8,001,667	84,435	385,000	8,471,102

Source: World Bank, based on data from DNP.

3.9 **Clearer definition on who is responsible for teachers.** Under Law 715, departments, districts, and certified municipalities are responsible for managing teachers and, in principal, for other recurrent costs in the education sector. Under the law, all municipalities with a population over 100,000 are automatically certified; however from the 55 eligible municipalities currently only 40 are certified in practice. Certification led to asymmetric decentralization since not all

25. In the 1950s, the provision of public education was a mixed responsibility, and the nation, departments, and municipalities all managed schools and hired and supervised teachers. The education system was gradually “nationalized” during the 1960s and 1970s, with the national government formally taking responsibility for hiring and paying teachers. By 1975, the public education system was almost entirely controlled by the national government. Then the national government gradually allowed local governments to take on more authority in education.

26. In 1979, as part of the centralization effort, the national government approved the first Teachers’ Statute (Estatuto Docente), Decree Law 2277 of 1979. This statute attempted to unify different salary practices throughout the country. Local governments still continued using their authority to create teacher positions, often as “temporary” appointments and to offer teachers different local incentives and bonuses. This practice intensified after introduction of decentralization with Law 60 of 1993. This strengthened the role of the teachers’ union, FECODE. In addition to lobbying for more pay and better benefits for teachers, FECODE was active in education policy, including in the design of the new education law (Law 115 of 1994).

subnational governments manage the same responsibilities. Most of the certified municipalities are the larger and more populous cities and they execute a relatively large share of education spending (Table 3.2). These local governments receive a “per student” allocation (at the margin; as explained in detail above). This is designed to give local governments an incentive to increase coverage. Regardless of the employer (department, district, or certified municipality), the national government sets human resource rules for teachers and most other staff in the sector.

3.10 Education quality. All municipalities, whether certified or not, receive a transfer for education quality. This transfer is made on a per student basis. Unlike municipalities, departments do not receive subsidies for education quality. Departments that can cover the payroll with the basic SGP for coverage can use the “surplus” resources for other educational expenditures, including school restaurants and transportation, infrastructure, and education quality. Departments may also use their own resources (from taxes, *regalias*, or other sources) for quality if they choose.

3.11 Certified and non-certified municipalities. Certified municipalities have a clear role in both supervising teachers and providing support for education quality.²⁷ However, in non-certified municipalities the roles are less clear: the department is responsible for placing and supervising teachers, including paying salaries. Thus non-certified municipalities are responsible for quality and infrastructure.

3.12 The “ownership” of schools varies. Prior to the nationalization of education in the 1960s and 1970s, most public schools were owned by municipalities and departments. More recently, national schools were transferred to departments. Under the current system, it is entirely possible that there are schools owned by departments but under the operational control of certified municipalities.²⁸ The school government (the Governing Council) has representatives from the school (the principal and teachers), parents and students, and the community. However, the local government is not directly represented on the council.

2.2. Responsibilities in Human Resources Management

3.13 The national government began reforming the human resources (HR) system as a consequence of Law 715 of 2001 and as part of a general move toward more transparent hiring, promotion, and salary practices in the public sector. The Teachers’ Statute (Decree 1278 of 2002) sought to control escalating teacher costs and introduce greater transparency and predictability in the hiring and promotion of teachers. The civil service reform (Law 909 of 2004) and other laws and decrees further reformed public teachers’ contracts.

3.14 The basic responsibilities for HR management are the following.

- **Teacher salaries and promotions are centralized.** The Ministry of Education sets the salary level for all public school teachers in Colombia (refer to Education Annex Tables), through a national pay scale based on the teacher’s level in the system (*escalafon*). Local government may not establish special bonuses or incentives, except as specifically

27. Districts and certified municipalities operate under a similar framework in terms of their responsibilities in the education sector.

28. Unlike hospitals, schools are not incorporated entities; however, they do have a recognized legal status and they have their own school governments, regulated by Law 115 of 1994.

indicated by the law. This does not allow any differentiation across regions, despite differences in the cost of living and other factors. In practice, there is almost no variation.

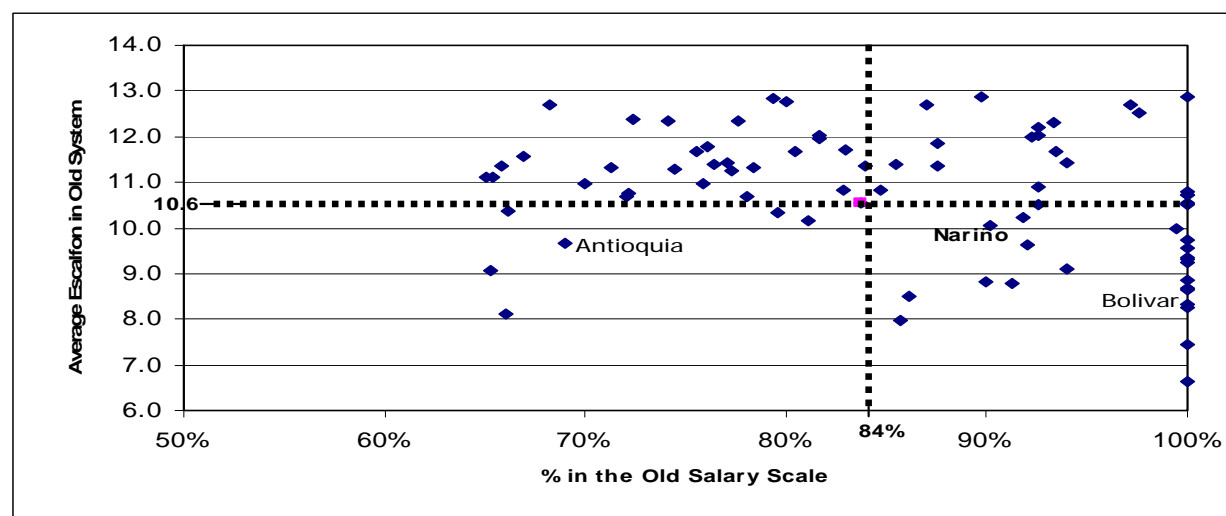
- **Past salary, pension, and bonus rights are protected.** The salary and benefit system for teachers has been reformed and simplified in recent years. Local governments are obligated to continue paying bonuses that were legally established in the past, both by the national government and by various local governments. The national government recognizes these costs as legitimate expenditures on the part of local governments and covers their cost.
- **Stricter rules on hiring and promoting teachers.** Recent laws restrict the flexibility that local governments have in hiring teachers. Under the new regime, teachers must be hired through a competitive process that is strictly controlled.²⁹ New teachers can be hired only if there is a clear need (defined by existing teacher-student ratios) and the local government has sufficient resources. The national government has to certify both prior to opening a new process. In addition, a number of recent decrees create a new salary scale for newly hired teachers and also limit the possibility of promotions. New teachers are also largely incorporated into the regular social security system. Under the new salary and promotion structure, the cost per teacher is substantially less than in the old system.
- **Teachers work for local governments.** Despite the highly centralized system of hiring and paying teachers, teachers are managed by local governments (departments, districts, and certified municipalities). There are no clear rules for the transfer of teachers among jurisdictions, although teachers are guaranteed their rank and salary if they do transfer.
- **Dismissing a public teacher is difficult.** As with other civil servants, it is very difficult for the government to dismiss public teachers. In theory, teachers can be removed due to a number of circumstances, but it is very rare for teachers to lose their job. Most teachers are confirmed after their probation period and the average job performance rating of teachers tends to be very high. The transaction costs for taking formal actions against public teachers are also very high.
- **Teachers may be transferred within their jurisdiction.** In theory, local governments have full authority to transfer teachers to schools within their jurisdiction. In practice, teachers have many tools available to block transfers, particularly if they involve moves to areas that are more isolated or face security risks.
- **Local government may use contracting to cover their education needs.** While hiring teachers and building schools is the standard model to provide public education, local governments are able to contract private entities to provide education services. This is particularly common in remote and difficult areas.
- **No clear strategy for “deficits.”** As explained in the section on transfers, there was to be a one-year transition period during which local governments could receive a complement to allow them to cover their payroll when it exceeds the total amount in the SGP coverage transfer. After this one-year period, local governments were to develop a “rationalization plan” to reduce their costs. Current law gives local governments no flexibility with HR costs. In practice, the one-year transition period has become permanent.

29. Since 2006 the Ministry of Education no longer has a role in selection. The National Civil Service Council (CNCS) is to rank three times the number of people for each vacancy. The selection process includes a knowledge exam, examination of résumé and experience, and an interview (which cannot exceed 10 percent of the consideration). There may be a role for territorial bodies in the second phase of the selection process (examination of résumés and interviews). This is still to be determined.

3.15 The teacher workforce is going through a “demographic transition”: most teachers are still covered by the old labor regime but this is gradually changing (also refer to Education Annex and corresponding tables). Under the previous rules, teachers had a very generous retirement that allowed them to receive two or even three pensions for the same job, often while they continued working. Salary levels were also higher and promotions were easier to secure. Gradually, more “old regime” teachers are retiring and are being replaced by teachers in the new HR regime. Currently, 84 percent of public teachers in Colombia are in the old system; in some jurisdictions, the proportion is as low as 65 percent, while in many, it is still 100 percent.

3.16 As Colombia transitions to the new salary scheme, there will be greater heterogeneity among the jurisdictions in terms of salary costs. Two basic factors drive costs: the percentage of staff in the old (more expensive) salary scheme and the level (*escalafón*) of those staff. Figure 3.2 shows the distribution of the teacher staff both by percentage in the old system and by the average level in the old system. As can be seen, there is a wide range of distributions. Some jurisdictions have a very high proportion of teachers in the old system but at a relatively low wage level. Others have a high wage for those in the old system but a large proportion of teachers in the new system. In general, jurisdictions in the “northeast” quadrant have the highest wage bill per capita while jurisdictions in the “southwest” have relatively cheaper wage structures. This implies that some departments might take much longer to transition to the new HR system, while others can achieve it much faster.

Figure 3.2 Distribution of the Teacher Staff in employment regimes, 2006



Source: World Bank.

2.3. Funding

3.17 Law 715 introduced a new financing mechanism as it pooled separate transfers, the *Situado Fiscal* and the revenue-sharing mechanism (*Participación en los Ingresos Corrientes de la Nacional*, PICN). Today, education is still mainly financed by the central government. There are different sources in addition to the SGP (Table 3.3), such as the National Royalty Fund. Figure 3.3 shows the flow of funds.

Figure 3.3 Funding Flow in Education

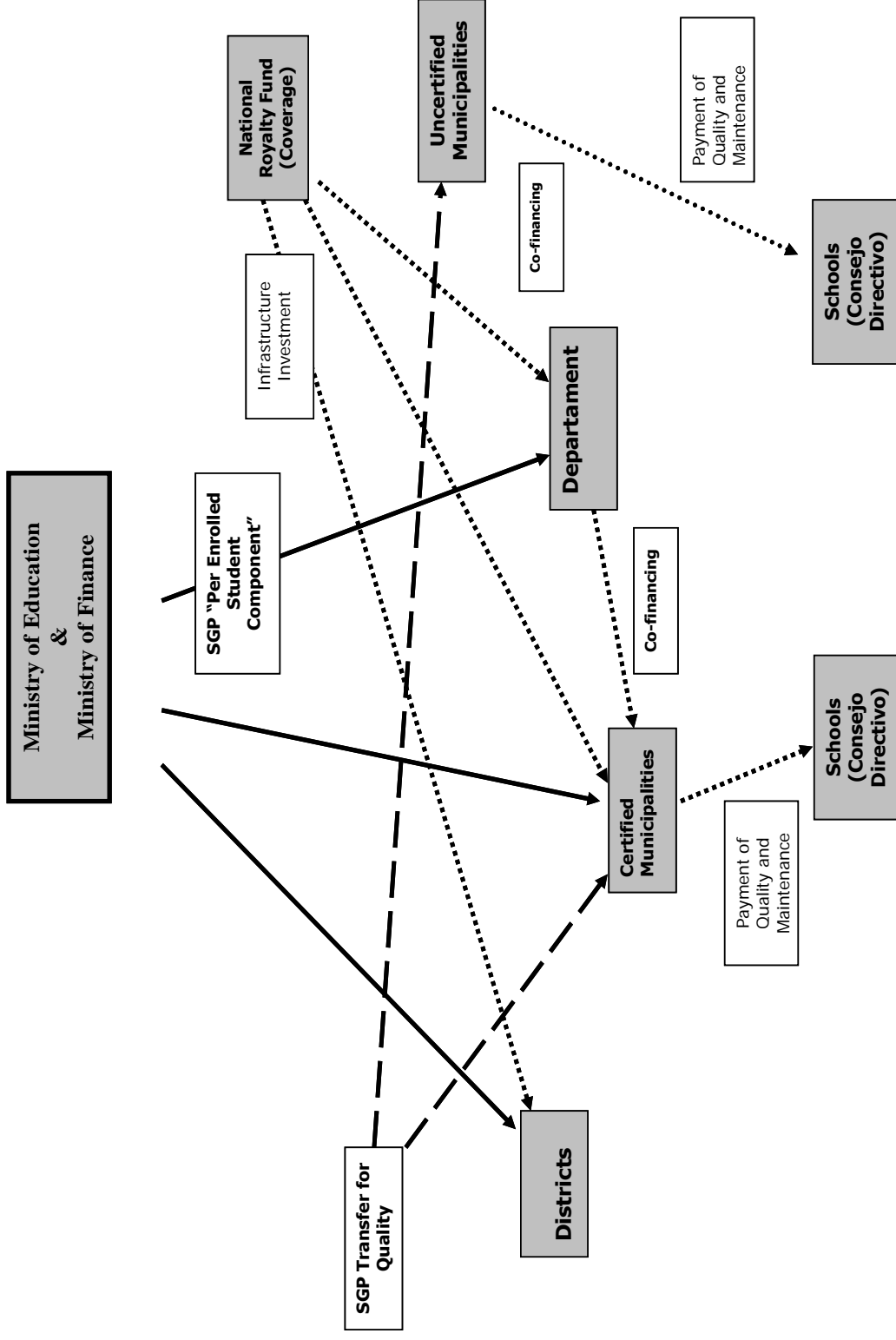


Table 3.3 Public Education Financing, 2006

Source	Amount ('000,000 pesos)	Share
SGP	9,211,119	84%
Regalias, for education	24,262	0%
Subnational own revenues, for education	622,560	6%
Law 21 of 1982	86,108	1%
PGN (National Budget) Education	967,805	9%
PGN (National Budget) Additional Resources	21,350	0%
Total	10,911,876	100%

Source: World Bank, based on data from *Departamento Nacional de Planeación*.

3.18 The formula of the SGP Transfer for Education. The SGP transfer for education has six components:³⁰ (a) per enrolled student component, (b) complement, (c) cancellations, (d) population to serve; (e) recognition of cost of service, and (f) educational quality.

3.19 (a) Per enrolled student component. The distribution of this component is based on the average cost of providing the service to each enrolled student in a public school in that entity. There are three different arrangements in providing the service: districts, departments, and certified municipalities.

- The first step in estimating the amount that each of these entities will receive is to identify the teacher payroll for each of these entities. For each group of these entities, the teacher payroll is divided by the number of enrolled students in public schools.
- The second step is to add an amount for administrative costs, which is determined by the share of administrative costs of the total payroll.³¹ The sum of these two amounts is defined as the basic allocation, and is basically the average cost per student for each of these groups.
- The third step is to cluster departments into different subgroups in each of different groups by using three variables: population dispersion, percentage of population in rural areas, and a weight of secondary enrollment over total school enrollment.³² For each of these subgroups they estimate an additional percentage that will be added to the basic allocation. To do this, DNP uses the principal components method.
- The fourth step is that once these two amounts are added, the sum is multiplied by the number of enrolled students in each entity. This is the total amount that departments receive through this component.
- The entities can spend up to 1 percent of this amount toward administrative costs. In addition, the national government determines each year what percentage of this component could be allocated toward teacher promotions.

3.20 (b) Complement. When Law 715 was approved, 39 entities could not cover their teacher and administrative payroll with the resources distributed by the per enrolled student component. The national government provided additional resources to finance this gap. The law seems to suggest that this complement is temporary, based on the assumption that there were

30. The distribution of the SGP resources is estimated by DNP; however, it needs to be approved by a CONPES.

31. The CONPES establishes a limit of one administrative workers per 270 enrolled students to estimate this percentage.

32. There are 7 subgroups for the departments, 4 subgroups for the certified municipalities, and only 1 subgroup for the special groups.

rationalization plans for human resources.³³ However, local governments have no authority to adjust the payroll and in many places, the transition has been slow. As will be emphasized below, in order to move into a per capita distribution of resources (or a more demand- driven formula), there must be changes in human resources management.³⁴

3.21 **(c) Cancellations.** These resources are distributed to the pension funds managed by the departments to pay for the pensions of the nationalized service established by Law 43 of 1975 that, according to Law 91 of 1989, was left out of the *Fondo Nacional de Prestacional Sociales del Magisterio*.

3.22 **(d) “Population to serve”: coverage increases.** The first component is estimated based on the number of enrolled students in the previous year. In order to adjust this figure with the current amount of enrolled students, during the year the central government transfers the extra resources for the additional students. This is based on estimates and is confirmed through audits and the existing education information system. If the entity had fewer enrolled students than the previous year, they do not get penalized.

3.23 **(e) Recognition of the costs of the service.** This is a special transfer to cover debt due to homologize the administrative positions of certain departments. In 2007, these resources will be given solely to the department of Valle del Cauca.

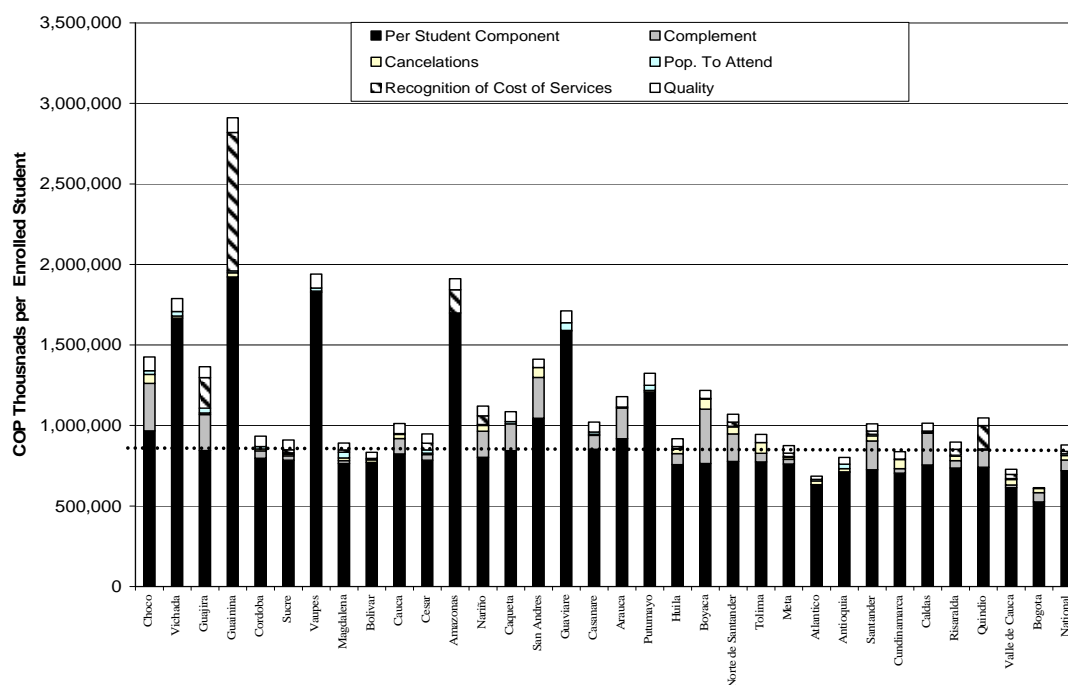
3.24 **(f) Quality.** These resources are for non-wage expenditures and they are distributed to all municipalities (certified and non-certified) on per student basis. The amount allocated to this component is the residual, given that the first five components are used to pay for the payroll. The distribution is based on the number of enrolled students and the unsatisfied necessities index (NBI). First the number of enrolled students is adjusted by using the ratio of the NBI of the entity to the national NBI. Then, the total amount of resources is divided by the total number of adjusted enrolled students. Finally, this figure is multiplied by the adjusted number of enrolled students in each entity.

3.25 The SGP of the education sector is distributed fairly equally in per capita terms (Figure 3.4). Most of the variation comes from the high payroll in certain departments that have a very high population distribution (see corresponding Figure in the Education Annex). Some departments with a low NBI receive fewer resources in per capita terms than the national average; however, poor departments are not penalized and receive at least the national average. Although there are no particular equity problems related to the SGP, the main issues are related to the incentive the formula generates on subnational levels, as discussed below.

33. The transition period established in a transitory article of Law 715 was for one year.

34. One policy option is certainly that during the transitions, subnational governments start receiving more human resources responsibilities, as discussed in the education sector section of the report.

Figure 3.4 Distribution of SGP in Education per Enrolled Student, 2006



Source: Bank Staff based on DNP and DANE data. The departments are ranked according to the unsatisfied necessities index (NBI), and the poorest department is the one in the left-hand side.

3. Efficiency Levels of Subnational Governments

3.26 Much as the availability of resources for public education varies greatly across the country, so does the capacity of subnational governments to effectively execute the resources they have. Based on the DNP methodology for measuring efficiency (DNP 2005a) and data for 2006 (Table 3.4), regression analysis was performed in order to highlight the determinants for efficiency in the use of resources. Most municipalities are indeed able to show good results in coverage. In turn, obtaining good education quality seems more challenging as more than half of the municipalities are achieving less than 50 percent of the outcomes of the best comparable municipalities.

Table 3.4 The DNP Model for Measuring Education Efficiency

Sector	Dimension	Output	Inputs
Education	Coverage	Total number of students enrolled in public schools	<ul style="list-style-type: none"> • Total investment in education excluding payroll and contracts with private entities • Total Number of Official Teachers • Classroom space available in education institutions
	Quality	Total Number of Students with a Score above average in the ICFES exam	<ul style="list-style-type: none"> • Total expenditure in education • Total Number of Teachers with grade level higher than 6 or 2 on the new scale

3.27 Not surprisingly, the regression analysis shows that the most important determinants for municipal efficiency can be found both in structural factors—conditions which can hardly be

influenced through policy—as well as in institutional and fiscal arrangements among levels of government.

3.28 **Structural factors.** Two important structural factors are related to (i) geographic location and (ii) population size. Municipalities in different regions (Atlantic region, Pacífico, Llanos Orientales) have a different level of performance. For instance, in the education coverage model the municipalities in the Atlantic region perform better (although they do not necessarily also perform better in education quality compared to other regions). This finding indicates that regional differences matter which underscores the importance of the socio-cultural context in which services are produced and delivered.

3.29 As for population size, the regression analysis indicates that municipalities with greater population density perform on average better than those with lower population density. For instance, efficiency scores are statistically superior in Bogotá when analyzing the scores of both the coverage and quality models. The same also holds for other large municipalities, for instance Medellín.

3.30 **Institutional and fiscal factors.** The most important institutional factor determining the level of efficiency is the condition of being certified as municipality. On a scale from 1 to 100, the efficiency scores of certified municipalities are higher in a range from 10 to 29 on average (refer to Annex 6 in Volume II for Details).

3.31 Since municipalities with more than 100,000 inhabitants were automatically certified, for large part these results endorse the finding regarding population size highlighted above. In the end, it is the different institutional arrangements within municipalities that explain differences in efficiency levels.

3.32 What about the impact of intergovernmental transfers on municipal efficiency? There exists a marginal positive impact of SGP transfers on the level of efficiency; however, in econometric terms this impact is very low and practically negligible leading to the interpretation that SGP transfers do not have a major impact in improving the provision of education services; these transfers do not do any harm, that is, they do not lead to more inefficiency, but they also do not seem to be the main driver for more efficiency either.

3.33 More worrisome, perhaps, is the fact that in parallel to SGP transfers there are a series of revenue sources which have a negative impact on expenditure efficiency: (i) royalties (which are kept by “producing” jurisdictions); (ii) transfers from the National Royalty Fund (aimed at compensating for different levels of income from royalties); and (iii) transfers from departments to municipalities. This finding underscores the need to reassess the transfer system in Colombia in order to achieve better education services.

3.34 On the other hand, the impact of tax revenue on education efficiency suggests that there are incentive problems at the subnational level in Colombia. The regression results indicate that there is a slightly negative relationship between tax revenues used for education expenditures and efficiency: municipalities with low levels of tax revenue have a slightly higher efficiency than revenue rich municipalities. This might be explained by the fact that certified municipalities in particular do not use their own revenue to finance education services in light of availability of SGP transfers. Should a future transfer system in Colombia evolve that compensates for low fiscal capacity, these findings should be taken into account since, contrary to common thought, also the jurisdictions with low levels of tax revenue—most probably also implying low levels of GDP per capita as well as fiscal capacity—can be efficient with the use of resources.

3.35 The next section will provide further analysis and detailed discussion of the underlying incentive problems that originate from institutional arrangements and that are a constraint for higher efficiency.

4. Drivers of Inefficiency and Incentive Problems

3.36 Although the current system established by Law 715 represents a major improvement over past models of education management, it does not fully accomplish the government's education objectives. The efficiency analysis clearly demonstrated that fiscal and institutional arrangements among levels of government clearly matter to explain the level of efficiency. In order to provide further evidence, this section traces the flow of funds (see Figure A.7) among levels of government to the frontline providers. It then discusses the incentive problems that constrain the efficient use of resources in each of these areas: from the national level to subnational levels; resource management within departments and municipalities; and flow of funds from subnational governments to frontline providers (schools).

4.1. Flow of Funds from the National Governments to Departments and Municipalities

Incentive Problem 1: The SGP formula does not match the responsibilities of subnational governments and discourages local fiscal effort

3.37 As explained in more detail in the transfer section above, the education formula has several shortcomings:

- **First, the formula is supply driven:** Only at the margin (for newly enrolled students) is the formula truly a “per student” formula. For many subnational governments, it simply represents the coverage of historic costs; for others, the effective per student financing is minimal.
- **Second, the formula does not encourage local fiscal effort as a complement to central financing:** increases in coverage are always paid by the central government and local governments gain little by putting their resources in the education system.
- **Third, the formula changes every year and is often not transparent:** This makes it difficult for local governments to plan and adapt to new incentives. Several rounds of distribution and calculation add a level of complexity. The same is true with the grouping of subnational governments into categories.
- **Fourth, the system is built around the implicit assumption that subnational governments have the capacity to influence the payroll.** Not all costs of payroll are covered through the formula and it was implicitly assumed that local governments would implement rationalization plans of teachers. In practice they do not have the means and responsibilities to adjust human resources.

4.2. Resource Management within Subnational Governments

Incentive Problem 2: Local governments have no control over human resources, although this is the main lever for introducing efficiency.

3.38 Public teachers comprise a large share of the total public workforce. It is not surprising that the hiring, assignment, and promotion of teachers have important political implications and overly generous compensation offered at the local level have created serious public financial problems in the past.

3.39 Human resources (HR) are central to the education system but, in practice, local governments have little control over HR policies in their jurisdictions. Local governments essentially serve as financial controllers, they have authority over transferring existing teachers and assigning new teachers, and they can call for the creation of new teacher positions, under well-defined circumstances. But subnational governments have no role in setting salaries or in

the actual hiring process for new teachers. Also, the number of teachers is strictly controlled. This level of control assures fiscal responsibility but on the other hand seriously limits the impact of any deeper decentralization in the education sector. In summary, subnational governments determine their needs for teachers but remain passive players in the actual hiring of teachers.

3.40 The national government faces an important quandary in terms of human resources. Past experience has clearly shown that giving local government's authority over HR leads to serious abuse. This arises from a system where education is seen primarily as a national responsibility, with the national government picking up the bill for decisions made at the local level. At the same time, it is not really possible to have meaningful decentralization if local governments do not have more control over HR. Experience in a variety of countries has shown that it is possible for local governments to control many key HR functions in a financially responsible way that leads to better learning outcomes. However this requires the right set of incentives and supervision mechanisms from the central level.

3.41 As is the case with the formula above, decentralization of HR management does not offer any particular advantages for public teachers. Decentralization could not break the bargaining power of the teacher union, which remains centralized.

Incentive Problem 3: Little use of fiscal revenue for education

3.42 With some important exceptions, subnational governments allocate very little of their own resources (from taxes and non-tax sources and transfers) to education (Table 3.5). Many departments spend little or none of their own resources for education, and while municipalities tend to spend a bit more, the total share is quite small. Historically, around 10 to 15 percent of total spending on public education (0.3 percent to 0.4 percent of GDP) is from local government sources. Many subnational governments spend nothing on the education sector—in 2000, only 10 out of 32 departments spent their own resources on education. All ten districts contribute significantly to education. This also raises concern about horizontal equity, if only the richest subnational governments have extra money for education. In many cases, non-certified municipalities contribute to the education sector as well and on average their contribution exceeds that of certified municipalities (Table 3.6). This may reflect the relative flexibility that they have in allocating their resources to the education sector, as they are freed from the constraint of actually operating the school system.

Table 3.5 Financing Sources and Expenditures for Decentralization (in percent GDP), 1993–2004

Year	National Transfer	National Budget Resources	Own Revenue of Subnational Governments	Revenue for Higher Education	Total Education Expenditure
1993	2.1	1.2	Na	na	3.3
1994	2.3	1.2	0.3	na	3.8
1995	2.4	1.3	0.3	na	3.9
1996	2.9	1.4	0.4	na	4.6
1997	2.8	1.2	0.3	na	4.3
1998	3.0	1.5	0.3	0.4	5.3
1999	3.3	1.3	0.4	0.4	5.3
2000	3.1	1.3	0.4	0.3	5.1
2001	3.2	1.5	0.4	0.3	5.5
2002	3.4	1.3	0.4	0.3	5.5
2003	3.3	1.1	0.4	0.4	5.2
2004	3.1	1.3	0.4	0.4	5.1

Note: na = Not available.

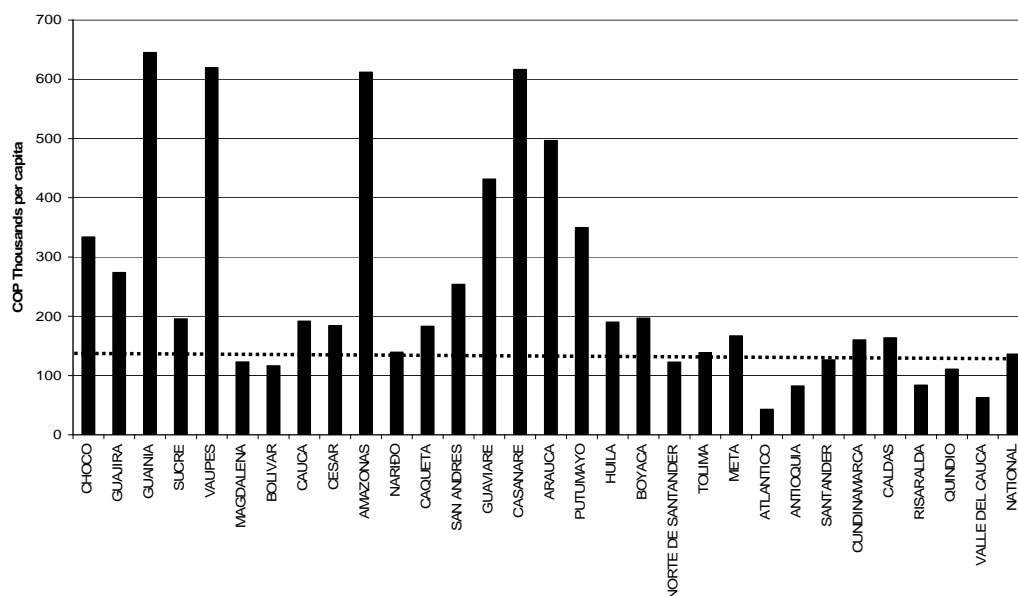
Source: Melo and others (2004), citing Henao y Silva (2004).

Table 3.6 Funding Sources in Certified and Non-certified Municipalities (in percent), 2005

	SGP Educati	Other SGI Own	Income	Credit and C	Departmen	Other
		Revenue		financing	Transfers	
Non-certified Municipalities	79.2%	0.5%	10.4%	6.1%	1.8%	1.6%
Certified Municipali	93.8%	0.0%	3.0%	2.1%	0.0%	0.4%

Source: World Bank, based on DNP.

3.43 As a result from the use of different funding sources and underlying incentive problems, there is an equity problem in the richer departments. While most of the poorer departments spend the national average in per capita terms, this is not the case for the richer departments (Figure 3.5). The latter probably have the resources, but given the incentive problems they do not spend sufficiently in this sector.

Figure 3.5 Departmental Government Per Capita Expenditures in Education, 2005

Note: Departments ranked from poor (left) to rich (right).

Source: World Bank.

3.44 The underlying incentive problems for investing little in education with own resources are the following: politically, local politicians do not perceive much reward in investing in education, which is largely seen as a national program. Local voters also tend to see the education system as a national issue and do not generally hold local authorities accountable for the education sector. The decision to reduce local governments' authority in HR has probably contributed to this attitude. While there are some local governments that have given education a very high priority, this is by no means common. On the other hand, the central government feels responsible for covering education expenditures, and for increasing coverage (which are financed 100 percent nationally). The formula and the HR management also send the message that the central government is in charge of running education. This discourages subnational governments from using more own revenue.

Incentive Problem 4: Very low investment in education quality in most jurisdictions

3.45 In recent years, resources for quality have been low and declining. Spending on investment (a proxy for quality) is less than 5 percent of total spending compared to levels from 10 percent to 30 percent in the 1990s (Table 3.7). Aside from the generally low level of spending on quality, this problem has additional dimensions:

- **Quality itself is poorly defined.** While there are clear definitions of education quality, in practice quality appears to be all expenditures other than for teachers' salaries and basic administrative expenses. In many cases this includes other recurrent expenses, such as public utilities or security services. Many municipalities use the quality budget to pay school fees for students as well. These expenses are simply given higher priority than education quality; in some cases due to legal mandates that require the municipality to pay other expenses first.
- **Low investment in infrastructure.** One serious consequence is the low level of investment in physical infrastructure. This leads to a low level of spending on basic maintenance and crowding in schools as enrollment increases. Budgets for teacher training and other school inputs are quite low, which will eventually impact on student learning.
- **Quality of instruction.** There is little authority (or resources) to promote the quality of instruction. The evaluation system for teachers in the regime established through Decree Law no. 1278 (from 2002) offers an opportunity to consider quality indicators/factors in teacher instruction, but it is rarely used. The evaluation system is currently under development.

Table 3.7 Current and Investment Expenditures in Education (in percent), 2004

Year	Operating Cost (<i>Funcionamiento</i>)	Investment	Total
1993	88.7	11.3	10
1994	82.1	17.9	10
1995	77.7	22.3	10
1996	72.1	27.9	10
1997	70.9	29.1	10
1998	70.4	29.6	10
1999	82.4	17.6	10
2000	83.7	16.3	10
2001	84.9	15.1	10
Average 93-	79.2	20.8	10
2002	95.7	4.3	10
2003	95.7	4.3	10
2004	97.0	3.0	10
Average 02-	96.1	3.9	10

Note: Includes transfers from the national government and other resources of the national budget.

Source: Melo (2004), citing Henao y Silva (2004).

3.46 In the long run, without investment in quality, the Colombian education system will not produce well-educated workers and will not be able to compete globally.

3.47 A major incentive problem for non-certified municipalities—which are the majority of the 1,100 municipalities since only 40 are certified—is that in the asymmetric decentralization model their role is a secondary one, while decision-making on important issues takes place at other levels of government. Non-certified municipalities are to a large degree disconnected from education planning, which does not create adequate incentives to invest in quality. For all subnational governments, in turn, a general incentive problem is that the central government in practice runs the system so there is only little “ownership” on local levels that can develop. There are also no strong participatory mechanisms for education in particular, so the demand for more

quality—on behalf of parents—cannot be effectively channeled to the decision-makers, and they finally cannot be held accountable for the lack of investment in quality.

4.3. Funding flow from Subnational Governments to Frontline Providers (Schools)

Incentive Problem 5: It is not clear who runs the schools

3.48 Prior to the decentralization reforms of the 1990s, there were national, departmental, and municipal public schools. In more recent years, it is often not clear who owns and operates public schools. This not only leads to underinvestment in infrastructure; it also leads to bureaucratic delays because school authorities are often not sure which level of government they should work with to solve a specific problem.

3.49 Many studies have shown the contribution of school autonomy to education outcomes. When community participation is strong and when it influences how the school is operated, it can have a positive impact on education quality and enrollment. Without clear rules on ownership and budgets, it is difficult to create a working school community or set up mechanisms to encourage great community participation.

3.50 One particularly reason for the existence of this problem is that both departmental and municipal levels have an incentive to “under-invest” in schools because they do not want to spend on investments that they do not clearly operate. This is particularly true for the more than 1,000 non-certified municipalities that perceive that it is the department that is responsible for schools.

5. Case Studies

3.51 The case studies have the objective to illustrate how the incentive problems described above play out in practice; and how departments with different fiscal and institutional capacities are dealing with them. The following are the most important lessons learned from the case studies of Antioquia, Bolívar, and Nariño.

Lesson One: The highly regulated central government-department relationship in education contrasts with an underregulated and often informal service delivery chain to frontline providers (schools).

3.52 **The limited decision-making space is used effectively, particularly with regard to teacher allocations.** The cases of Nariño, Bolívar, and Antioquia illustrate that departments actively use the little decision-making space they have on human resources. They transfer teachers among schools in order to better the teacher-student ratio. In particular, they have initiatives to transfer teachers to areas of greatest need. Nariño and Bolívar illustrate different challenges faced by departments:

- Nariño has tried to reallocate its teachers to the rural areas; the incentive provided is for new and young teachers to start in rural areas and later be allowed to also work in urban areas.
- Due to the security situation in Bolívar, the department is constantly moving around teachers in the territory, trying to avoid disruptions in service delivery.

3.53 In practice, teachers often resist being transferred, which clearly limits the capacity of the departments to rationalize their education workforce. However, generally, the departments take advantage of this important tool for achieving better quality and equity in the education sector.

3.54 The type of relationship between departments and municipalities varies greatly. Although the governor and the departmental assembly are elected to represent the whole department, the department government plays different roles in practice vis-à-vis municipalities, whether they are certified or not.

- In Antioquia, the department is borrowing money for investing in education only in non-certified municipalities.
- Both Antioquia and Nariño have certified municipalities that need significant technical assistance, but receive little formal support from the department.
- In Nariño, the department was generally seen as distant and involved primarily in administering teachers.

3.55 There are no consistent policies to try to incorporate schools, as the frontline providers, into the education system. However, there were the following differences:

- In Bolivar, the department provided a significant amount of support for the maintenance and public utilities budget. This comes from the department's "surplus" in the coverage budget. Bolivar has one of the youngest teacher's force in the country.
- In Nariño, the opposite model seemed to apply, with the municipalities playing the leading role vis-à-vis schools and the department providing some support, using its own fiscal resources).
- Antioquia has much more control over its schools and has an explicit co-financing scheme with municipalities.

3.56 So it appears that the organization of the service delivery chain remains informal in many areas.

3.57 Education "quality" is poorly defined. In all departments, a major impediment was the weak legal definition of "quality": the municipalities have to use their allocation for "quality" to also pay for basic services, such as utilities and security services, leaving little for maintenance or education quality.

3.58 Contracting remains an important organizational model that adjusts flexibly to local circumstances. With encouragement from the national government, all of the local governments employ some form of contracting to reach the most difficult population. This is particularly common in areas where violence prevents placing permanent teachers. This was generally done by the Catholic Church or a religious organization. Political pressures (including from the teachers' union) seem to prevent the wider use of contracting outside of difficult areas. However, none of the local governments reported serious union opposition to contracting in its current form as it is widely understood that this is often the only way to ensure coverage in some areas. All of the local governments reported general satisfaction with this approach and their intent to continue as long as needed. These cases therefore illustrate that maintaining these flexible arrangements for service delivery is an important condition for better services.

Lesson Two: There is no "level playing field" among departments in their ability to use this reduced decisionmaking space. The center does not follow a consistent policy to enable all departments to contribute financially to education.

3.59 In most cases, there was a strong feeling that education was primarily the responsibility of the central government and that the local government's primary responsibility was to administer the system. Accordingly, the local contribution to education was quite small.

3.60 Aside from the incentive problems discussed above, local financial contributions to education critically depend on (a) fiscal capacity, and (b) the cost of the payroll (which may or may not allow for a “surplus” in resources after SGP transfers). These two conditions are outside the control of departments and municipalities (Box 3.1), and are clearly an area where the central government needs to exercise its role in providing a “level playing field” for all subnational governments.

- Antioquia makes use of the two sources of own revenue: (a) fiscal revenue (the department has a strong tax base),³⁵ and (b) the “surplus” in transfers from SGP due to its relatively young teaching staff and its cheap payroll.
- Nariño is a “deficit” department related to SGP transfers and has far less own fiscal revenue at its disposal.
- Bolivar, which, like Nariño, is going through a financial restructuring (Law 550), does not contribute any of its own resources to education. This shows that some departments may temporarily not be able to contribute higher levels of revenue to education.

Box 3.1 Variation in Teacher Salaries

Both Antioquia and Bolivar have relatively cheap payrolls, staffed by younger teachers. In the case of Antioquia, this seems to be driven by the work opportunities outside of the public system and the attraction of working in Medellin (a certified municipality, outside of the department’s payroll). For Bolivar, the profession is generally dangerous and turnover is high. As in Antioquia, teachers try to move toward the capital (Cartagena) as they gain experience.

Teachers in poorer departments tend to see teaching as a good economic option, essentially tying up all of the department’s SGP in salaries. At the same time, these departments have a very limited tax base. In Nariño, teachers tend to be older and paid better. In a poorer department such as Nariño, the wages offered to teachers are quite attractive and there are few other options. Pasto, the capital of Nariño, had an even more expensive payroll because teachers tend to move toward the capital as they gain more experience. In Nariño and Pasto, teachers tend to remain in service until they reach the mandatory retirement age.

These different cases illustrate the different challenges inherent in human resources management, and the little control departments have to address them in practice.

Source: World Bank.

3.61 In the meantime, departments make only very little use of additional national funding mechanisms. While there are some resources available for education outside of SGP, accessing these funds does not appear to be straightforward. The most common sources are resources from Law 21 of 1983, which is for education infrastructure, and the National Royalty Fund (*Fondo Nacional de Regalias*). These sources are open to departments and certified municipalities; departments can consolidate proposals from uncertified municipalities. In general, subnational governments perceive the administrative requirements to be excessive and that there was not sufficient technical assistance. In many cases, subnational governments do not access them and hence miss opportunities to improve quality.

Lesson Three: The fact that not all departments are able to contribute financially implies that there are missed opportunities for improving services and the quality of education.

35. However, with the exception of the municipality of Medellin, these resources are generally only around 10 percent or less.

3.62 The use of (a) fiscal revenue as a complement to the SGP, and (b) the “surplus” from SGP transfers, have a potentially large impact on quality of education. In addition to supporting contracting initiatives, most of the local governments have special programs or initiatives that they finance with these two sources of revenue.

- Bolivar and Nariño both offer free education to all at the primary level, using department resources to pay monthly fees. Several municipalities in Antioquia have done the same.³⁶
- Antioquia has a number of special programs, including student credit for higher education, a large infrastructure program, and an enhanced focus on quality, all financed with local resources.

3.63 **The support for quality varies greatly and critically depends on the availability of either fiscal revenue or “surplus” from SGP, or both.**

- In Nariño, a SGP-“deficit” department, the departmental government has only limited fiscal funds available for the education sector after paying teacher salaries. The department does use its own resources for the education sector, but these are very limited.
- Antioquia, on the other hand, has resources from SGP and from the department revenues for “quality,” and invests these resources quite strategically across the education sector.
- Bolivar only has resources from its SGP for “quality.” It uses these resources to cover public utilities and to ensure that students do not have to pay school fees. This provides money directly to schools and allows municipalities to focus more on education quality.

3.64 These cases illustrate that investments on education quality depend on factors that are not always in the hands of the departments.

3.65 **The capacity to coordinate effectively among departments and municipalities depends on the availability of resources at these two levels.** The case studies illustrate that resource availability can make a substantial difference in how intergovernmental arrangements can be structured.

- Antioquia and Bolivar both seem to use their SGP-“surplus” resources to strengthen the role of the department in terms of planning education in the department.
- Antioquia, in particular, has organized the education sector in “regions” and is seeking to develop economies of scale for technical assistance to schools. It is also using co-financing to encourage municipalities to invest according to departmental plans.
- Nariño, with its smaller education budget, acts more to support municipalities than to take the lead role in the education sector.

Lesson Four: The ability of the central government to influence local choices only through transfer formulas remains limited.

3.66 **The size and effectiveness of the financial incentive for increasing enrollment is not similar in all departments, which has important implications for reaching the service delivery targets for 2010.** The size of the incentive for enrollment depends on the present level of teacher-student ratios and on the availability of and willingness to use own revenue to finance education. In cases like in Antioquia, for instance, which has higher fiscal capacity, the financial incentive is smaller than in departments like Bolivar or Nariño.

3.67 **On the other hand, the transfer formula of SGP is poorly understood.** From the perspective of local governments, the formula for the allocation of resources was not transparent.

36. Public education is free but public schools can charge a fee on a monthly basis. The government limits this fee to C\$4,000 a month and the money stays in the school.

While local authorities generally understood how the formula worked in a broad sense, they often do not understand the details or how the final transfer is calculated.

3.68 The assignment for education “quality”: the incentive structured by the national government is not applied consistently below the municipal level. The assignment for “quality” on behalf of the central government to municipalities is on a per student basis; however, the same equity factor is not used when local governments assign resources to the individual school. Although there have been some efforts to support schools on a capitation basis (primarily with the departments of Bolívar and Nariño paying school fees), most transfers to schools are for specific purposes. Each Mayor applies individual criteria for the allocation of resources for education, which can lead to inappropriate uses of resources in some cases. Interviews show that the level of commitment of municipal authorities varies greatly and is more variable than the commitment and understanding at the departmental level. In all cases, however, it cannot be taken for granted that the incentive structured at the central level is consistently applied at the local level.

6. Conclusion

3.69 There are notable advances in education enrollment in Colombia. Starting from a very low base, coverage has improved substantially. On the other hand, education quality remains a concern. Going forward both goals need to be addressed jointly in order for the education system to deliver the results that are expected.

3.70 Although the current education system and Law 715 are a major improvement over the past, there are constraints on all stages of the service delivery route. These problems are particularly evident regarding human resource management. With high teacher salaries still driving most of the expenses and the lack of control over HR at the local level, the system has not really generated the positive incentives that were expected. Decision-making is disjointed: the formula does not match the real decision-making authority of subnational governments in HR management. In fact, the formula would fit into an advanced stage of decentralization, where departments have authority to reform human resources (*escalafón*), or have other means (hiring, firing, defining salaries) that would enable them to manage teachers more effectively.

3.71 At the same time, the system strengthens fiscal responsibility at the cost of allocative efficiency. Considering the experiences of the 1990s, the central government keeps tight control over HR management. In the current system, however, this rules out *potential* gains on higher allocative efficiency in that some areas of decision-making on HR are not taken at local levels.

3.72 Given the incentive problems in the use of the different revenue sources—strong reliance on transfers and little use of own revenue—there is an equity problem in the richer departments that need to be addressed.

3.73 It is clear that further institutional reform is required in order to achieve better resource management and performance. Simply raising the level of earmarked transfers without further reform will most likely perpetuate above-mentioned problems. Going forward the following are key areas:

- **The space to achieve efficiency mainly with formulas has been exhausted.** While the transfer formulas can be improved, this is no “magic bullet.” What is needed is a deeper reform of the public sector that will adjust the incentives provided through a formula. This is particularly true for HR management, a reform path that has been initiated in Colombia through a more competitive and transparent selection process. However, most arrangements of HR management are still extremely rigid.

- **The center has a role to provide all departments with the same opportunities in order to contribute financially to education.** This goes beyond finding better incentives for financing to address fiscal capacity and the payroll cost (“surplus/deficit”). These financial contributions outside the SGP are an important tool to improve education quality. At the same time, it is important to recognize that the financial incentive to increase enrollment is not similar in all departments.
- **There is a need to regulate the service delivery chain from subnational governments to schools, while keeping flexible arrangements.** Although decentralization is meant to find local solutions to local problems, the service delivery chain can break down in this important element if departments and municipalities do not exercise this decision-making space creatively, which at the margin of an otherwise highly centralized scheme seems to be surprisingly large.

Chapter 4. Health Sector

4.1 This Chapter discusses the intergovernmental arrangements in the health sector, the underlying incentive problems, and how they affect better use and management of resources. The discussion of these issues is important in order to reach the coverage targets set for 2010 while at the same time improving service quality.

4.2 The Chapter is structured as follows: Section 1 presents the sector challenges. Section 2 describes the organization of the sector and responsibilities among levels of government. Section 3 assesses the levels of efficiency of subnational governments in immunization and enrollment into the subsidized regime. Section 4 discusses the main incentive constraints that impede higher efficiency in resource use. Section 5 presents the main lessons learned from the case studies of Antioquia, Bolívar, and Nariño. Finally, Section 6 summarizes the main findings and conclusions.

1. Health Sector Challenges

4.3 Total health expenditures in Colombia increased from 6.2 percent in 1993 to 9.6 percent in 1997 and then stabilized at 7.7 percent since 2003 (Baron 2007). This indicates the emphasis the country has given to social expenditures, but also underscores that the achievements in health insurance coverage implied additional cost. Today, Colombia's total health expenditure is above the Latin American average (7 percent of GDP, 2002) but is still lower than those in Uruguay (10 percent of GDP, 2002), Argentina (8.9 percent of GDP), and Brazil (7.9 percent of GDP).³⁷ On the other hand, according to Table 4.1 Colombia has been performing above average on almost every indicator. Only in the immunization of measles does it perform below the average of the Latin America region. In terms of infant mortality rates, Colombia has a lower rate than the region; the reduction of its rate has been slower than in other countries.

Table 4.1 Selected Indicators of Service Quality of Health

	1990	1992	1995	1997	2000	2002	2005
Immunization, measles (% of children ages 12-23 months)							
Colombia	82.0	74.0	95.0	75.0	75.0	89.0	89.0
Latin America and the Caribbean	76.4	82.7	87.2	88.1	89.1	91.7	91.9
World	73.2	69.8	74.3	72.4	73.2	74.5	76.8
Births attended by skilled health staff (% of total)							
Colombia	81.8	..	85.6	..	86.4	..	96.4
Latin America and the Caribbean	..	..	..	..	..	..	86.6
World	..	..	..	..	..	..	62.9
Mortality rate, infant (per 1,000 live births)							
Colombia	26.3	..	24.1	..	20.4	..	17.2
Latin America and the Caribbean	42.8	..	35.8	..	30.0	..	26.1
World	63.5	..	61.3	..	56.9	..	51.4
Mortality rate, under-5 (per 1,000)							
Colombia	34.7	..	31.4	..	25.9	..	21.4
Latin America and the Caribbean	54.0	..	44.1	..	36.1	..	30.8
World	94.9	..	89.6	..	86.9	..	74.9
Life expectancy at birth, total (years)							
Colombia	68.3	68.5	69.8	70.7	71.6	72.2	72.8
Latin America and the Caribbean	68.1	68.8	69.9	70.5	71.2	71.7	72.5
World	65.2	65.5	65.9	66.3	66.7	66.9	67.6

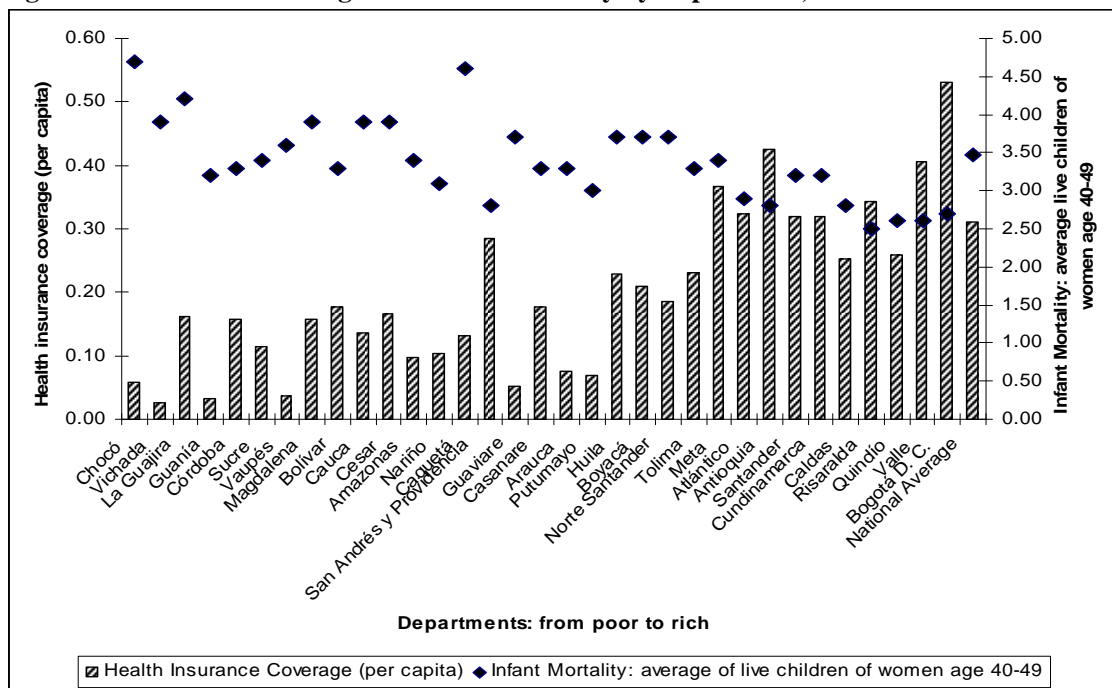
Note [..] = data not available. Source: World Bank.

37. These values do not include out of pocket expenditures. Distribution of health expenditures by source in Colombia is similar to that of the OECD countries (large public spending and social insurance but very small out of pocket and other private spending). Also refer to WDI Indicators and CEPAL (2007).

4.4 One particularly important concern in the health sector is the coverage in health insurance. Between 1992 and 2006, Colombia's health care reform made great strides: insurance coverage increased from 20 percent to 74 percent of the total population.³⁸ By mid-2006 there were 15.9 million people enrolled in the Contributive Regime (CR) and 18.3 million people in the Subsidized Regime (SR).³⁹ The government aims to achieve universal health insurance by 2010 while further extending coverage of the SR to the poorest population (SISBEN categories 1 and 2).⁴⁰

4.5 These national indicators conceal that there are important differences in the level of insurance coverage among the different departments. As can be seen in Figure 4.1, coverage is particularly low in the poorer departments. This requires additional efforts in order to reach full coverage. Poorer departments also exhibit higher rates of infant mortality.

Figure 4.1 Insurance Coverage and Infant Mortality by Department, 2005



Source: World Bank, based on information provided Ministry of Social Protection (Encuesta de Hogares).

2. Organization of the Health Sector

2.1. Responsibilities by Level of Government

4.6 In order to address the above mentioned challenges, Colombia gradually reformed the administration; financing; organization; and delivery of health services (refer to Annex 2 in Volume II). A key piece of the reform was the creation of the National Social Health

38. This total percentage does not take into account that 5 percent of the population received partial subsidies, which are a transitory measure, and another 5 percent is enrolled in special regimes, such as the military and police forces.

39. Data: Ministry of Health, Report to Congress 2006. The growth in enrollment is particularly notable in the SR, starting from 0 percent but increasing to 39 percent of the total population between 1993 and 2005.

40. This is not the first time that the goal of universal coverage has been set. Previously, Law 100 of 1993 set the goal of universal coverage for 2000.

Insurance through Law 100 in 1993; another was the decentralization of responsibilities and resources to subnational governments, which was initiated in the late 1980's and regulated through Law 60 (1993) and Law 715 (2001).

4.7 Law 100 established two separate schemes: the Contributive Regime (CR) and the Subsidized Regime (SR).⁴¹ The CR is the mandatory health insurance scheme for formal sector or informal (self-employed) sector workers with ability to pay and pensioners. The SR allocates public subsidies to individual insurance premiums for the poor according to a proxy-means testing index known as Beneficiaries Identification System (*Sistema de Identificación de Beneficiarios*) or SISBEN.

4.8 Both schemes are organized as a two-tiered managed competition model, which is expected to improve access, contain costs, improve efficiency, and upgrade quality by restructuring incentives.

- **First tier: relation among population and health insurance providers.** In the first tier, consumers have freedom of choice to enroll among a set of public or private health insurance carriers—the private *Empresas Promotoras de Salud* (EPS) and the *Administradoras del Régimen Subsidiado* (ARS) for the publicly subsidized regime—which offers the services included in a standard benefits packages in return for a risk-adjusted premium that has a value fixed at the national level. At this level insurers are expected to engage in quality competition to attract enrollees.
- **Second tier: relation of health insurance with service providers.** In the second tier, health plans act as group purchasers for their enrollees by arranging a network of private and public providers they select based on the best price and quality.

4.9 In terms of benefits, the CR enrollees are entitled to a comprehensive set of services and interventions at all levels of care⁴². The SR benefits package is less generous, covering only preventive and ambulatory care services, medications, some surgical procedures and catastrophic care.

4.10 One important element of the 1993 health sector reform concerns hospitals. Law 100 foresaw that public hospitals be transformed and compete on equal terms with private hospitals to sell healthcare services. These new hospitals, dubbed Social State Enterprises (ESE), operate in a marketplace regulated by the state.

4.11 The decentralization laws reorganized responsibilities⁴³ as well as resource flow among levels of government and the different levels of care. The decentralization laws established administrative procedures to certify local governments; if requirements were met, authority, responsibility and budgetary control of these resources were shifted to

41. The reason for designing national insurance as two separate regimes was to allow for resources to become available to gradually increase insurance coverage for the population eligible for subsidies, with accompanying additions to the benefits package. Both regimes were expected to become equal in terms of benefits coverage in 2000, so that a single universal health insurance system could be implemented throughout the nation, but resource constraints have been an obstacle to fulfilling this goal.

42. The first level of complexity includes preventive and emergency care, basic medical, dental and diagnostic services. The second and third levels include specialized and rehabilitation care, hospitalizations and their corresponding diagnostic tests.

43. The central government's main role referred to policy design, regulation and financing; departmental governments assume regional planning, management and finance, articulation of policy between local and national levels; provision of second and third level health care services; municipal governments take on policy implementation and provision of primary health care services.

departmental and municipal levels.⁴⁴ The current roles of subnational governments are defined in Law 715 of 2001 (Table 4.2).

- Municipalities have to serve first level care for all the uninsured.
- Departments have to serve both the insured in RS and the uninsured with secondary and tertiary care.
- The key role of the government, represented by the Ministry of Social Protection (MPS, formerly the Ministry of Health) and its affiliated regulatory bodies, is to provide information and formulate, monitor, and enforce regulations directed at minimizing market failures, and to devise mechanisms to guarantee equitable access to healthcare services.

Table 4.2 Law 715 and Main Roles in Health by Level of Government

Subnational Government	Main Role
Departments	Management and organization of the public network of health service providers. Public health: Vector-borne disease control.
Municipalities	Expanding insurance coverage and management of the insurance process. Public health: Municipalities maintain competences and authority over resources and service provision as long as they meet performance indicators designed for this purpose.

Note: Details of the territorial responsibilities defined by Law 715 are provided in the Health Annex.

Source: World Bank.

2.2. Funding

4.12 Each insurance scheme has its own sources of financing, wage contributions for the CR and a mix of funds in the case of the SR. There is an interdependency between both schemes given by a solidarity transfer of resources from the CR to the SR. This section will be mainly concerned with financing of the SR, for which the SGP plays a key role.

4.13 Subnational governments finance health expenditures through a series of different funds, which are described in Table 4.3. These include, among others, national budget contributions, earmarked own revenue, and employee benefit funds.

4.14 The most important source, with growing importance in the total revenue available for health, is the *Sistema General de Participaciones* (SGP) created by Law 715 (2001).⁴⁵ The Law earmarks 24.5 percent of total SGP resources to the health sector and establishes a new allocation based on territorial indicators of equity and administrative efficiency. Under Law 715, total resources transferred to municipalities increased from 41 percent to 69 percent between 2001 and 2004.⁴⁶

44. Law 10 1990, Art. 37; Law 60 1993 Arts. 14 and 16; Decreto 1770 de 1994.

45. Law 715 pooled the resources of the Situado Fiscal and Participaciones Municipales into a single bag.

46. For 2006 total SGP resources were \$3,857,648 million pesos, of which \$1,954,948 million (51 percent) was allocated to demand subsidies, \$1,502,019 million (39 percent) to supply-side subsidies, and \$399,914 million (10 percent) to public health.

Table 4.3 Current Sources of Funding, by SGP Purpose

Source	Description	Allocation Rule by SGP purpose
National budget contributions	Resources from the national budget to finance public health programs, the public network of facilities and the SR.	Distributed by the Ministry of Social Protection to Departments and Municipalities.
FOSYGA-Solidarity fund	A fund that pools resources for the SR (1.5% of of wage base contributions to the CR by employees and employers, a percentage contribution from <i>Cajas</i> , contributions from the national budget, taxes on guns, financial returns)	Demand subsidies. Co-financing expansion of SR coverage by Municipalities.
<i>Rentas cedidas</i>	A percentage of total departmental revenues from taxes on liquor sales and lotteries.	Transferred directly to Department budget from source. Earmarked for operation of the Department of Health Secretariats. 25% must be assigned to demand subsidies.
<i>Empresa Territorial para la Salud (ETESA)</i>	Revenues from taxes on gambling and chance.	Distributed to Municipalities, earmarked for pension debt of health sector, research, and demand subsidies.
<i>Cajas</i> (employee benefits funds)	10% of revenues from health taxes on payroll.	Demand subsidies.
Department resources (discretionary)	Revenues from taxes on notary services and other departmental taxes. Sale of services by Health Secretariats. Credit.	Earmarked for demand subsidies and infrastructure.
Own municipal resources (discretionary)	Revenues from municipal taxes. 15% of resources from oil (<i>regalias</i>).	Earmarked for demand subsidies and infrastructure. Permanent.
Private agents	Discretionary contributions from guilds and worker associations (e.g., coffee growers).	Co-finance demand subsidies.

Source: World Bank, based on Law 715 and Law 1122.

4.15 The resources are to be spent for the following purposes:⁴⁷

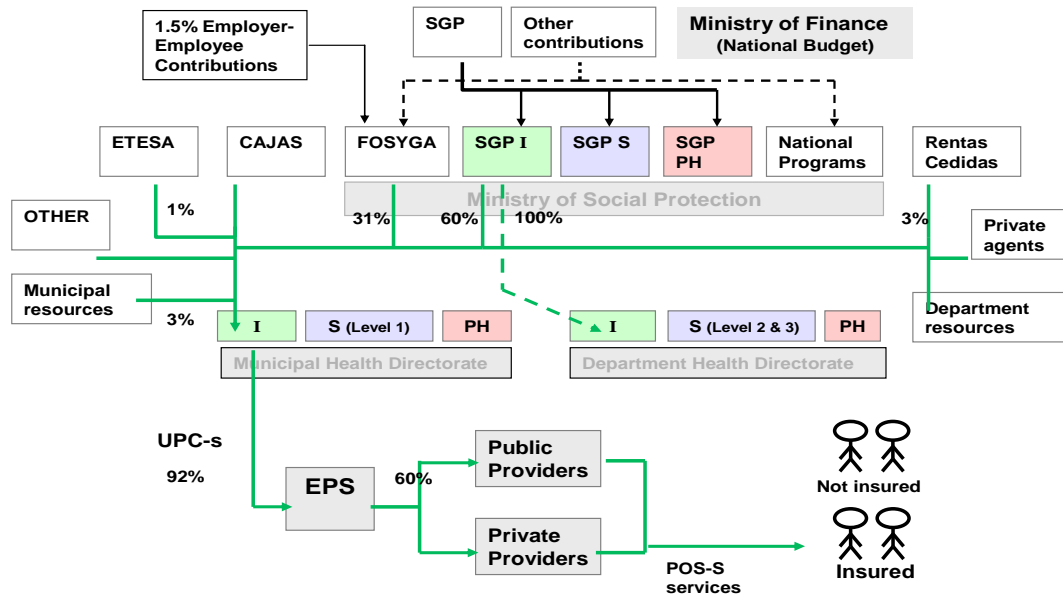
- **Subsidized Regime (“demand subsidies”):** Co-financing of insurance in the SR;
- **Delivery of Services to the uninsured poor population (“supply subsidies”):** Provision of health services not covered by the SR health plan and services or for the poor uninsured, poor population (supply subsidies).
- **Provision of public health interventions:** each subnational government prepares their own public health plan according to priorities established by the Ministry of Social Protection.

4.16 (i) **Subsidized Regime (“demand subsidies”).** The distribution of this component is now made according to a formula and has the objective to continue financing the population already in the SR and provide new resources to expand coverage to those still uninsured

47. The allocation level, percent distribution of resources by level, and criteria to determine the amount to be allocated by each purpose are summarized in the Health Annex.

(Figure 4.2). In other words, it allocates resources to those departments that have a high gap to achieve full coverage under the subsidized regime. For the population already enrolled in the subsidized regime, the entities received the same amount of the previous year adjusted for inflation.⁴⁸

Figure 4.2 Flow of Funds for Services to the Subsidized Regime (“demand subsidies”)



Source: World Bank.

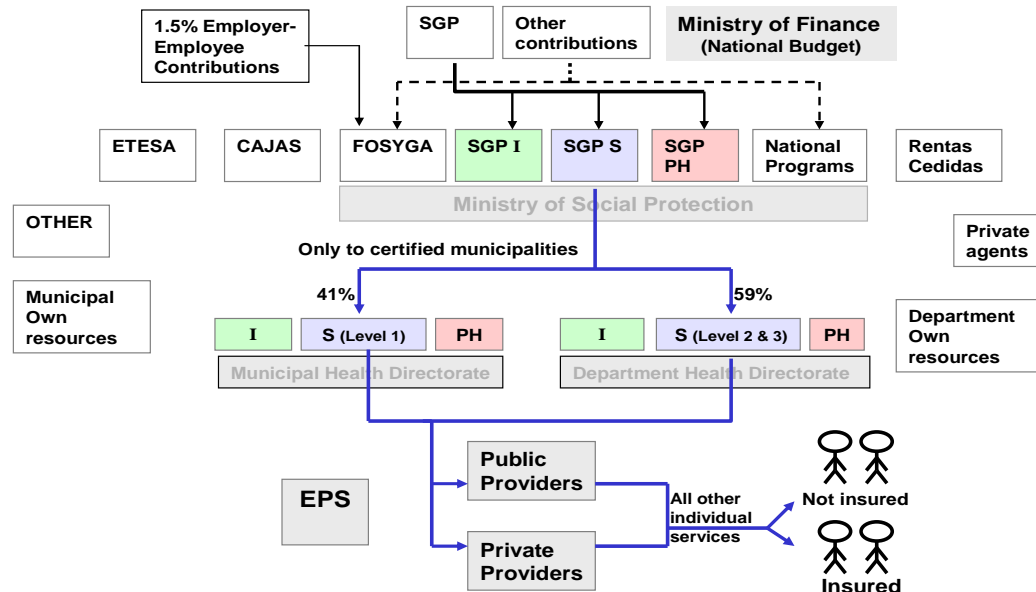
4.17 In early 2007 the government enacted Law 1122, which changed the workings of this component so that now the subsidized regime is no longer decomposed into two subgroups, but its size has increased substantially. In 2007, 56 percent of SGP-Health will be distributed to this component; in 2008, 61 percent; and from 2009 on, 65 percent. The entities will then receive the same amount of resources per individual enrolled in the subsidized regime. The *Fondo de Solidaridad y Garantía* (FOSYGA) will pay the extra resources for expanding the subsidized regime while continuing funding coverage for the enrolled population.

4.18 (ii) **Delivery of Services to the uninsured poor population (“supply subsidies”)** (Figure 4.3). Up to 2006, entities received the same amount that they received in the previous year, adjusted for inflation. In 2006, this component represented about 40 percent of the SGP health. The first step in the distribution of this component is to estimate the number of poor and uninsured population. To do this, the Department of National Planning, (*Departamento Nacional de Planeación*, DNP) uses the SISBEN survey, and for the population under SISBEN I-III they remove the population that is insured. Once the poor uninsured population is estimated by each entity, DNP adjusts those figures based on population dispersion and the

48. Up to 2006 this component was divided into two subgroups: (a) expansion of the subsidized regime, and (b) the continuation of the people enrolled under the subsidized regime. This component represented about 50 percent of the SGP-Health. The transfers that paid for the expansion of the subsidized regime were the residuals of all the resources of SGP-Health, which was a substantial amount since all the increases of the SGP were allocated to this part.

services not covered by the insurance. Afterward, DNP estimates the total adjusted population and distributes the same amount of resources to each entity in per capita terms.

Figure 4.3 Flow of Funds for Services to the Uninsured Poor Population (“supply subsidies”)



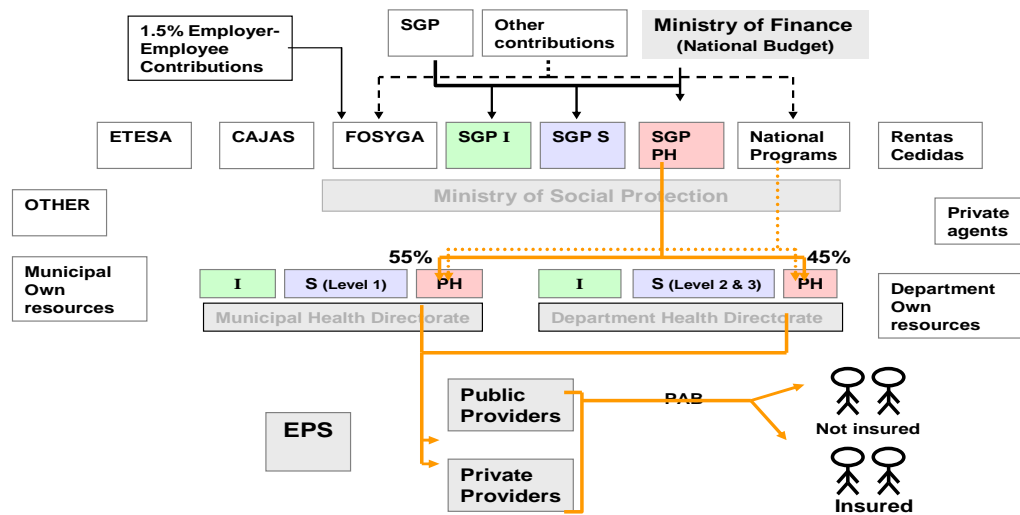
Source: World Bank.

4.19 (iii) Public Health. Regarding a transfer in public health (Figure 4.4), up to 2006, entities received the same amount that they received in the previous year, adjusted for inflation. In 2006, this component represented about 10 percent of the SGP-Health.⁴⁹ This component is distributed to the entities according to three criteria:

- 40 percent for “population to serve”;
- 50 percent based on each of these five factors: poverty, risk for dengue, risk for malaria, population to be vaccinated and access;
- 10 percent for administrative efficiency; 40 percent of this component is distributed according to population served, which is the share of the population in that entity; 50 percent of this component is distributed based on equity measures; and 10 percent based on administrative efficiency.

49. According to Law 1122 of 2007, the size of this component will be decided by the Ministry of Social Protection. For 2007, the ministry decided to allocate the same amount of resources distributed in 2006, but adjusted for inflation.

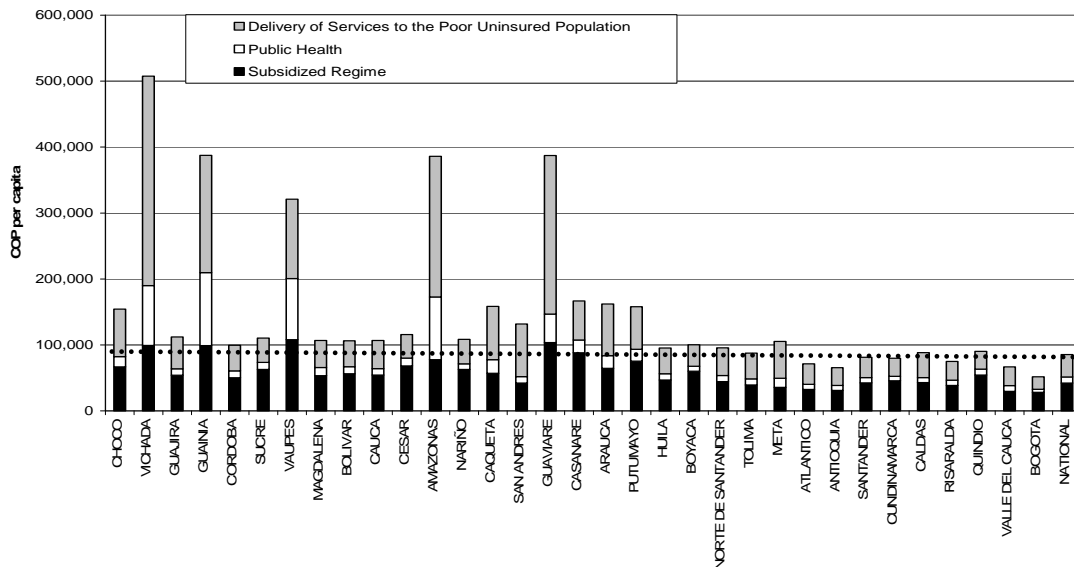
Figure 4.4 Flow of Funds for Public Health



Source: World Bank.

4.20 The SGP of the health sector—the three transfers taken together and described above—is distributed fairly equally in per capita terms (Figure 4.5). Most of the variation comes from the high cost of providing the service where population dispersion is quite high. Similar to education, some departments with a low unsatisfied necessities index (NBI) receive less resources in per capita terms than the national average; however, poor departments are not penalized and receive at least the national average.

Figure 4.5 Distribution of SGP in Health Per Capita, 2006



Note: Differences in per capita levels are partially explained by high population dispersion in some areas as well as higher cost.

Source: Bank staff calculations based on DNP and DANE data. The departments are ranked according to the unsatisfied necessities index (NBI), and the poorest department is the one in the left-hand side.

3. Efficiency Levels of Subnational Governments

4.21 This section assesses how efficient subnational governments are in the use of existing resources within the intergovernmental system. Based on the DNP methodology for measuring efficiency (DNP 2005b) and data for 2006 (Table 4.4), regression analysis was performed in order to highlight the determinants for efficiency in the use of resources. Analysis covers two outputs: (a) coverage in the subsidized regime, one of the current reform goals of the government; (b) immunization, reflecting basic management capabilities.⁵⁰ While there are quite a large number of municipalities with relatively good performance in enrolling people into the health regime, the DNP data also highlight basic management deficiencies: in immunization more than half of the municipalities are achieving less than 50 percent of the outcomes of the best comparable municipalities. On the other hand, a municipality efficient in the affiliation to the subsidized regime is not necessarily efficient in the provision of vaccinations (and vice versa).

Table 4.4 The DNP Model for Measuring Health Efficiency

Health	Coverage	Total Number of affiliates to the subsidized regime	<ul style="list-style-type: none"> • Investment in the subsidized regime • Payroll of personnel in the subsidized regime
	Managerial Skills	Number of vaccinated children for MRM (measles, rubella and mumps)	<ul style="list-style-type: none"> • Total public investment in the immunization program • Number of vaccine doses provided by the central government

4.22 Similar to education, health outcomes are both influenced by structural factors (conditions that can hardly be changed through policy) as well as institutional and fiscal factors (altered or influenced more easily through central government policies).

4.23 **Structural factors.** Regional differences do explain health outcomes. This is true both for enrollment into the subsidized regime as well as for vaccination. However, the following differences are worthwhile noting:

- The Andean (highland) region (dummy variable) has better performance with regards enrollment into the subsidized regime compared to other regions.
- In providing MRM vaccinations, a municipality in the Llanos Orientales, Pacific or Atlantic region is performing better on average.

4.24 It is worthwhile noting that, contrary to common thought, population size does not matter much for influencing efficiency in health outcomes. This is surprising, since health services are usually affected by economies of scale.

4.25 **Institutional and fiscal factors.** The SGP transfers have no impact on the efficiency in the health sector. In other words, a higher increase in earmarked SGP transfers does not lead to a higher affiliation to the subsidized regime and to a higher number of MRM immunization participants. This casts doubt on the current policy which is built on the assumption that increasing transfers will lead to more enrollment and better services.

4.26 Similar to education, departmental transfers to municipalities are problematic as they do in fact have a negative impact on enrollment into the subsidized regime.

50. Annex 6 (Volume II) on Efficiency Analysis provides further details.

4.27 However, there is a difference to the education sector with regards to the use of tax revenue. The amount of tax revenue allocated towards health expenditures leads on average to more enrollment into the subsidized regime. In other words, tax revenue-rich municipalities have a slightly higher efficiency than those with only low levels of tax revenue. This might be related to fiscal capacity and levels of income, but further data development is necessary to corroborate this finding.

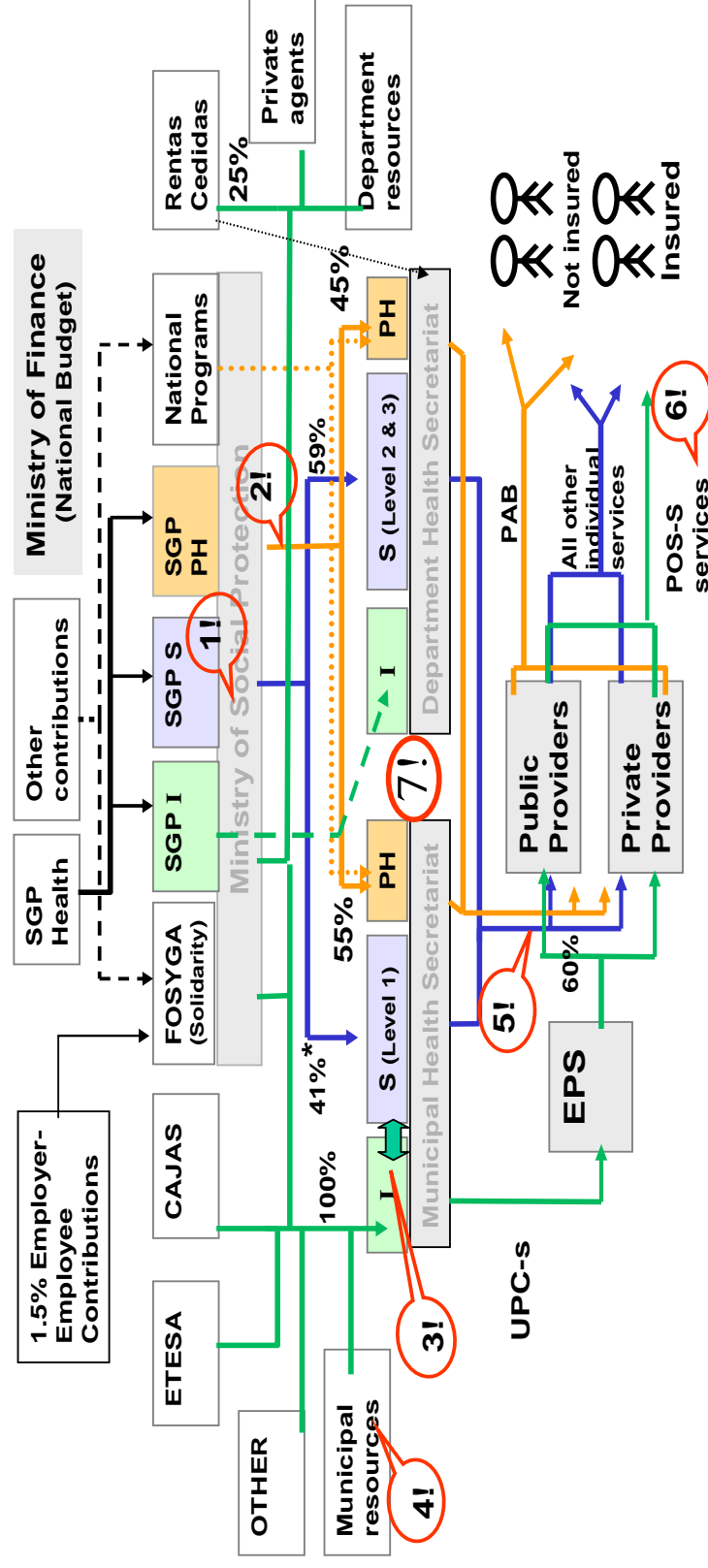
4.28 These findings underscore the need to further reflect on the current institutional arrangements and related incentive problems. The next section will provide further analysis in this regard.

4. Drivers of Inefficiency and Incentive Problems

4.29 The efficiency analysis demonstrated that fiscal and institutional arrangements among levels of government matter to explain the level of efficiency. In order to provide further evidence, this section traces the flow of funds (see Figure 4.6) among levels of government to the frontline providers. It then discusses the incentive problems⁵¹ that constrain the efficient use of resources in each of these areas: from the national level to subnational levels; resource management within departments and municipalities; and flow of funds from subnational governments to frontline providers (hospitals, insurers).

51. Incentive problems that can potentially impede the efficient use of resources allocated for each purpose are identified by the exclamation bubbles in the corresponding figure.

Figure 4.6 Flow of Funds of the Current Health System by SGP Purposes



Notes: the percentages indicate the proportion of each funding source that is allocated by law to the accounts for each of the SGP purposes: I=insurance, PH=supply subsidies, PH=Public health

* Only certified municipalities receive these funds directly

Explanation: Following the arrows from top to bottom, funds from the National Budget are distributed by the Ministry of Finance to the Ministry of Social Protection, which in turn distributes them to the Health Secretariats of Departments (DHS), Municipalities (MHS), and Districts (Districts manage the totality of resources), which have separate accounts for each SGP purpose. Funds from ETESA and Rentas Ceditas reach HS of Municipalities and Departments directly from the source. The Department of Finance at the subnational levels distributes the funds from own resources allocated to the HS. Funds from co-financing agreements among subnational governments and private agents also reach the HS according to the terms negotiated by each agreement.

4.1. Flow of Funds from the National Government to Departments and Municipalities

Incentive Problem 1. Supply and demand mismatches

4.30 The growth in supply resources resulting from the reforms favored an increase in the number of first-level providers. As of December 2004, out of a total of 1,008 public hospitals 84 percent were first-level providers. Of these, 69 percent operated under the jurisdiction of municipalities and 29 percent under departments. There are indications that this increase could have surpassed the levels of demand for these services, as shown by the low occupational levels and bed turnover rates (BTR) of first-level providers between 2002 and 2004, shown in Table 4.5 (in this sample, more than three-fourths of all providers had occupational levels less than 50 percent). In contrast, second- and third-level providers seem to be operating at full capacity.

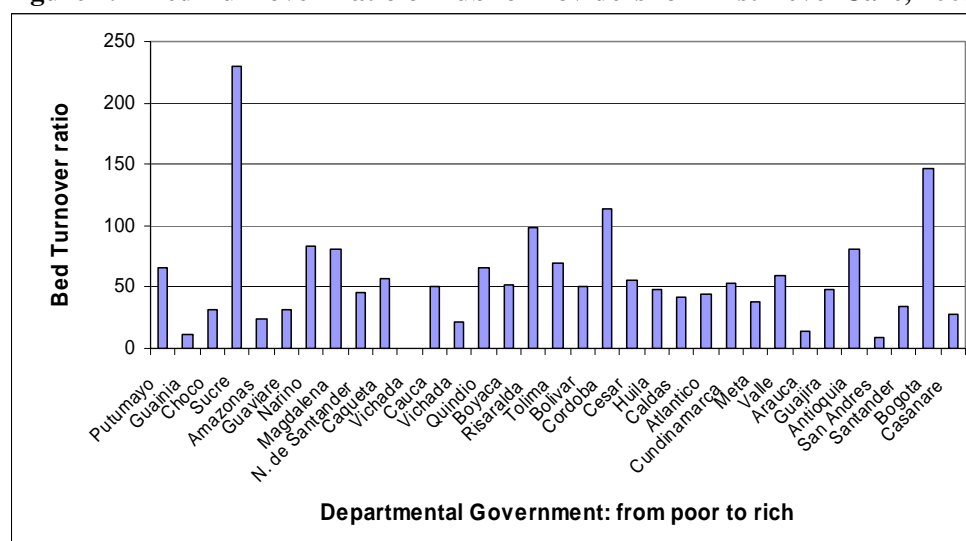
Table 4.5 Occupation Level and Bed Turnover Rates of Public Providers, 2002–04

Level	Indicator	Year		
		2002	2003	2004
First	Percent occupation	34.5%	33.8%	37.8 %
	Bed turnover rate	53.5%	57.35	63.2%
Second	Percent occupation	65.8%	68%	73.5%
	Bed turnover rate	76.7%	71.4%	75.0%
Third	Percent occupation	87.0%	87.0%	84.6%
	Bed turnover rate	66.2%	67.7%	58.4%

Source: Dirección General de Calidad de Servicios, MPS.

4.31 On the other hand, data available for 2005 show that the median Bed Turnover Rate for first level care was roughly 48 percent. As can be observed in Figure 4.7 below, low levels of bed turnovers can be observed both for poor and rich departments.

Figure 4.7 Bed Turnover Ratio of Public Providers for First Level Care, 2005



Source: World Bank calculation, based on data provided by MPS.

4.32 The allocation formulas for supply subsidies have generated an incentive for the development of primary-level services under the rationale that this is where the majority of

health problems of the population are resolved. Although this could have been a reasonable objective, there is a risk that rigid earmarking rules lead to an oversupply of services. As insurance coverage increases there will be less need to allocate supply subsidies to this level of services, given that most of it can be financed by insurance contracts. However, there is no automatic and direct link between the rates of insurance expansion with the SGP formula. In the presence of the unequal insurance coverage ratios in the different jurisdictions, the fixed formulas of the SGP generate the risk of either over-supply or under-supply of resources. Another reason for the current level of over-supply is that there might be an incentive to provide primary care because in that way the hospital could get a contract with insurers in the SR on top of the supply-side subsidy.

Incentive Problem 2: Fragmentation of resources and responsibilities in public health

4.33 Many public health interventions require large-scale actions and investments to be effective, as is the case of vector-borne diseases. Resources need to be pooled and individual efforts articulated. Under the scheme of Law 100 and Law 715, public health responsibilities directed toward collective actions (the *Plan de Atención Básica* [PAB]) pertain to the national and subnational government level and interventions toward individuals pertain to insurers, and resources are assigned accordingly. In practice, however, public health investments are limited and fragmented among a large number of actors, losing the advantage of economy of scale.

4.34 In all countries, externalities in public health interventions provide an incentive for subnational governments to act as free riders or to shift the cost of non-action to other levels. This incentive seems to be particularly strong in Colombia because health functions are still not clearly articulated: there is consequently no direct cost implied in the no-action in terms of public health for the individual level of government. In addition, allocation of a fixed percent of total SGP to public health provides a signal to subnational governments that this is the adequate level of investment (although the formula correctly rewards performance, for instance for immunization coverage).

4.2. Resource Management within Departmental Governments and Municipalities

Incentive Problem 3. Competing interests—overlaps in financing, provision, and oversight functions

4.35 According to Law 715, the Municipality is simultaneously a financing agent for SR insurance and a provider of health services through its own first-level public facilities. Additional insurance coverage can be reached by reallocating resources for supply subsidies to demand subsidies, but to the extent that public facilities are a source of political power, the Municipality will be reluctant to reduce the supply budget. Furthermore, local governments are judge and jury of their own actions, as monitoring and oversight of SR processes and provision of services is included among their competences. These conflicts also exist at the Department level with respect to decisions to co-finance insurance expansions by transforming supply subsidies for Level 2 and 3 public providers.

Incentive Problem 4. Disincentives for own fiscal effort to complement national financing

4.36 The sources of financing for the SR have been changing, largely as a result of gradual replacement of resources coming from solidarity contributions by resources from national transfers, which reached 56 percent of total resources for demand subsidies in 2005 (see Table 4.6). Local resources allocated to demand subsidies have been increasing, and represented almost 9 percent of total sources of funding in 2005. A share of FOSYGA resources to finance larger insurance expansions can be granted as matching funds for subnational government own resources.⁵² Overall, however, local contributions to centrally financed expenditures are too limited for accountability and efficient spending to materialize.

Table 4.6 Sources of Funding as Percent of Total Resources for the SR, 1995–2005

Source	1995	1996	1997	1998	1999	2000	2001	2002	2003	2005
FOSYGA	85.7	63.1	46.7	51.3	38.0	34.6	36.0	29.4	31.70	34.40
National transfers	14.3	36.9	44.0	37.2	50.0	51.9	51.0	67.9	62.0	56.3
Local resources	n.d.	n.d.	3.8	4.5	3.9	5.1	3.0	2.0	4.2	8.8
Without taxes	n.d.	n.d.	1.8	2.2	3.4	2.1	9.0	n.d.	n.d.	n.d.
Cajas	n.d.	n.d.	3.7	4.8	4.8	6.2	2.0	0.6	1.8	0.5

Note: n.d. = No data. Local resources do not include administrative expenditures.

Source: GES (2006).

4.37 Current arrangements may create disincentives for local efforts. SGP resources for insurance are guaranteed to finance continuity of existing enrollment plus gradual yearly expansions in Municipalities with the largest insurance gaps. The compensation mechanism of the SGP transfer signals to subnational governments that regardless of effort, sooner or later the national government will assume financing insurance expenditures. In addition, several rules regarding earmarking and minimum allocations for other sources of funding (*rentas cedidas*, sin taxes, and so forth), implicitly signal to local officials that it is just this amount that is expected from them to co-finance health expenditures.

4.38 Another disincentive to subnational own effort is related to Law 1122. Before this law, matching funds from FOSYGA provided an incentive to higher levels of subnational government contributions since it was established that after a period, FOSYGA would assume full financing of the expansions carried out through these efforts. Recently, Law 1122 established that own resources assigned to demand subsidies will be permanently earmarked for this purpose. This may further deter the effort of subnational governments due to fear of losing flexibility in the management of their own revenues.

4.3. Flow of Funds from Departments and Municipalities to Frontline Providers

Incentive Problem 5. Isolation of public hospitals from market forces

4.39 The reforms' rationale for greater hospital autonomy and the introduction of market forces was to improve public hospital efficiency and financial sustainability through the sale of

52. The percent contribution of subnational own resources motivated six Departments (Antioquia, Arauca, Casanare, Cesar, Huila, and La Guajira) in 2006 to mobilize available oil revenues and other resources to co-finance massive SR insurance expansion strategies (about a total of 1.6 million new enrollees).

services. Since implementation of the reform, the hospital deficit has been decreasing in aggregate yet this efforts still needs to continue and consolidate.

4.40 One of the major incentive problems which still constrain efficiency is that public hospitals are isolated from market forces through regulations requiring minimum or preferential contracting on the part of insurers, and more recently on the part of departments.⁵³ This is further reinforced by soft budget constraints generated by permanent availability of supply SGP resources; and the lack of incentives for subnational governments to both establish as well as enforce sanctions regarding poor hospital performance. In other words, there is a public provision monopoly with negative consequences for efficiency. Clearly however, in some jurisdictions there are structural problems for competition to be effective, creating a monopsonistic market structure between insurers and purchasers of services.

Incentive Problem 6. Benefit design

4.41 Even if full health insurance of the population eligible for subsidies is reached, public providers have the responsibility of filling the gaps in the breadth of coverage of the SR benefits package, which are centered mostly around second-level and some third-level services not included in the benefit package for the RS. Departments have been filling the gaps.

4.42 Departments often cannot resist the pressure from the population to fill the gaps with additional health services while supply subsidies are still in place at this level. This is mainly an incentive problem existing during the transition while these subsidies are phased out.

Incentive Problem 7: Transparency and institutional capacity

4.43 There is evidence that deficiencies in subnational government managerial capacity create opportunities for corruption. Results from audits of SR resource management carried out by the General Comptroller (*Contraloría General de la Nación*) in a sample of 120 municipalities between 2003 and 2004 show management problems in more than half the municipalities in contracting, administrative, treasury, and information processes (see Table 4.7). This leads to significant inefficiencies in the use of resources.

53. Recent legal changes (Law 1122 from 2007) restrict the number of contracts of health plans with their own health care providers to 30 percent of total health expenditures; requires the Administradoras del Régimen Subsidiado (ARS) to contract with the public network 60 percent of Unidad de Pago por Capitación (UPC); and requires ARS to favor the public network in contracts for health promotion and prevention activities.

Table 4.7 Percent Municipalities with Problems in Management of SR Resources, 2003–04

Problem Area	Description
Contracting (68%)	<ul style="list-style-type: none"> • Unsettled contracts (52%) • Lack of oversight and follow-up of contracts (33%) • Irregularities in contracting processes (42%)
Administrative processes (77%)	<ul style="list-style-type: none"> • Archive (49%) • Internal control (46%) • Accounting reports (44%)
Treasury and budget (78%)	<ul style="list-style-type: none"> • Delay in payments to ARS (29%) • Resources in checking accounts (19%) • No separation of accounts (13%) • Seizure of accounts (14%)
Information systems (50%)	<ul style="list-style-type: none"> • Duplications in enrollment data (50%) • Errors and inconsistencies in SISBEN and SR enrollment databases (27%)

Source: Contraloría General de la Nación (2005).

4.44 Some of these irregularities yield financial opportunities to the different agents involved: municipalities, insurers, and hospitals. On the other hand, effective control and oversight is very costly for the central government in the roughly 1,100 municipalities. Possibilities for monitoring are limited. Sanctions, if spelled out, are often not credible in environments with high informality.

5. Case Studies and Lessons Learned

4.45 The case studies are attempted to illustrate how the incentive problems described above play out in practice; and how departments with different fiscal and institutional capacities are dealing with them. The following are the most important lessons learned from the case studies of Antioquia, Bolívar and Nariño.

Lesson One: The service delivery chain between subnational governments and frontline providers (hospitals) remains the most critical one and is affected by low levels of transparency.

4.46 The departmental cases illustrate that the department/municipality relation with frontline providers remains the most critical in the whole service delivery chain. This becomes apparent in (a) low municipal performance, (b) weak capacity of public providers, and (c) information gaps related to insurers.

4.47 **Low municipal performance is an obstacle for service delivery while “de-certification” has been applied in some cases and is an effective means to protect service quality.** In the three departments, weaknesses in municipal capacity to assume the competences established by Law 715 with respect to insurance processes—with regard to information and enrollment databases—have been limiting factors for service delivery. In some cases, poorly performing municipalities have been “de-certified” on behalf of departments: both Nariño and Bolívar have “de-certified” a number of municipalities after evaluating their institutional

capacity. In practice, this implies that the department has taken over management of SGP resources allocated to the supply of first level services. This illustrates clearly that municipalities are not in all jurisdictions effective institutions, but also that sanctions can be effectively enforced at the local level. However, it also adds to the complexity of the roles to be fulfilled by the department in the future.

4.48 The capacity of the public network to meet the demand implied in insurance expansions may not be available. In the three departments, Departmental Health Secretariat (DHS) staff expressed concern regarding the capacity of the public network to meet the increases in demand brought about by insurance expansions, in particular for second- and third-level services. However, on the other hand, there seems to be resistance to contracting with the private sector to supplement deficiencies in the public network. In Bolívar, the situation regarding public hospitals is particularly critical (Box 4.1).

Box 4.1 Supply Constraints of the Public Health Network: The Case of Bolívar

According to a DSH report, as of 2007, 18 out of 44 first-level hospitals and 5 out of 6 second-level hospitals are in financial deficit, despite the fact that 4 participated in national hospital restructuring programs in the past. The Department's only third-level hospital was closed in 2003 and re-opened in 2006 as a new hospital operating under a scheme with a mix of public-private capital and management.

Among the factors related to the public network's financial problem are low institutional capacity for sale of services and billing, increasing debt to personnel, and demand and supply mismatches due to an unrestricted expansion of first-level institutions. For example, the range of ambulatory consultations varies between 1 and 9.9 consultations per inhabitant per year among municipalities.

Bolívar's public network also faces problems due to deteriorated and outdated infrastructure. Several second-level hospitals are providing first-level services due to deficiencies in the primary network. In addition, problems with the flow of resources from financing agents (municipalities and insurers) to providers were mentioned during interviews with Bolívar's DHS staff. For example, there are cases in which accounts for payments to hospitals have been frozen due to municipal bankruptcy.

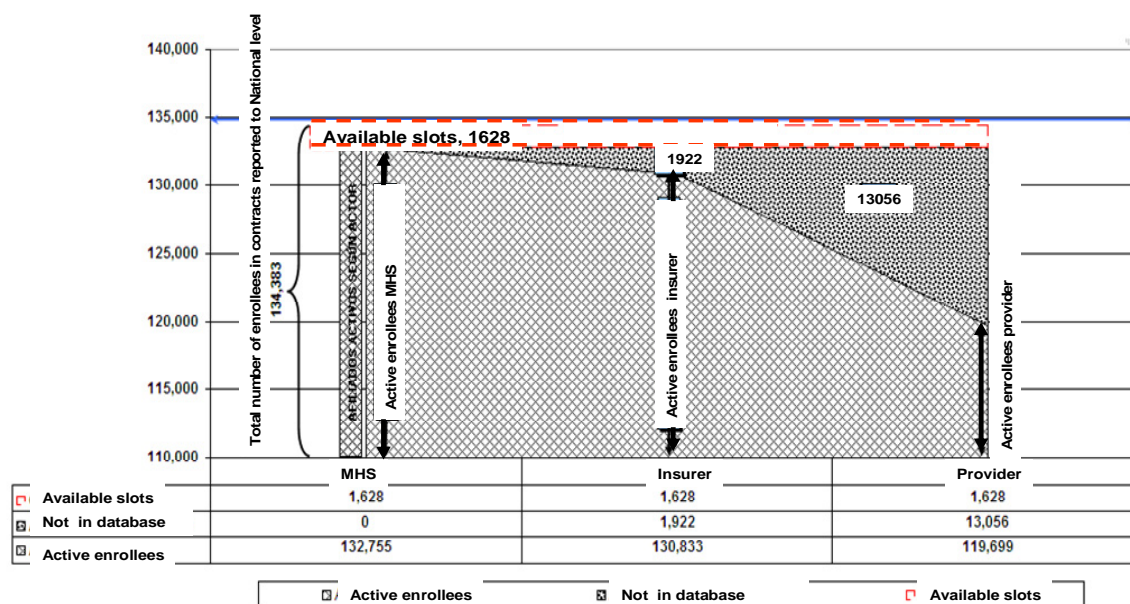
Source: World Bank.

4.49 The information gaps among municipalities, insurers, and providers are an obstacle for better resource use. Reliable and accurate municipal enrollment databases are key for the efficient management of Subsidized Regime (SR) resources, given that based on their information, resources from the national level are allocated to municipalities. The municipality establishes contracts with insurers, which in turn contract with providers who will render services by verifying enrollment status. The cases illustrate that the following are key problems with regard to insurers:

- Inconsistencies in enrollment databases between municipalities, insurers, and providers.
- Noncompliance with rules and regulations regarding municipal oversight of contracts with insurers and limited allocation of resources for this purpose.
- Delays in the flow of resources from municipalities to insurers and insurers to providers.
- Unsatisfactory performance of insurers with regard to indicators of coverage and volume of standards of services.
- Poor knowledge of rights and obligations with respect to health insurance on part of the population.

4.50 All departments reported these as limiting factors to better structuring of the service delivery chain to frontline providers. The information gaps among municipalities, insurers, and providers were particularly evident in Antioquia (Figure 4.8).

Figure 4.8 Number of Participants in the Subsidized Regime According to Different Databases in Sample of Municipalities in Antioquia, 2006



Population in contracts = Number of enrollees in contracts between municipalities and insurers.

Active enrollees = Population that has completed the paperwork for enrollment.

Available slots = Available enrollment slots in a contract that need to be allocated to individuals.

Enrollees not in database = Enrollees in excess or deficit with respect to municipal database.

Source: Secretaria Seccional de Salud de Antioquia (2006).

Lesson Two: There are opportunities for quick gains in achieving higher levels of transparency for better resource use in the service delivery chain among subnational governments with insurers and service providers. Achieving minimum levels of accountability among municipalities and hospitals is possible even in the poorest departments.

4.51 **Basic performance indicators as a base for accountability for hospitals.** Some departments have—at the margin of the centralized management—initiated a more results-based system: both Antioquia and Nariño reported allocating resources to providers based on a combination of criteria related to billing of services, historical costs, and performance indicators. For example, Nariño applies a formula that includes an efficiency indicator for second- and third-level services⁵⁴:

54. Resolución 7205 in Nariño, 2004.

- Criteria to allocate resources for first-level services: billing (40 percent), historical expenditures (40 percent), poor and uninsured population in catchment area (20 percent).
- Criteria to allocate resources for second- and third-level services: billing (20 percent), historical expenditures (70 percent), efficiency (10 percent).

4.52 These cases illustrate that even in the poorest department there are possibilities to apply a minimum performance-based management. On the other hand, it is clear that it is still too early to judge the final impact of these new allocation criteria.

4.53 **Achieving quick gains in transparency: Closing the insurance enrollment information gap between Ministry of Social Protection insurers and providers—the case of nine municipalities in Antioquia.** These municipalities faced the problem of inconsistencies in databases: out of 134,383 total slots for the SR, 132,755 appeared as active enrollees, 130,833 according to insurers (difference of 1,922), and 119,699 according to the respective insurer provider network (difference of 13,056). By verifying the database, these information gaps were closed within a year's time, contributing significantly to better resource use, and ultimately also improving the information flow to the central government as a base for calculating transfers.

Lesson Three: Decisionmaking space for subnational governments on budgetary allocations is highly constrained. The only budget space that can be effectively used more autonomously is through human resources reform, but that depends critically on the willingness of the subnational government as well as availability of further central support in order to be implemented.

4.54 **Achieving more decisionmaking space through reform of human resources.** The case of Antioquia illustrates that reforming rigid payroll structure is only one of the few opportunities that departments have to create more budget space that is not regulated by the central government. In contrast, raising more tax revenue from *rentas cedidas* will always be subject to an earmarking of 100 percent.

4.55 Among the *Empresas Sociales del Estado*'s (ESEs) overseen by Antioquia's certified municipalities, the data reveal a nearly 5 percent reduction (from 59.2 percent to 54.6 percent) in the share of personnel expenditure within overall hospital expenditures between 2002 and 2005. As Table 4.8 shows, there are far fewer department hospitals (7) and ESEs overseen by non-certified municipalities (4), so the results should be treated with caution. Still, the trend is the same: a reduction of more than 12 percent in the wage bill share of hospital expenditure (from 49.8 percent to 37.7 percent) among departmental ESEs, and a fall of nearly 15 percent (from 72.6 percent to 57.8 percent) among the ESEs of non-certified hospitals.

Table 4.8 Personnel Expenditure Trends in Antioquia ESE Hospitals, 2002–05

ESE	Revenues	Expenditures	Personnel Expenditure as % of Total Expenditure		Indirect Personnel Exp. As % of Total Personnel Expenditure*	
	%Δ 2002/05	%Δ 2002/05	2002	2005	2002	2005
Certified municipality (N = 129)						
Mean	42.7%	36.1%	59.2%	54.6%	13.2%	22.0%
Maximum	488.9%	189.7%	77.3%	69.3%	50.6%	73.7%
Minimum	-19.0%	-32.8%	35.0%	22.7%	1.2%	2.8%
Department (N = 7)						
Mean	48.9%	41.0%	49.8%	37.7%	19.1%	39.8%
Maximum	89.6%	75.8%	74.4%	54.5%	36.4%	78.1%
Minimum	-11.2%	1.3%	31.8%	24.9%	5.4%	9.2%
Non-certified municipality (N = 4)						
Mean	80.3%	47.3%	72.6%	57.8%	11.7%	24.3%
Maximum	121.1%	104.7%	98.7%	67.7%	24.6%	61.5%
Minimum	42.3%	9.2%	61.3%	50.1%	2.5%	7.1%

* “Indirect” expenditure may include contract employment with individuals, contracts with a company providing health sector personnel, and/or individual payment for an event (for example, surgery).

Source: World Bank calculation based on information provided by Secretaria Seccional de Salud de Antioquia (2006).

4.56 In parallel with this overall reduction in the wage bill as a share of total expenditure, there is an evident *increase* in the use of “indirect” personnel by hospitals in Antioquia. On average, indirect personnel expenditures grew from 13 percent of the wage bill in 2002 to 22 percent in 2005. At the high end, indirect expenditures in 2005 reached 74 percent of expenditure in one certified municipality ESE.⁵⁵

4.57 There is likely a cause-and-effect relationship between the shift to “indirect” employment and the overall reduction in hospital wage bills as a share of total hospital expenditures in Antioquia. However, a detailed analysis of the hospital Staffing Plans would be required to confirm this cause-and-effect relationship.⁵⁶

4.58 In addition, these cases also demonstrate that human resource reform remains an important reform in order to create the conditions necessary for hospitals to compete and adjust their cost structure. This is a challenge that is still not properly addressed in Bolívar. On the other

55. Once again, the trend among ESEs pertaining to the Department and ESEs in non-certified municipalities is the same as that witnessed in certified municipalities. From 2002 to 2005 the share of indirect expenditures in the wage bill rose from 19 percent to 40 percent in Departmental ESEs, and from 12 percent to 24 percent, on average, in the four ESEs belonging to non-certified municipalities.

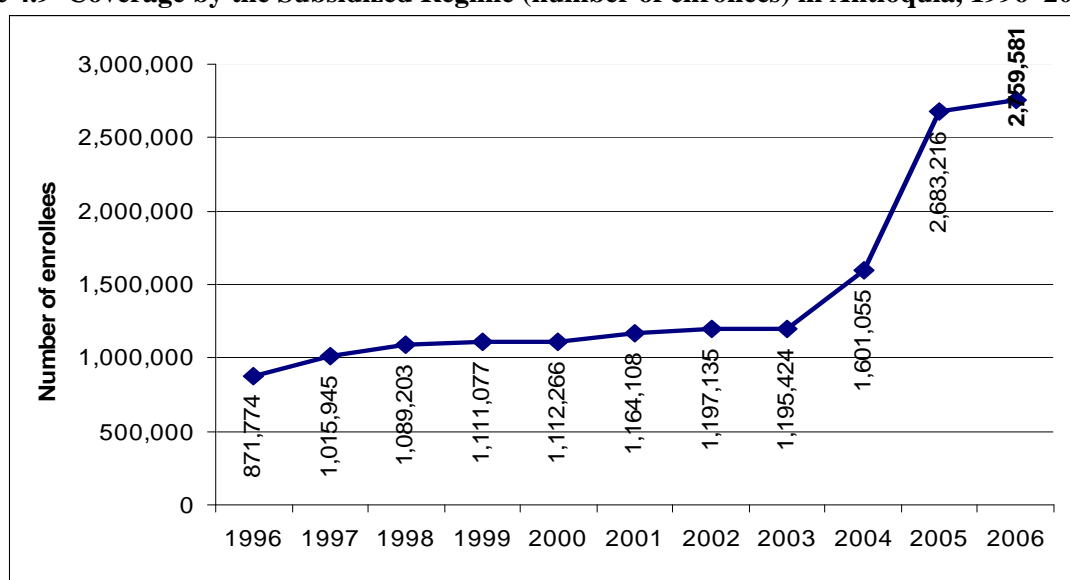
56. Officials with the MPS confirm that this trend toward “indirect” employment is not limited to Antioquia, but is rather a common phenomenon nationally. The greater flexibility (decisionmaking space) that these employment mechanisms offer to hospital directors and the ESE Management Committees (Juntas Directivas) is a positive development, when properly used. There are cases, however, where this flexibility has been abused in ways that do not improve the efficiency or quality of service. For this reason, the MPS is currently developing a set of recommended standards for a planta básica (core staff complement) for ESEs. The presumption is that planta básica posts should be filled with career employees, not contract staff. Meanwhile, common services (for example, food services, laundry), and highly specialized professional health services (for example, pediatric oncology), would be more appropriate candidates to consider contract employment as a complement to the ESE’s planta básica.

hand, the case of Antioquia highlights that a gradual human resource reform is possible and creates important conditions for better resource management in hospitals. Finally, further central government support for human resource management is necessary to cover the additional cost.

Lesson Four: Clear and coordinated expenditure priorities among levels of government can contribute to better resource use and an increase in coverage.

4.59 **Achieving higher coverage through establishing clear expenditure priorities.** The case of Antioquia clearly illustrates that, at the margin of a centralized health system, the departments and municipalities can achieve higher coverage in health if they establish clear expenditure priorities. Based on their action plan and commitment to assume stewardship in health, authorities decided several years ago to direct resources toward full health insurance coverage of the Subsidized Regime. This was achieved through a combination of transformation of supply subsidies and co-financing of national resources with departmental and municipal resources (Figure 4.9).

Figure 4.9 Coverage by the Subsidized Regime (number of enrollees) in Antioquia, 1996–2006



Source: Department of Antioquia (2006).

Lesson Five: Transfers still need to improve but are not the only tool for structuring incentives at the local level. They need to be reformed in line with the service delivery chain to frontline providers.

4.60 **Improving transfers starts at the local level.** The case studies clearly demonstrate that the lack of transparency in the service delivery chain among municipalities, insurers, and hospitals affects the calculation of the transfer formula at the central level; on the other hand, once resources arrive at the departmental level these entities can do little in practice to improve the distribution in order to address the oversupply for first-level providers. National rules for

earmarking of expenditures are rigid and are usually applied throughout on the local level. Transfers need to improve allocation and distribution, but the service delivery chain also needs to be improved at the same time in order to guarantee a better information flow on which the amount of grants are finally calculated.

4.61 Regarding public health transfers, the three departments perceive that the allocation formulas do not adequately compensate for differences in the cost of providing public health interventions. This is particularly true for regions with geographic barriers to access or with violence problems. Nevertheless, both Antioquia and Nariño reported using departmental resources for public health to complement municipal needs. Antioquia does so giving priority to lines of action defined at the departmental level and that imply economies of scale, and also prioritizes allocating of resources to municipalities based on explicit need criteria. Although there is fragmentation of resource management regarding public health, some departments are taking action and strive to use revenue more efficiently, particularly when spending is coordinated with municipalities.

6. Conclusion

4.62 Despite the fact that the health system has been reformed quite substantially since 1993, the intergovernmental system still provides obstacles to achieve higher performance. There is evidence that not all subnational governments are equally efficient in the use of resources. Indeed, there are indications that many subnational governments are not producing the desired outputs with the existing resources. The relative efficiency levels of subnational governments are very heterogeneous. They are not always related to levels of income or fiscal capacity, contrary to common thought.

4.63 The institutional arrangements and corresponding incentives determine to large extent the level of performance. These obstacles appear on each level of government and in all stages of the resource flow from the national level to frontline providers.

- From the national level to subnational governments, the main efficiency problems are related to oversupply of first-level providers, while public health interventions are fragmented.
- On the other hand, resource management within subnational governments is inefficient due to unclear roles of municipalities and departments, and there are disincentives to increase own revenue contributions to finance health expenditures.
- The service delivery chain then is negatively affected by low levels of transparency.

4.64 The combined incentive effects behind these efficiency problems are mutually reinforcing. On balance, it seems that given the incentive problems described above, the increase in SGP seems to reward inefficiencies, rather than punishing low performers.

4.65 Further institutional reform is required in order to achieve better resource management and performance. Going forward the following are the key areas:

- There is the need to continue with hospital reform, starting with minimum conditions for accountability. The case of Nariño clearly illustrates that a more results-oriented management can develop.

- Human resource reform is a precondition for successful hospital reform, at the same time that it provides more budget space to departments and municipalities. The central government needs to continue supporting this reform process.
- Improve transfer system, particularly through better information flow.
- Both departments and municipalities would need to engage in higher coordination to better take advantage of scarce resources, while responsibilities are clearly separated.

Chapter 5. Road Sector

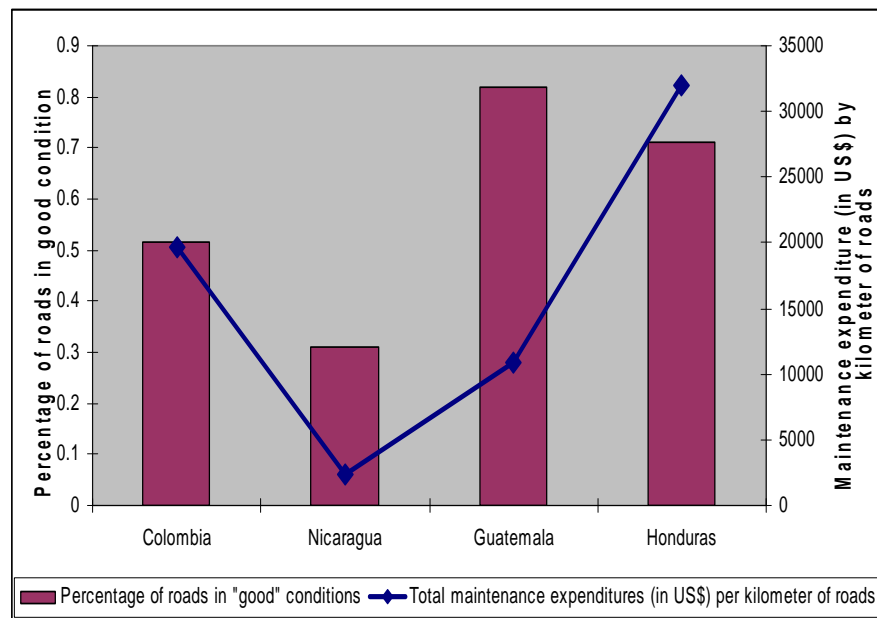
5.1 This Chapter discusses the intergovernmental arrangements in the road sector, the underlying incentive problems, and how they affect better use and management of resources. The discussion of these issues is important in order to improve the quality of roads, which is deficient in many departments and municipalities.

5.2 The Chapter is structured as follows: Section 1 presents the sector challenges. Section 2 describes the organization of the sector and responsibilities among levels of government. Section 3 assesses the levels of efficiency of subnational governments in the use of resources. Section 4 discusses the main incentive constraints that impede higher efficiency in resource use. Section 5 presents the main lessons learned from the case studies of Antioquia, Bolívar, and Nariño. Finally, Section 6 summarizes the main findings and conclusions.

1. Road Sector Challenges

5.3 In Colombia total public expenditures on road maintenance—including the national (primary roads), departmental (secondary roads) and municipal (tertiary roads) levels of government—are roughly US\$19,690 per kilometer of roads in average between years 2002 and 2005. This level of expenditures is higher than in Nicaragua (US\$2,340) and Guatemala

Figure 5.1 Road Network Quality and Maintenance Expenditure Levels



Source: For Nicaragua, Guatemala, Honduras: World Bank database (years 2004-2006). For Colombia: municipalities, departments, and DNP (years 2002-2005).⁵⁷

(US\$10,840), but lower than cases like Honduras (US\$32,000), which has lower levels of per capita income (Figure 5.1).⁵⁸ On the other hand, only roughly 50 percent of Colombia's roads are in good condition, a share substantially lower than in Guatemala or Honduras. International experience therefore suggests that higher expenditures, particularly for maintenance, have a positive impact on road quality in the long term. Deteriorating road conditions require very high additional expenditures in order to reach previous levels of service quality. In international

57. For Colombia the data were calculated as follows:

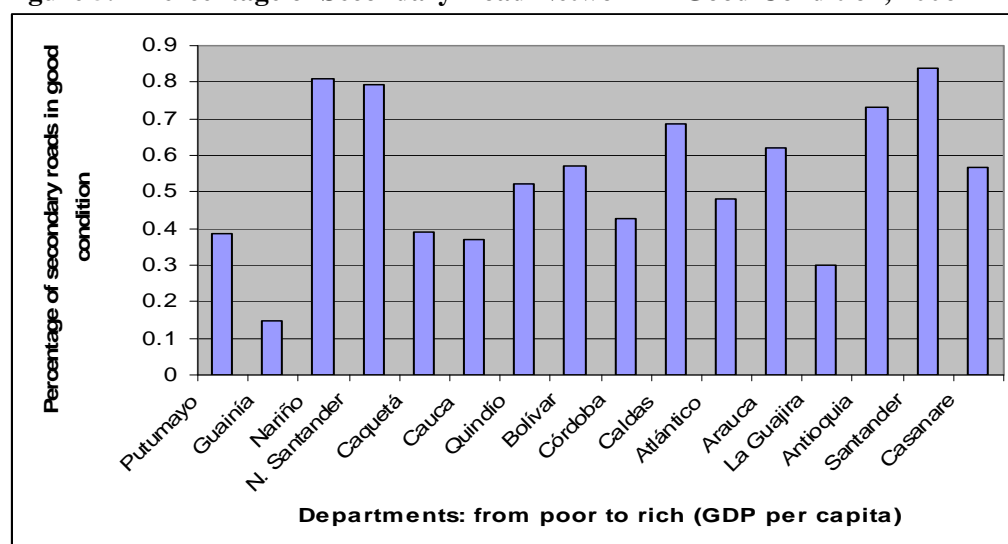
58. Cases of Nicaragua, Guatemala and Honduras covers the three-year average for years 2004-2006.

comparison it becomes clear that Colombia could certainly step up efforts to reach better quality of roads.

5.4 As highlighted by the Bank report on Regional Competitiveness (2007), having roads in good condition is a clear contributing factor for higher regional interaction, competitiveness, and growth. Transport infrastructure constitutes the physical link between production and consumption centers, and the key trade gateways. Several analyses have pointed out that transport sector weaknesses may be reducing the potential for economic activity in Colombia, constituting an obstacle to greater interregional links within the economy (World Bank 2004; Cardenas and others 2005; Perez 2005).

5.5 The quality of roads, however, leaves much to be desired, particularly in certain departments. Figure 5.2 shows that the quality of the secondary network is limited in many regions, but that this is independent of the level of income; some of the poorer departments like Nariño have relatively good roads with levels of quality comparable to those in high-income jurisdictions like Antioquia or Santander. Although data are very deficient given that the length of the road network is not precisely known in many areas, there is no doubt that improving service quality remains a challenge in a large number of departments independent from the level of income.

Figure 5.2 Percentage of Secondary Road Network in Good Condition, 2006



Source: DNP/Ministry of Transport survey of departmental governments (2007).

5.6 A major obstacle of the road sector is that the types of roads—national, departmental, and municipal—are poorly defined. Currently, there are insufficient data available on the length of the subnational road network. Many informal arrangements on the ownership of roads have developed among levels of government, but even more worrisome is the fact that ownership of roads is called into question each time a particular level of government invests in a stretch of road. This is a basic management problem, which impacts negatively on accountability and efficiency.

2. Organization of the Road Sector

2.1. Responsibilities

5.7 The *de jure* division of responsibilities is the following: the national government is responsible for primary roads; the departments are responsible for secondary roads; and the municipalities are responsible for tertiary roads. As mentioned above however, in practice the division of responsibilities is unclear in many areas and being redefined continuously. Ownership of a sizable network of roads is unclear in many jurisdictions. Taking these limitations into account, Table 5.1 shows the approximate extension of the network in each department.⁵⁹

5.8 Decentralization of the road network was initiated in the mid-1990s, but this process is still incomplete. The central government has not transferred tertiary roads that—following the basic legal framework—should be managed at the local level (roughly 27,000 kilometers). The national government continues to expand and improve departmental and municipal roads but which are not its legal responsibility. The departments, on the other hand, reject ownership of roads in which the nation has intervened through its national programs.

2.2. Funding of Subnational Roads

5.9 This section provides an overview over the different funding mechanisms in place for subnational roads (secondary and tertiary). These funds originate from national, departmental, and municipal resources (Figure 5.3). Table 5.2 shows the importance of national funding sources for the departmental and municipal road networks.

Table 5.1 Road Extension by Department, 2005

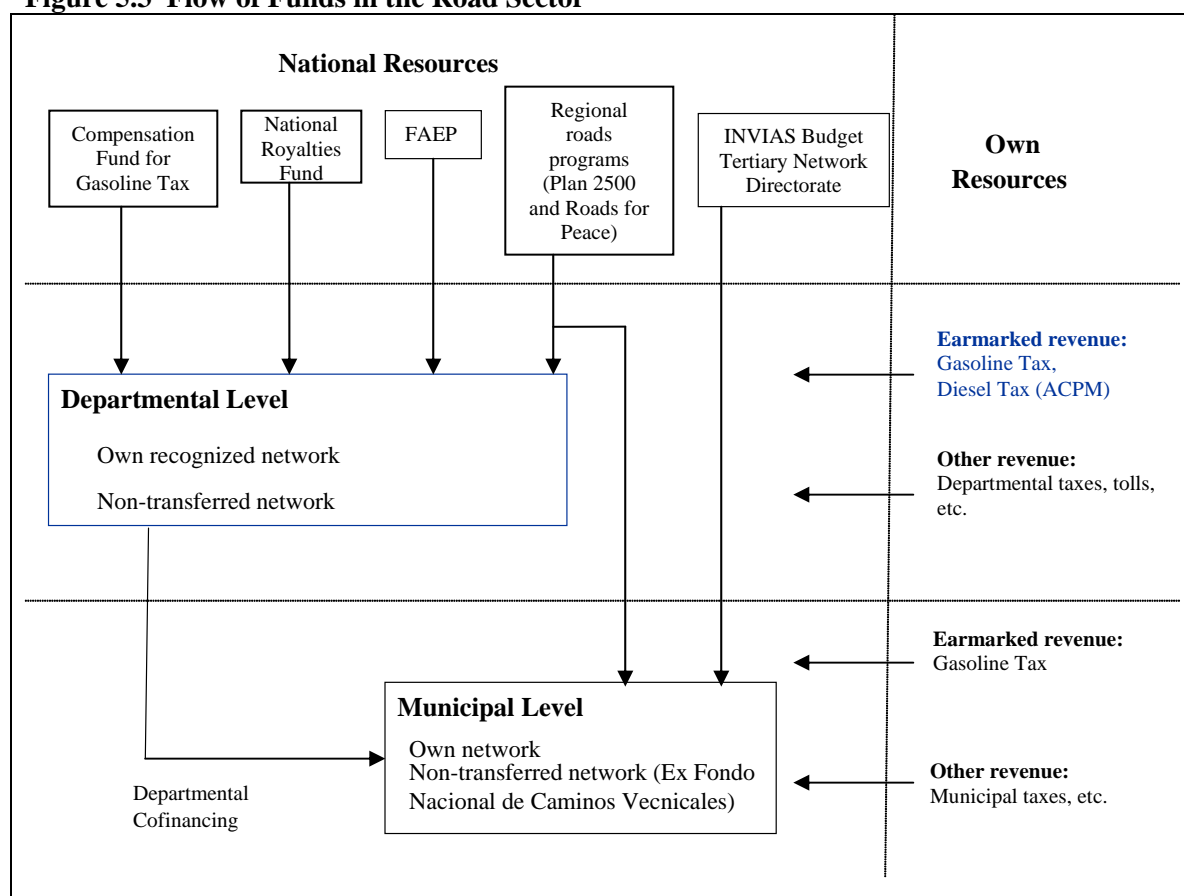
	National Network	Secondary Network	Tertiary Network (INVIAS)
Amazonas	0	92	4
Antioquia	1,533	4,800	1,495
Arauca	0	688	33
Atlántico	278	680	n.d.
Bolívar	510	130	2,232
Boyacá	1,037	5,370	2,612
Caldas	303	2,148	559
Caquetá	445	491	1,368
Casanare	770	1,254	71
Cauca	1,345	n.d.	1,758
Cesar	714	n.d.	1,236
Chocó	275	n.d.	296
Córdoba	595	798	1,271
Cundinamarca	801	6,937	2,161
Guajira	355	1,232	606
Guanía	0	283	142
Guaviare	0	n.d.	59
Huila	859	n.d.	1,732
Magdalena	656	736	1,201
Meta	1,059	n.d.	2,071
N Santander	257	1,459	825
Nariño	776	1,610	1,507
Putumayo	415	81	301
Quindío	168	n.d.	359
Risaralda	311	n.d.	15
Santander	590	2,802	1,976
Sucre	276	n.d.	600
Tolima	562	2,326	543
Valle	669	n.d.	544
Total	15,559	33,917	27,577

Source: National government, INVIAS, Ministry of Transport, DNP.

Note: n.d.: no data are available.

59. There is no complete information to estimate the length of the tertiary network in charge of the municipalities.

Figure 5.3 Flow of Funds in the Road Sector



Source: World Bank.

Table 5.2 National Funding for Roads (in million pesos colombianos), 2002–06

	2002	2003	2004	2005	2006
Expenditures of national level on its own roads					
Primary road network	258,056	161,978	332,971	357,260	625,011
Secondary road network (INVIAS)	140,865	115,479	108,125	213,455	556,775
Tertiary road network (INVIAS)	6,334	1,500		86,184	128,200
Flow of funds from the national level to departments					
INVIAS			103,124	526	
Subsidio Sobretasa a la Gasolina	3,200	3,200	3,344	3,378	12,565
National Royalty Fund	44,795	12,475	3,005	9,892	43,045
Flow of funds from the national level to municipalities					
Oil Stabilization Fund (FAEP)	18,332		55,958	159,540	45,443
National Royalty Fund	99,077	91,528	33,252		

Source: Ministry of Transport, INVIAS, and DNP.

2.2.1. National Resources

5.10 **Instituto Nacional de Vías (INVIAS).** The *Fondo Nacional de Caminos Vecinales* (FNCV) was dismantled and the Tertiary Network Directorate was created within INVIAS. Since it went into effect in 2005, a mechanism has been established to maintain the 27,500 kilometers of roads that have not been transferred. In 2007 INVIAS has a budget of 210,000 million pesos; about half of the resources are to finance works in the tertiary network, both in roads under its responsibility and for roads managed by municipalities. These resources includes 100 million pesos per municipality, without taking into account the length of the road network. This implies that the distribution is not carried out taking into account different maintenance needs. INVIAS allows—but does not formally require—that the works be contracted with third parties instead of direct execution by the municipalities; the latter was an arrangement that has often been inefficient in the past.

5.11 **The National Royalties Fund (FNR)** allocates a percentage of its resources to investments of regional interest. The funding levels vary greatly from year to year. One of the drawbacks of this mechanism is the difficulty in aligning the political interests of the different departments to agree on projects with positive externalities and interregional impact. These difficulties forced the National Royalties Fund to finance only a few new highway projects.

5.12 **Oil Stabilization Fund (Fondo de Administración y Estabilización Petrolera, FAEP).** The FAEP was constituted at the national level to isolate the resources available from greater oil exports and to prevent Dutch disease. In 2005 FAEP allocated US\$89,000 million pesos to road improvement projects, partially in national and subnational roads. However, 98.9 percent of these resources were invested in Casanare (in national roads).

5.13 **National Compensation Fund for the Gasoline Tax.** The National Compensation Fund for Gasoline Tax (Subsidio a la Sobretasa de Gasolina) allows departments with low collection rates—due to the fact that they are a border department,⁶⁰ have low traffic, or have low collection of the Gasoline Tax—to reach at least the national average in revenue. All the departments contribute 5 percent of the Gasoline Tax to this fund. Fund resources are used for maintenance of the network (Figure 3.7).

2.2.2. Departmental Resources

5.14 **Diesel Sales Tax (ACPM).** Departments obtain resources from the Diesel Tax in a revenue-sharing arrangement with the national government. The nation shares 50 percent of the revenue with departments. In Colombia, the Diesel Tax is commonly referred to as departmental “own revenue”; however, due to the institutional arrangements, this tax rather qualifies as a transfer. The revenue is 100 percent earmarked to maintenance of the secondary road network. However, this revenue faces several limitations: Law 550 of 1999 dictates that this revenue should be used for debt service, among other things, in support of the fiscal adjustment process

60. Law 488 of 1998 establishes that, “The resources of this fund will be allocated to the following departments: Norte de Santander, Amazonas, Chocó, Guainía, Guaviare, Vaupés, d Vichada, San Andrés and Providencia, and Santa Catalina.” Despite being a border department, Nariño does not receive resources from the fund. Drivers often prefer to be supplied with fuel in the neighboring countries (Ecuador, Venezuela) where fuel is strongly subsidized. According to the Secretary of Works of Nariño, it is estimated that fuel sales are 50 percent of the potential, due to fuel purchases in Ecuador.

of departments. In practice, there are still 10 departments and 64 municipalities in the fiscal adjustment process, and therefore only a fraction has effectively been used to finance the extensive network of secondary roads. On the other hand, the volume of diesel fuel sales in a department does not necessarily bear any relation to the extension of the roads under its responsibility.

5.15 Gasoline Sales Tax (*sobretasa a la gasolina*). The arrangements for the Gasoline Sales Tax is one of taxbase-sharing with municipalities. For departments, the tax rate is set at 6.5 percent. Departments have no possibility to alter the tax rate.

5.16 User Charges. Only the most developed departments—for instance Antioquia and Cundinamarca—which have significant traffic levels on some of their roads, have undertaken concession projects that are partially financed with tolls.

5.17 Other financing sources for road projects. The departments can invest their own resources, such as un-earmarked transfers, royalties, or other un-earmarked tax revenue,⁶¹ to finance road projects. For instance, departments keep 80 percent of the Tax on Motor Vehicle ownership but this revenue is not earmarked for roads or any other sector. It is clear that all the above mentioned resources compete with the other expenditure priorities in departments so they are not regularly available. Therefore, departments usually bargain for additional national funds and strive to be included in national sector programs.

2.2.3. Municipal Resources

5.18 Gasoline Sales Tax (*sobretasa a la gasolina*). Municipalities receive a share of the Gasoline Sales Tax corresponding to a rate of 18.5 percent of the sales price. The revenue is earmarked to road networks and mass transportation projects. The revenue flow has been less than dynamic over the past years because gasoline sales in the country have declined (motor efficiency, gasoline price increase, contraband, and robbery). In the large cities the majority of the collections have been committed to mass transportation projects. In small municipalities, where there are no fuel stations, this revenue is not available and does not constitute a source for maintenance.

5.19 Other Revenue. The municipalities also receive 20 percent of the Tax on Motor Vehicle ownership. However, this revenue is not earmarked. In Colombia, there are no tolls of a municipal nature, although some cities have considered installing tollgates at entry points to urban areas. Furthermore, some cities have companies in charge of expanding the urban road network based on the collection of the charge. This mechanism is not used for rural roads.

3. Efficiency Levels of Subnational Governments

5.20 The assessment of the level of efficiency of subnational governments in the use of resources was based on an optimization model, termed the Highway Design Model (HDM), developed by the World Bank and used by many countries to support decisionmaking and planning in the road sector. This model computes the best level of maintenance and investment expenditures for a given road and traffic volume, taking into account the service quality that reaches the maximum benefit-cost ratio. In the optimum case, there should neither be “over-

61. For instance, the tax on vehicle ownership, which is shared between departments and municipalities.

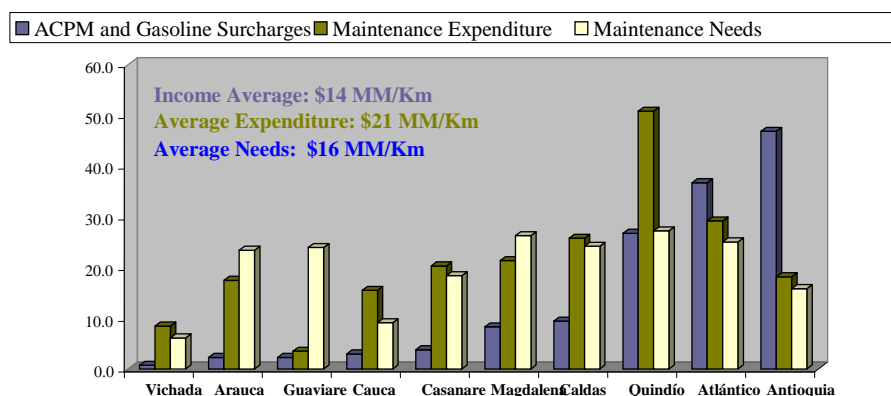
spending” (public expenditures are above the necessary level to maintain roads in good condition), nor “under-spending.” The model defines this optimum level of service and expenditures as a benchmark. The analysis was carried out for 10 departments for which complete data sets are available.⁶²

5.21 Figure 5.4 depicts the results of this analysis. There are four major efficiency problems:

- (a) **Some departments spend below their maintenance needs (according to the benchmark), while others spend above.** Both types of misallocations are suboptimal.
- (b) **The allocation of expenditure is suboptimal: only about 40 percent of the resources for interurban roads are allocated to maintenance.** The rest is usually invested in improvements and construction of new roads. Maintenance is carried out to overcome critical network situations, which implies excessive costs in present value in terms of both reconstruction and in the costs faced by the private sector in the operation of its vehicles.
- (c) **Expenditures are volatile.** This undermines regular maintenance and allows roads to deteriorate faster.
- (d) **Subnational governments tend to ignore maintenance of secondary and tertiary roads where the nation has invested.** This further deteriorates the quality of roads.

5.22 These problems are clearly an obstacle to making better use of scarce resources. The next section tries to explain some of the main drivers of inefficiency and incentive problems.

Figure 5.4 Average Revenues and Maintenance Expenditure in a Sample of Departments (Millions of pesos constant per kilometer), 2003–05



Note: Departments ranked from low (left) to high (right) fiscal capacity based on non-oil GDP.

Source: Departmental governments.

4. Drivers of Inefficiency and Incentive Problems

5.23 In order to analyze the obstacles for better resource use this section analyzes the fiscal and institutional arrangements among levels of government. It discusses the incentive problems that constrain the efficient use of resources in each of these areas: arrangements among the

62. Antioquia, Arauca, Atlántico, Caldas, Casanare, Cauca, Guaviare, Magdalena, Quindío, and Vichada.

national with subnational governments; resource management within departments and municipalities; and the relationship of departments and municipalities.

4.1. Arrangements among the national government with subnational governments

Incentive Problem 1: Poor definition of ownership of the roads—The investor assumes responsibility (*el que invierte asume la propiedad*)

5.24 Currently, there is no consensus between the national and subnational governments concerning who is responsible for secondary and tertiary roads. In practice, the level of government investing in roads assumes ownership of the roads. This impacts negatively on accountability since ownership is constantly redefined and ultimately no level of government is effectively responsible for roads. Efficiency in the use of resources declines⁶³ and so does the quality of roads.

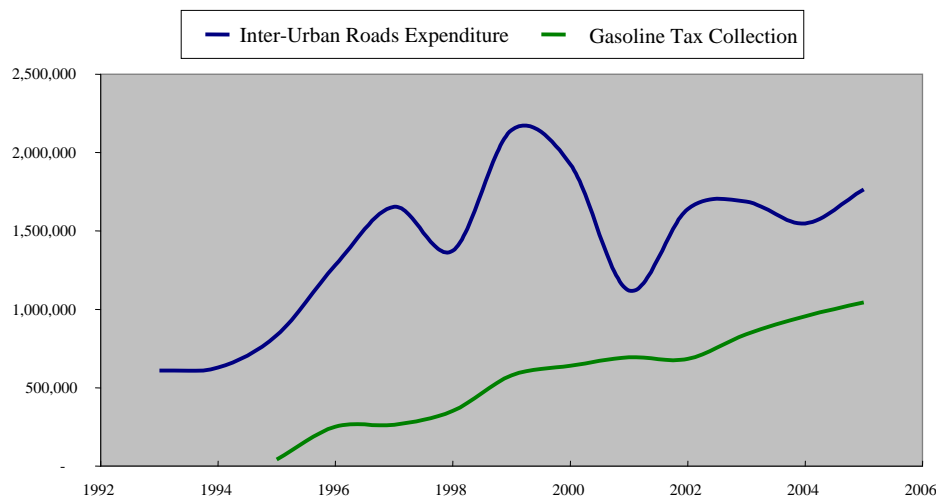
5.25 Subnational governments find the involvement of the national level arrangements advantageous because they can use their own scarce revenue for other expenditure needs. As well, in an environment of informality, departments and municipalities can reject ownership of roads.

Incentive Problem 2: Flexibility of Funding Sources and Volatile Flow of Resources vis-à-vis Recurrent Expenditure Needs

5.26 Ideally, maintenance should have a sufficient and stable flow of resources that allows the implementation of optimal programs from the technical and economic standpoint. Road maintenance is a recurrent expenditure that requires permanent preventive and periodic interventions in order to prevent deterioration of the network. In Colombia, decentralization of roads was not initially accompanied by the necessary resources for their maintenance; today, there is still no stable and predictable flow of resources that would be related to investment and maintenance needs. As a consequence, departmental and municipal expenditures are also volatile, negatively impacting the quality of service (Figure 5.5).

63. The selection of the projects for Plan 2500 did not arise from a cost-benefit analysis that took into account the impact of each project on the savings of transportation expenses or regional development (for example, roads with very low traffic levels are being paved). According to the results of the Highway Design Model, the level of traffic above which a better strategy is to pave a road is approximately 250 vehicles per day. In Plan 2500 roads are paved with less than 100 vehicles per day.

Figure 5.5 Revenue and Expenditures at the Municipal Level (millions of 2006 constant pesos), 1992–2006



Source: DNP databases with information on budgetary execution from the Office of the Comptroller.

5.27 The main reason for this problem to exist is the following: a volatile resource flow does not create incentives or possibilities for subnational governments to develop an efficient scheme of preventive maintenance with regard to planning, execution, and monitoring. Interventions remain largely ad hoc and subject to resource availability.

4.2. Resource Management within Subnational Governments

Incentive Problem 3: Gasoline and Diesel Tax (ACPM): Weakly defined earmarking that is unrelated to maintenance needs

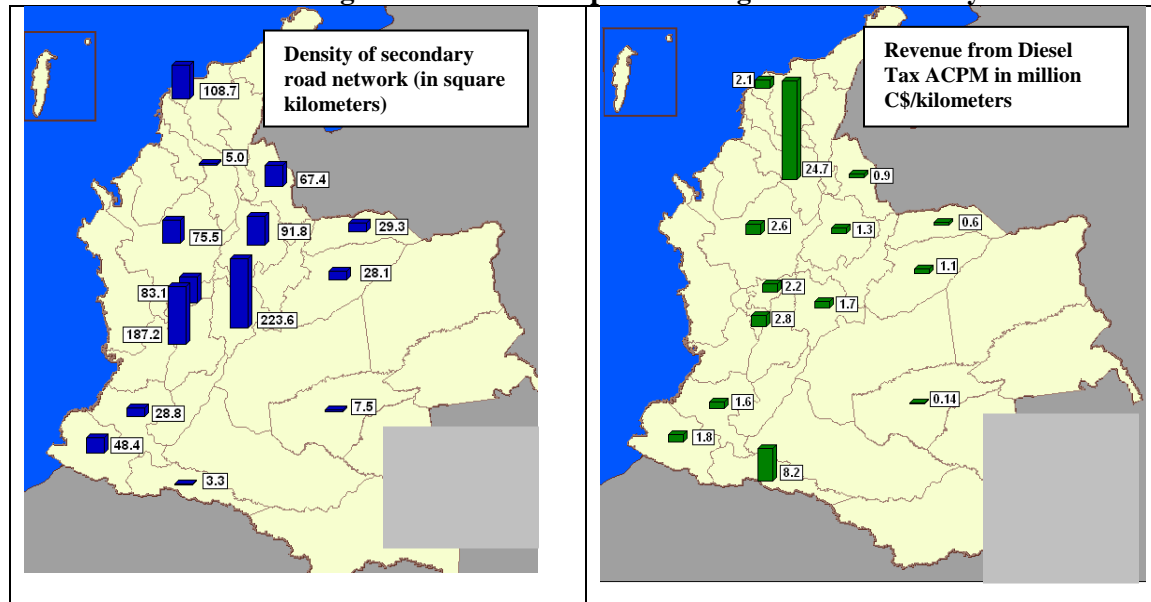
5.28 The earmarking for the Gasoline and Diesel Tax was intended to secure a funding source for subnational roads, given that the transfer of responsibilities which started in the mid-1990s never entailed a regular revenue flow. Although questionable from a point of view of allocative efficiency, earmarking was justified given the particular financing constraints at the start of the decentralization process (see Road Sector Annex for details). Today, this revenue has several constraints:

- (a) the definition of eligible expenditures is very broad and entails mass transportation as well as construction and maintenance of urban and inter-urban roads. In practice the surcharge is allocated in the large cities to mass transportation and maintenance of the urban network.
- (b) Second, there is only a weak relationship between fuel consumption and the extension and density of the road network in each territorial entity (Figure 5.6). The earmarked revenue collected in departments is mostly according to fiscal capacity.⁶⁴ However, earmarked revenue for roads is not related to maintenance needs, and revenue is in most cases below the

64. Fiscal capacity estimated based on non-oil and non-natural resource GDP.

maintenance needs according to the national benchmark. In some departments the revenue is insufficient (based on the benchmark) and in others it is excessive. In addition, the National Compensation Fund for the Gasoline Tax offers funding in equal shares to departments; this is not an effective compensating mechanism to address this challenge.

Figure 5.6 Relationship of Funding and Road Density



Source: Ministry of Transport (2006).

5.29 The main incentive problems behind these issues are the following: the use of earmarked funds is rarely monitored on behalf of the national government; and since there are no explicit sanctions for misuse, in many cases the revenue is regularly used for other purposes. This is particularly common in departments that have resources available that exceed their maintenance needs. In departments that have resources below their maintenance needs, incentives are created to continue bargaining for other financing sources, thus perpetuating permanent negotiation in the road sector.

4.3. Relationship Departments and Municipalities

Incentive Problem 4: Diverging expenditure priorities between departments and municipalities

5.30 Municipalities are responsible for both urban streets and tertiary roads. The priority of small municipalities is to maintain or improve the streets of the urban core; in large cities, the resources are being committed in high percentages to the mass transportation programs. In addition, not all municipalities have a fuel station in their jurisdiction, so often they obtain no revenue at all from the gasoline tax. This implies that not only are very little resources effectively committed to tertiary roads, but also negative externalities for the whole departmental road network.

5.31 The main incentive explaining these expenditure priorities is that municipalities often see, in visible urban works, higher political returns than in investments in tertiary roads. Besides, they wait for opportunities to obtain funding from the national government for tertiary roads. Ultimately, ownership for the road network is called into question each time a level of government invests in a stretch of road (see above) that creates only little commitment.

5. Case Studies

5.32 The case studies have the objective to illustrate how the incentive problems described above play out in practice; and how departments with different fiscal and institutional capacities are dealing with them. The following are the most important lessons learned from the case studies of Antioquia, Bolívar and Nariño.

Lesson One: Defining responsibilities among levels of government regarding roads is a precondition for better resource management. A gradual, phased approach to clarifying ownership is likely to be more successful.

5.33 **Institutional arrangements are unclear in most departments.** The institutional arrangements regarding road ownership vary greatly among the three departments. Antioquia has a generally well-defined road network, although the department rejects ownership of about 20 percent of its network. However, the network that interconnects the urban areas and these with the main network is effectively owned and operated by the department. In turn, the ownership of roads in Bolívar is unclear for large parts of its network (Box 5.1).

Box 5.1 Incomplete Decentralization and Unclear Ownership of Roads: the Case of Bolívar

The most evident example of the poor assignment and inadequate definition in the distribution of the network is the Bolivar case. Not only was decentralization incomplete, and the national government responds for 16 times more kilometers of secondary roads than the department. More important, no level of government clearly owns and administers most of the road network, particularly in the most productive area in the south of the department.

Investments and maintenance depend on the political lobby and the availability of national resources. The quality of roads has been declining. This negatively affects economic development since production on arable lands is adversely affected by the high transportation costs of shipping agricultural products to markets.

Also, this region has been ravaged by internal conflict and violence for a long time, further limiting efforts to achieve regular funding flow and maintenance.

Source: World Bank.

5.34 On the other hand, all three departments reported coordination problems with the national “Plan 2500.” Works were not precisely defined and some remained incomplete due to problems

in planning and execution.⁶⁵ This shows that incentive problems of poorly defined ownership and competition among levels of government are clearly strong limiting factors for higher levels of efficiency in the use of resources.

Lesson Two: Departments are trying to effectively address the problem of diverging expenditure priorities for tertiary roads with municipalities.

5.35 The departments have tried to structure incentives in the form of co-financing schemes to municipalities in order to increase funding levels for the tertiary road network. The cases illustrate that the main incentive problems in the relationship between departments and municipalities are the different expenditure priorities that have developed between both levels: the priority of small municipalities is to maintain or improve the streets of the urban core; in large cities, the resources are being committed in high percentages to mass transportation programs. In addition, not all municipalities have a fuel station in their jurisdiction, so often they obtain no revenue at all from the Gasoline Tax. This implies that only very little resources are effectively committed to tertiary roads. In addition, technical capacities of municipalities are often very limited.⁶⁶ To the extent to which this implies negative externalities for the whole departmental road network, departments are striving to address this problem through co-financing (Table 5.3).

Table 5.3 Institutional Arrangements of Departments with Municipalities

Antioquia	Bolívar	Nariño
Co-financing of works in tertiary roads following the same mechanism as in the secondary network: first stage rehabilitation and execution on behalf of micro-enterprises, under the condition that the municipalities become partners and constitute an institutional figure (public, private, or mixed) responsible for the road sector in the grouped municipalities.	Co-financing of some municipal roads projects. The government supports the municipalities in the technical, budgetary and contractual structuring of the interventions. Only marginal use of technical criteria for project selection.	Municipal co-financing for secondary roads of departmental responsibility: 20 percent. Departmental co-financing for tertiary roads of municipal responsibility: maximum of 50 percent of departmental financing. Technical assistance for municipalities in project preparation.

Source: World Bank.

5.36 These arrangements are not required by law and are entirely subject to bargains struck among the departments with municipalities. Although most of them contribute to higher economies of scale, not all of them are formal arrangements.

65. This situation is less important in Bolivar because, among other things, “Plan 2500” does not intervene in secondary roads.

66. During the field visits it was corroborated that, in general, municipal administrations are very weak in structuring maintenance programs. In general, this is handled by a staff member who is responsible for all the public works of the municipality, not only roads. Both regional Instituto Nacional de Vías (INVIAS) offices interviewed and the governments report evident weaknesses in formulating projects, preparing contracts, and executing resources.

Lesson Three: Although there are local efforts at improving resource use, in the medium to long term they can be successful only if there is a more regular resource flow from both national transfers and departmental sources.

5.37 **The funding flow to the road sector in the three departments is volatile and leads to volatile expenditures** (Table 5.4 and Table 5.5). This volatility originates from both national transfers and departmental funding: in the case of Antioquia, for instance, assignments from ordinary budget vary greatly from year to year. This suggests competing interests for cross-sector budget allocations in departments. On the other hand, it is also true that higher levels of funding from own revenue—which also involve user charges⁶⁷—potentially allow departments like Antioquia to be more autonomous and independent from national funding sources; Bolívar and Nariño do not have this opportunity because they depend more on transfers. As a result, Antioquia is in a position to invest in each kilometer of its network six times more resources per year than Nariño.

**Table 5.4 Road Funding Sources in Antioquia, Bolívar, and Nariño
(in million Colombian pesos), 2003–06**

	2003	2004	2005	2006
Antioquia				
Sources				
Ordinary Resources (Common funds)	19,045	9,289	73,391	61,329
Ordinary Resources (Dividends)		1,618	810	
Ordinary Resources Special Assignment	27,161			
INVIA		2,545	3,613	10,636
ENR		626	273	
Municipal Management		11		
Royalties		7,034	10,008	8,732
Valorization		2,756	12,082	13,144
ACPM		2,636	17,093	16,917
Special Assignment Other		1,179	1,779	460
EADE EDATEL		826	75	55
Tolls		711	3,996	24,557
IDE		6		
Internal Credit	2,655	2		
Investment Fund	1,642			
EPM			41	1,138
Traffic			40	283
Other Royalties			21	
Metropolitan Area				763
Total Antioquia	50,503	29,239	123,222	138,014
Bolívar				
Ordinary Resources	222	760	1,310	914
National Resources	1,196	523	1,887	789
Total Bolívar	1,418	1,283	3,197	1,703
Nariño				
Ordinary Resources	1,316	4,546	3,691	6,582
Total Nariño	1,316	4,546	3,691	6,582

Source: World Bank, based on information provided by departments.

67. Antioquia collects resources from, among other sources, tolls, improvement levies, participation in business, and industrial enterprises at the departmental level.

Table 5.5 Road Maintenance Expenditures (in million Colombian pesos), 2003–2006

	2003	2004	2005	2006
Antioquia	50.503	29.239	123.222	138.014
Bolivar	1.418	1.283	3.197	1.703
Nariño	1.316	4.546	3.691	6.582

Source: World Bank, based on information by departments.

5.38 Law 550 temporarily adds to the problem of unsteady or low resource flow. Antioquia is the only department that allocates the totality of the earmarked revenue from ACPM and gasoline taxes to the road sector. In other departments, not all earmarked revenue is effectively used for road expenditures (Table 5.6)—both Nariño and Bolivar use only roughly a fourth of the earmarked revenue for road expenditures. In these two cases it clearly illustrates the effects of Law 550 and how fiscal adjustment still temporarily limits proper funding for the road sector.

Table 5.6 Use of Earmarked Revenue and Road Expenditures (in Colombian pesos), 2005

	Antioquia	Bolivar	Nariño
Gasoline Tax	0	9,299,651	14,663,569
Diesel Tax (ACPM)	14,547,027	3,648,312	3,393,162
Earmarked revenue	14,547,027	12,947,963	18,056,731
Total road expenditures	116,388,661	2,942,174	5,201,236
Gap between revenue and expenditures	-101,841,634	10,005,789	12,855,495

Source: World Bank based on information provided by DNP.

5.39 On balance, however, it remains to be seen if efficiency-enhancing arrangements at the local level can be effective if the funding flow remains volatile. Adverse conditions—through unclear definition of road ownership and volatile funding mechanisms—still seem to be the most significant limiting factors for better resource use. Although most departments and municipalities⁶⁸ now have reformed their administrations,⁶⁹ several general management problems remain.⁷⁰ On the other hand, departments are striving for management models that adjust flexibly to their particular service delivery challenge (Table 5.7). Some of these models, like those applied in Antioquia and Nariño, clearly lead to more economies of scale in the use of resources and lead to win-win situations among departments and municipalities.

68. Nariño is the only department of the three visited where the municipalities continue to acquire public works machinery. This model can represent important savings in maintenance, but before it is generalized at the national level, it should be regulated in order not to revive efficiency problems from the past: rapidly depreciated machinery due to mismanagement and little transparency in the budgetary execution under administrative agreements.

69. In the three departments the direct works executing units were eliminated, staff were laid off, and machinery was sold. This process has resulted in important fiscal savings. In the three cases, the respective infrastructure secretariats have a low number of employees, mostly engineers, who travel and assess the condition of the network, the investment requirements, and the degree of priority through visual inspection.

70. None of the departments has an up-to-date road inventory. No department uses optimization models for maintenance routines technical measurements of the condition of the structure; as well as measurements for traffic volume.

Table 5.7 Road Management Models

	Antioquia	Bolívar	Nariño
Investment Prioritization	Basic level of routine maintenance of the whole network. Rehabilitation cycle is expected to begin in 2008, giving priority to the most remote towns with severe access problems.	No formal prioritization model. Visual inspections to determine the road condition and decide on resource allocation of the small road network of 139 kilometers.	No maintenance optimization tools. For visual inspection, however, department takes into consideration the benefit-cost ratio of projects.
Works Execution	Contracts are agreed upon under the modality of unit prices and work quantities (not based on results). Capture of economies of scale routine maintenance.	Third parties under the modality of unit prices and quantities of work.	Microenterprises for routine maintenance. Three-fourths of the periodic maintenance executed through co-financing schemes with municipalities (20%).
Future Plans	Rehabilitate the whole network in annual cycles based on groups of roads. Once the road has been renovated, microenterprises will be contracted with local personnel in order to ensure routine maintenance. Payment of these micro-enterprises will become a recurrent expenditure.	Construction of new roads is feasible only with additional funding from national government.	Paving of roads if fiscal situation improves, particularly related to Law 550.

Source: World Bank.

5.40 However, in the medium to long term, these efforts can be successful only if there is a better funding flow. Although the trend toward developing municipal co-financing schemes and introducing more technical management models in departments is clearly positive, in the medium to long term subnational road management requires a national funding framework that establishes the right incentives for equity and efficiency.

6. Conclusion

5.41 Even after more than a decade of decentralization in the road sector, resource management at subnational levels is still deficient. The prevailing fiscal and institutional arrangements are not conducive to making better use of scarce resources. The basic problems are: the changing and often unclear division of responsibilities among levels of government; the volatile funding flow; and the weak correlation between levels of revenue from earmarked taxes with maintenance needs.

5.42 As a consequence, subnational road expenditures are inefficient in several dimensions: some departments spend below their maintenance needs (according to the benchmark), while others spend above; the allocation of expenditure is suboptimal: only about 40 percent of the resources for inter-urban roads are allocated to maintenance; expenditures are volatile; and subnational governments tend to ignore maintenance for secondary and tertiary roads where the nation has invested. All these factors together deteriorate the quality of roads.

5.43 Based on these findings and incentive problems, the following are some guidelines to adjust the fiscal and institutional arrangements in the road sector:

- It is necessary to define the responsibilities among levels of government as a pre-condition to better resource use. This requires an effort to create basic accountability in the sector.
- Earmarking of taxes will have to play a role in the short-, to medium run to guarantee a minimum level of funding for roads, although it is suboptimal from an allocative point of view.
- Achieving better resource management through central government transfers remains limited in the short term. It appears that what is needed is to create a cost-benefit link first, and then—once this basic condition is present—complement later with a national funding mechanism for ensuring equity. These changes are also an opportunity to move towards a user-based system for maintenance financing.
- There is the need to revise contracting mechanisms at the local level; direct contracting should be limited.
- Gradual adjustments in the above-mentioned areas are more likely to be more successful.

Chapter 6. Conclusions and Policy Options

6.1 This Chapter presents the main conclusions as well as policy options in order to improve the use of resources in the intergovernmental system. The Chapter is structured as follows: Section 1 presents the main conclusions from the analysis carried out in the preceding sections. Section 2 delineates the elements of a future decentralization strategy. Section 3 presents policy options for the sectors of (i) health, (ii) education, and (iii) roads as well as (iv) local own revenue and (v) monitoring and evaluation. Section 4 presents the final considerations.

1. Assessment of the Present Intergovernmental System

6.2 The intergovernmental system in Colombia is the result of several adjustments that were introduced in the past. In fact, there is not a single, unified intergovernmental system, but several systems exist in parallel: (i) in the SGP-financed sectors (health, education, and water) the central government still keeps close control over expenditures and contributes the bulk of resources; (ii) other sectors—roads for instance—are highly decentralized; they appear to be underregulated, that is, subnational governments enjoy a high degree of autonomy within informal environment.

6.3 This system is the result of several adjustments that were introduced over the past decades. Chapters Two through Five in this report clearly highlight that the national government has constructed the present system from the best of motives: it was aware of the efficiency problems of several subnational governments and it has attempted to guide them through expenditure earmarkings; transfers were established to compensate poorer subnational governments; local tax revenue was earmarked in order to increase and guarantee funding for health or, in the case of roads, to protect the scarce funding source from declining even further. Some of these policies might be debatable indeed, but they were undertaken in order to implement what was seen as a sensible development path for the intergovernmental system. The problem now is that some of these arrangements have turned out—in the incentive framework that existed or that has developed—individually, to be flawed and collectively, to be mutually contradictory.

6.4 The main constraints of the current intergovernmental system are related to (a) expenditures and responsibilities, (b) resources and financing, and (c) fiscal and budget management.

(a) Expenditures and responsibilities

6.5 **Education: Mismatches in responsibilities—the “principal-agent model” is not applied consistently.** While such a model can theoretically produce very beneficial results in terms of accountability and efficiency, in the case of Colombia it is not applied consistently. There is a mismatch between the decisionmaking power of resources and responsibilities: the transfer (per capita) formula wrongly assumes that subnational governments manage human resources responsibilities and hence cannot be effective. This, in turn, rules out efficiency gains. As well, neither departments nor municipalities are clearly responsible regarding schools.

6.6 **Health: inefficient competition among levels of government and lack of transparency at the level of frontline providers.** The relationship of subnational governments

with insurers and hospitals is often not fully transparent. The information flow is weak which undermine efforts at the central level to improve the transfer system. In addition, the assignment of responsibilities—which were regarded as a means to improve service coverage—led to unhealthy competition among levels of government. Responsibilities for the uninsured population were assigned to departments; improving coverage for departments implies managing less funds (which are received by municipalities) and restrict its role merely to planning.

6.7 Roads: constant redefinition of responsibilities. Many informal arrangements on the ownership of roads have developed among levels of government; ownership of roads is called into question each time a particular level of government invests in a stretch of road. This is a basic management problem, which impacts negatively on accountability and efficiency.

6.8 Accountability and the political system. Given the unclear division of responsibilities, combined with the features of the political system, demands for better services can be easily channeled back to the central government. Problems cannot always be resolved at the level of government in which they occur.

(b) Resources and Financing

6.9 Own revenue: few incentives to tax and to complement centrally financed expenditures. There are few incentives to raise own revenue. Although departments and municipalities in Colombia have an own-revenue base that is more favorable than in most other unitary countries in Latin America, the current system does not encourage subnational resource mobilization. A substantial part of the departments' own revenue is earmarked and they are not allowed to set tax rates; some taxes classify as a transfer rather than proper own local revenue. The existing shared tax bases could in some cases lead to tax rates set above an economically efficient level; on the other hand, revenue-sharing among subnational levels of government might—in the context of competition among levels of government that have not yet found a new equilibrium—not provide the incentives to raise more own revenue. This implies that a relatively high share of subnational expenditures is financed by transfers, weakening incentives for expenditure efficiency.

6.10 Despite a per capita (health) and per student (education) formula, the SGP still has gaps in compensation. In the health sector, there is oversupply of first-level providers compared to other levels of provision. In education, the missing human resource reform implies that there are “surplus” departments—governments that have a cheaper payroll and receive more funds than are needed to cover the cost. These “surplus” departments can often engage in important activities for improving education. Thus, neither the SGP nor any other central government measure establishes a level playing field for all subnational governments.

6.11 The SGP also discourages own revenue efforts as a complement to central financing. The transfer system in Colombia compensates only for expenditure needs, but not explicitly for different levels of fiscal capacity, creating a source of horizontal inequity. The equity problem also exists due to the fact that the SGP implicitly assumes that richer departments complement expenditures with own revenue in order to reach the national average in per capita expenditures. Yet, as outlined above, due to the existing incentive problems in raising own revenue it cannot be taken for granted that these departments do in fact complement SGP-financed expenditures. This leads to an equity problem in expenditures financed by the SGP in some of the richer departments.

6.12 High inequity due to royalties. In the current system, royalties are distributed in an unequal fashion among the departments in per capita terms. The distribution favors “producing” departments, and hence national efforts at redistribution of royalties have been ineffective. Although overall there is more equity in the distribution of funds, achieved particularly through Law 715 and the 2001 reforms to the transfer system, royalties still explain much of the relatively high degree of inequity (in per capita terms) that exists.

(c) Fiscal and Budget Management

6.13 Low resource mix. Given the incentive framework that has developed—subnational governments accept the high regulation in the SGP sectors as long as non-SGP sectors are underregulated—there is only a low resource mix between these two systems. To a large extent, subnational governments regard SGP-financed sectors as the responsibility of the central government and are reluctant to provide complementary funding. This limits allocative efficiency because resources at subnational levels cannot always be directed to sectors with the greatest need.

6.14 The intergovernmental system still needs to sacrifice allocative efficiency for fiscal responsibility. Allocative efficiency in subnational governments is still limited due to their previous fiscal imprudence. For an important number of subnational government—10 departments and 60 municipalities—Law 550 establishes a tight constraint over resource use. This constraint is likely to be of a transitory nature, but will persist over the medium to long term.

6.15 Restricted decisionmaking space in human resources. Following previously negative experiences—during the 1980s and 1990s subnational governments initiated unauthorized hiring and established compensation packages on top of nationally defined salaries—the current system is highly controlled by the center. However, centralized collective bargaining for wages probably adds to fiscal pressures; and rules out potential efficiency gains for a more decentralized wage bargaining process. Although the country has started to gradually move toward a more competitive and merit-based system in human resources, in large part the payroll structure is rigid.

6.16 Little un-earmarked revenue. Likewise, the SGP provides only little un-earmarked revenue, which subnational governments can use for their own purposes (and it does so only for municipalities). As illustrated by the case studies, however, the departments have very different expenditure needs.

(d) Assessment

6.17 The combined effect of the problems summarized above implies a significant constraint for better use of resources. This could put at risk the possibility of Colombia achieving the double goal of (i) reaching service delivery targets for 2010 (education, health), while at the same time, (ii) keeping fiscal pressures in check. Not addressing these problems either puts at risk the service delivery targets that have been set for 2010, or it could cost the central government much more than what it currently assumes. The current policy of increasing earmarked transfers without additional reform is unlikely to address the efficiency issue in subnational governments. The challenge for the country is certainly to address these problems

within the “model” and assignment of responsibilities that has developed. The next section presents the main elements of the strategy for going forward.

2. Strategy for Going Forward

6.18 Addressing the above-mentioned problems requires a particular strategy, based on the following elements.

6.19 **(i) Learning from the past: combining fiscal reforms with public sector and institutional reforms.** In the past, there has been a strong emphasis in Colombia on improving equity and on increasing efficiency through better transfer formulas. Transfers probably still need to improve in Colombia, but they are not a “magic bullet” for the future in order to gain more efficiency. The theoretically efficiency-enhancing formulae such as per-student allocations in education were not able to break the inertia of a rigid payroll structure. These lessons suggest that, going forward, one needs a reform of the public sector in its core elements: improving hospital performance; deepening human resources reform; and clarifying responsibilities among levels of government. Once there is better performance in these areas, fiscal decentralization reforms and national transfers can send the right signals for the public sector to act accordingly, but this is not always possible in the reverse order.

6.20 **(ii) Sequencing: select feasible entry points and continue with gradual adjustments.** Experience in Colombia suggests that the gradual adjustment path is appropriate in addressing the efficiency problems. The challenge now, however, is to select the correct entry points that will create the demand and incentives to build on previous achievements. It is important to sequence actions: some incentive problems need to be removed first, before some policy options can be realistically implemented; conversely, there is the risk that some inefficiencies will be perpetuated rather than eliminated.

6.21 **(iii) Sector-specific reforms based on clear priorities.** The following are the main elements in the education, health, and road sectors:

- **Education:** The main area of reform is human resources.
- **Health:** Improve the relationship among subnational governments, insurers, and hospitals.
- **Roads:** Define ownership of roads as a precondition for higher accountability and efficiency.

6.22 **(iv) Developing a vision of the future intergovernmental system, but as a “moving target.”** Decentralization is a reform which needs continuous adjustments—and as any reform, is difficult to be planned due to changing conditions at the local and national levels. Nevertheless, it would be important to lay out a vision for the future intergovernmental system as a “moving target”: it should be adjusted flexibly as circumstances demand.

6.23 The following are elements of this vision and future “model” of the intergovernmental system.

- **Clear lines of accountability.** Achieving this goal requires resolving the present inconsistencies in the intergovernmental system. There needs to be a consensus that the

system evolves either into more centralization, or more decentralization. The “middle-of-the-road”-model is the least desirable situation.

- **More decentralization is probably desirable.** In the long term, more decentralization could probably yield additional efficiency gains provided there are clear lines of accountability and responsibility. Reversing the model towards higher degrees of centralization is probably unlikely on political grounds given the interests that developed on the regional and local levels.
- **Higher integration and resource mix between the General System of Transfers (*Sistema General de Participaciones*) and non-SGP sectors.** The objective would be to establish a fully integrated subnational budget and fiscal management, including fiscal responsibility rules that cover those expenditures for which departments and municipalities are meant to be responsible.
- **More unearmarked revenue for departments.** The current system does not take advantage of allocative efficiency at the departmental level. In the future it would be desirable to provide more unearmarked revenue (either from transfers or from own revenue) so that departmental expenditures can be matched closer to their priorities.

6.24 (v) **Asymmetric strategies.** The conditions and capacities on behalf of subnational governments for service delivery are very heterogeneous: some are small, others are large; some are rich, others are poor; some are urban, others are rural; some have strong bureaucracies, others have weak bureaucracies. This is reflected in their relative level of efficiency. An obvious implication is that the intergovernmental system should adapt in a flexible manner to these different conditions: the depth and scope of both revenue and expenditure responsibilities could be different for each department and municipality. The idea not to treat similarly units that are not similar, and to transfer more powers and resources, seems obvious.

6.25 In fact, the present system in Colombia has already elements of asymmetric decentralization; in the education sector, for instance, certified and uncertified municipalities manage different levels of responsibility. Such approaches can potentially lead to more efficiency in individual subnational governments. Therefore, asymmetrical decentralization must be considered very seriously, although it is more difficult to implement than what might appear at first sight.

6.26 Spain is a country case where asymmetric decentralization was adopted explicitly (for more details please refer to Annex 7). Technical considerations based on efficiency principles were less important than political objectives. The thrust behind this process, which developed after 1980, was essentially political based on the nationalist aspirations of certain territories—mainly, though not exclusively, the Basque Country and Catalonia (Box 6.1).

6.27 As can be illustrated by the case of Spain, the implementation of asymmetric decentralization is challenging for two main reasons. First, it is extremely difficult to assess the level of “competence” of subnational governments. This is difficult ex-post, but it is even more complex ex-ante. Second, even if the “less competent” subnational governments could be identified, on behalf of the national government it requires substantial political power to discriminate and explicitly exclude the less capable from the benefits of decentralization. For this very reason, the following sections provide a discussion of some criteria that could be applied in

order to assess the level of competence of individual subnational governments (i) ex-ante, (ii) during the decentralization process, and (iii) in an ex-post fashion.

Box 6.1. Asymmetric Decentralization: the Case of Spain

There were two modalities for transferring responsibilities: the „fast track“-approach was used for the so-called Historical Communities; and the „slow track“-approach was applied for all other territories and which required a minimum of five years before responsibilities were transferred. Nonetheless, there were never set minimum requirements from a technical point of view and, like in Colombia, it was not necessary to accredit a subnational government – using any indicator for management capacity—previous to transferring powers.

In terms of expenditure, asymmetric decentralization was implemented by transferring responsibilities related to education (all levels, including university); healthcare (medical care and pharmaceutical services); public order (police forces directed by the regional government of the Basque Country and Catalonia); and culture (development of their idiomatic peculiarities). Most other responsibilities were transferred in a symmetric fashion.

In turn, in fiscal matters, the only initial element of asymmetry is related to the Communities of the Basque Country and Navarra, whose (statutory) funding system is much more “autonomist” as these two regions can collect all taxes which in the rest of the country are collected by the central government (except for customs duties) and they get to keep all these resources; they merely have to make a general contribution to the central government in exchange for the non-decentralized services which are provided in their territory. In the other regions, the financing system is similar but has gained more autonomy over time, increasing the participation of the regional governments in the most important taxes (Personal Income Tax, VAT and Excise Taxes) and widening these governments’ normative capacity for defining taxes or establishing fiscal benefits (the exception are the indirect taxes subject to fiscal harmonization within the European Union setting). The financing system, excluding the specific case of the territories with foral rights (the Basque Country and Navarra), was adjusted over time through five-yearly reviews with a clear trend towards enhanced symmetry in the instruments, so that all regions have enjoyed increasing fiscal autonomy. The principal differences which remain are related to the scope of the compensation mechanisms (extent and criteria for distribution of unconditional transfers).

Source: World Bank.

3. Policy Options

3.1. Education

3.1.1. Challenges

6.28 The current institutional set-up in the education sector represents a delicate balance between the need of the central government to ensure fiscal discipline while entrusting subnational governments with the task to implement national goals. Due to the current institutional arrangements however, the present system limits allocative efficiency – precisely at a time when it is most needed in order to meet the government’s goals that have been established for the sector: full coverage in basic education; increased secondary graduation rates; and higher quality of learning.

6.29 The main institutional problems are the following:

- The key challenge facing the education sector is the inability of subnational governments to manage responsibilities in human resources that would allow them to rationalize teacher personnel.

- Consequently, the overall transfer is still mainly supply-driven. This system is appropriate when subnational governments have control over teachers, but this is not the case in the current system. It was designed to respond to past excesses on the part of many local governments that seriously put the nation's fiscal stability at risk.
- Most local governments rely extensively on the central government for financing, particularly through the SGP, and their own budgets contribute only about 10 percent of the cost in providing services.
- Finally the division of responsibilities between the nation, departments, and municipalities has not been fully clarified; this leads to confusion and lowers the willingness of local governments to fully engage in the sector. For example, in theory municipalities are responsible for school infrastructure, but it is often not clear which level of government actually owns the schools.

6.30 At the same time, the recent reforms to the transfer system imply that there are new resources flowing into the education system:

- Increased resources available through the SGP for education in the amount of about one billion COP; this represents an increase for education from 2007 to 2008 of about 11 percent.
- The Legislative Act No. 4 of 2007 requires a certain percentage of the additional resources to be used for quality, in the amount of 0.2 billion COP; this represents an increase for the quality budget in the amount of about 40 percent.
- Changes in the demographic structures of both student and teacher populations; the latter may lead to additional resources through savings in the budget for teachers.

6.31 Without changing the present institutional arrangements however, the new resources are a missed opportunity to improve the education system.

3.1.2. Strategy for Going Forward

6.32 Addressing aforementioned institutional issues requires an explicit strategy in order to address them. The following are the three main elements of this strategy:

- **(i) A clear model of accountability: resolving the current partial decentralization situation.** Colombia's education system is at a critical juncture: it either continues to decentralize important responsibilities, particularly with regard to human resources management, so that the incentives structured by the central government through the transfer formula—and increased resources—can be effectively used at subnational levels; or it adjusts the system to ensure that local governments have adequate resources to cover the payroll and have the autonomy to focus on other aspects of the education sector effectively.
- **(ii) Combining fiscal with institutional reforms.** Transfers formulas still need to improve but institutional reforms need to accompany them in order to be effective. An important element is to create incentives for the use of own revenue as a complement to SGP.
- **(iii) Gradual adjustments with elements of asymmetric decentralization.** Adjusting institutions and changing the present balance that has developed must be done carefully in order to avoid the problems that the past decentralization attempts had created. The education sector should continue with asymmetric decentralization approaches: selecting the most

capable and efficient entities which could take on additional responsibilities, so as to gradually move towards higher degrees of decentralization.

3.1.3. Addressing the Key Challenge: Human Resource Management

6.33 Central to overcoming partial decentralization is to resolve the inconsistencies between the SGP and the rules on human resource management. For Colombia there are two principal options for moving forward with respect to human resource management.

Option One: The Path toward Greater Decentralization—Revise the Human Resources Rules to Allow Local Governments to Have More Authority

6.34 Decentralizing human resources would entail three important decisions: (i) adjusting the level of pay; (ii) hardship allowances; (iii) transferring teachers; (iv) strengthening the “per student” element in the formula; (v) adjustments to the rules for firing of personnel. These decisions would allow local governments to take steps to rationalize their work force, as envisioned in Law 715 of 2001.

6.35 **(i) Allow local governments to adjust pay within a predetermined range** (Box 6.2). The current rules do not give any possibility to determine the level of pay; an important weakness in the current salary structure is that it does not take into consideration the significant differences in the cost of living in different parts of the country. By decentralizing this responsibility the national government could allow departments to establish pay within a range, for example from 2 percent to 5 percent; each local government would determine the pay increase and assume the additional fiscal cost implied; hence this rule would need to be based on corresponding fiscal responsibility rules.

Box 6.2 HR policies in education: adjusting pay within a predetermined range

Allowing departments to adjust pay would require a gradual and definitive phasing out of the *complemento*. Initially, only local governments that have sufficient resources and have the fiscal capacity in the future would be allowed to deviate from the national average. MEN and MHCP would have to evaluate each local government’s capacity in this respect. One way to ensure responsible behavior would be to require local governments to commit in the long run a certain percentage of their own resources in this exercise.

For this approach to work, the national government would have to carefully monitor pay levels to avoid excessive and unsustainable behavior. In addition to announcing a range, the national government needs to establish an expected average rate of increase and then monitor which local governments exceed this average. Local governments that consistently exceed the range would have to loose this HR responsibility.

6.36 The introduction of this reform could follow two ways: either through a nation-wide and symmetric roll out independent of the capacities of subnational governments, providing them increasing room to establish pay; or proceed in an asymmetric fashion, selecting individual subnational governments which from their fiscal indicators and past performance in delivering and improving services are the most capable. Table 6.1 below further presents criteria that could be used to proceed with asymmetric decentralization.

6.37 **Establish an explicit policy regarding teachers working in difficult areas, including the payment of hardship allowances and/or cost of living.** In the past, these premiums have led to significant abuse with local governments approving multiple and often contradictory incentive packages. This abuse led to several crackdowns on the part of the national government.

Table 6.1 Education Sector: Criteria for Asymmetric Decentralization

Responsibilities	Criteria for Asymmetric Decentralization			Institutional Arrangements among levels of government and type of intervention
	Ex-ante Evaluation	Monitoring Indicators	Ex-post Evaluation	
<p>Determine teacher salary (within centrally defined bands), with fiscal cost borne on subnational government.</p> <p>Needs to be combined with other responsibilities: local curriculum, local education policy, etc.</p>	<p>Ratio: own revenue/payroll cost.</p> <p>Productivity indicators (coverage, drop-out rates, completion rates).</p>	<p>Student/teacher ratios.</p> <p>Track teacher mobility in light of changes in level of payment.</p> <p>Evolution of productivity and quality indicators (coverage, drop-out rates, completion rates). Monitoring of students professional development after graduating.</p>	<p>Ratio: own revenue/payroll cost.</p> <p>If cost exceeds target, responsibility needs to be recentralized.</p>	<p>In pilot departments: individual agreements based on clear objectives, including financing framework and organizational autonomy.</p> <p>Provide more autonomy based on good performance.</p>
<p>Departments to take on school management (which is currently undefined and at times in hands of municipalities)</p>	<p>Productivity indicators (coverage, drop-out rates, completion rates).</p>	<p>Evolution of productivity and quality indicators (coverage, drop-out rates, completion rates). Monitoring of students professional development after graduating.</p>	<p>Assessment after 5 years.</p> <p>If autonomy leads to deterioration in school management, there should be explicit recentralization.</p> <p>Conversely, decentralization could proceed further.</p>	<p>In pilot departments: individual agreements based on clear objectives, including financing framework and organizational autonomy.</p> <p>Provide more autonomy based on good performance.</p>

6.38 The government could draft a series of regulations indicating under what conditions it is appropriate to establish premiums and the rules for their payment. There are several key areas where premium might make sense.⁷¹ If premiums are established, the SGP formula should explicitly recognize the need to pay these premiums and make appropriate adjustments. It is very important to ensure that incentives and premiums do not become acquired rights that teachers can take from one job to another and instead represent special payment for well defined circumstances.

6.39 **(iii) Development rules to facilitate the transfers of teachers.** One weakness in the current system is the difficulty that teachers have in being transferred within the department (for example, from one certified municipality to another). While this helps to ensure that teachers do not abandon rural positions for more attractive urban positions (in certified municipalities), it also complicates the ability of local governments to rationalize their workforce according to student/teacher ratios.

6.40 For transfers within departments, the government should consider regulations that allow jurisdictions to transfer teachers from other jurisdictions rather than holding an open competition for each new position. Rules would have to be established to encourage teachers to apply from areas where there is an excess of teachers (based on student/teacher ratios).

6.41 Different rules would need to be put in place for teachers transferring among different departments. Under a more decentralized human resource scheme, departments would need to have the right to reject the transfer of personnel from other departments. On the other hand, for transfers among departments teachers would have to accept the existing pay scale and could not take their salary level with them.

6.42 **(iv) Improving the SGP transfer formula.** There are three important policy options to be considered.

- **Strengthening the “per-student” element.** The per-student element in the current formula only applies at the margin—that is, for newly enrolled students. Provided departments acquire new and additional responsibilities in managing personnel outlined above, the formula could be structured such that the per-student element also applies to covering a share of the current and basic payroll cost.
- **Stronger impact through simplification:** The use of categories (*tipologías*) may reduce the signals sent by the formula. While categories tend to force outlier governments closer to the mean, which can be important to encourage efficiency, they also tend to reduce the impact of each government’s own efforts by grouping them with often disparate comparators. The national government should carefully consider the appropriate role of the categories and ensure that the categorization is fair and broadly accepted.
- **Predictability:** The composition of the formula is likely to change from year to year, however the government should try to ensure that there is as much stability as possible.

71. These include payment for teachers who work in especially difficult and remote areas; teachers who work in areas with usually high costs of living; and teachers who have special skills. In the case of teachers living in remote areas, MEN could establish the criteria for this payment based on information from DANE and other government agencies. The same procedure could be applied to areas with high costs of living. For special skills, the local jurisdiction and MEN would have to agree on what constitute a special skill. In many cases, the payment can be in the form of a “prize,” a one time payment that is offered in special cases.

When elements are changed, these changes should be announced as soon as possible and be subject to public comment. The CONPES document with the revised formula should be published as early as possible to allow local governments a chance to review and understand the formula. Good practice would be to release the CONPES document at least two months before the new school year.

6.43 **(v) Adjusting payroll size and staff to needs.** In order to rationalize the workforce as mandated by Law 715 (2001) it would be convenient to facilitate the restructuring of payroll provided certain parameters are fulfilled. One option is to provide departments more ability to offer compensation packages for teachers who want to leave; applying more rigorously the personnel evaluation system that already exists; or to transfer personnel within and among departments, among others. Such arrangements could be introduced once certain parameters are fulfilled, for instance: once the ratio of the payroll cost exceeds certain targets set by the fiscal responsibility regulations (for instance, a percentage of current own revenue); and once student/teacher ratios exceed certain targets.

6.44 **Conditions of success.** Moving towards a more decentralized system of human resource management requires that some conditions of success are in place, as outlined below.

- Consensus to amend the Teachers Statute.
- Fiscal responsibility: allowing local governments more control over human resources provides significant fiscal risk, given Colombia's past experience with education decentralization. Decentralizing more responsibilities along the lines suggested above also requires an adjusted fiscal responsibility framework which covers subnational expenditures besides administrative cost of the departmental and municipal governments (*funcionamiento*).
- Indicators such as student/teacher ratios are respected and can be enforced.
- Monitoring and control on behalf of the central government; sanctions are graduated and enforceable.

Option 2: Completing Centralization of Teacher Personnel

6.45 Should the conditions of success for deeper decentralization as outlined in Option One not be present, the possibility to completing the centralized human resource management model could be considered. There are two elements:

- **Converting teachers into central government employees.** The national government would hire and administer teachers as their own employees.
- **The national government assumes the cost of the payroll.** The national government will remain responsible for paying teachers; the SGP would cover all the cost, without separating into different components (among others, the *complemento* would be eliminated as a separate transfer).

6.46 The scheme of complete centralization of teacher management would provide benefits in terms of ensuring: common benefits for teachers; equitable distribution of teachers in and across

the departments; and common standards in student/teacher ratios across departments. For simplicity, and in order to avoid the existence of parallel HR systems, this new scheme should not be introduced gradually.

6.47 At the same time, it should be underscored that the additional benefits over the current, already quite centralized scheme, are marginal for the following two reasons: a substantial part of the teachers employed by the private sector (NGOs, church, others) should still be supervised by departmental governments in order to ensure current flexible arrangements are maintained; in addition, significant responsibilities of the education system are decentralized in departments and municipalities—and which cannot realistically be centralized—and hence basic coordination problems are likely to remain.

3.1.4. Policy Options independent of Decentralized or Centralized Human Resource Management

6.48 Some reforms to the education system are important to be addressed independently of the human resource management model that is selected: (a) Clarifying responsibilities among levels of government; (b) Transparent Financing; (c) Improvement in Quality.

6.49 **(a) Responsibilities: clarify the role of departments and municipalities in the education system.** While Law 715 has clarified some of the roles of departments and municipalities the following issues would need to be addressed.

- **Strengthening the role of departments vis-à-vis certified municipalities.** Under the current system departments only focus on the public education system in non-certified municipalities although they are elected by the entire population. While this does tend to improve equity by having departments focus on small municipalities (which tend to be poorer), it also creates inefficiencies because it leaves many weaker certified municipalities with little support. It also limits the role of the department government in carrying out department level education planning. The department could be given certain monitoring and evaluation functions and the authority to support certified municipalities.
- **Defining ownership of schools.** The ownership of schools should be better defined to ensure that there is a clear “owner” of the physical infrastructure. Given the current setup of public education, it would probably be appropriate to transfer schools explicitly to municipalities. In the medium term, the education sector may want to explore options to “incorporate” schools as legal entities. This will allow a greater role for community participation in its operation.
- **Private sector.** The national government should also provide support to department governments to work with the private sector in planning and capacity building role. Except in special cases, the department government should not directly subsidize the private sector but it should work together to try to fill in gaps in both coverage and quality and to ensure that there is sufficient new investment.

(b) Transparency in Financing: The national government should publicize the elements of the formula so that the public have a clearer understanding of what factors are influencing their performance in the formula. This might include publicizing the raw results and the different subcomponents of the formula.

6.50 (c) **Education Quality: Revise the allocation of the SGP for quality** (Box 6.3). Currently, municipalities receive a fixed per capita payment to cover education quality.⁷² Departments that want to invest in quality either have to use their own resources or their “surplus” from the SGP-Coverage transfer. Of course, many departments have very limited resources and most do not have significant SGP-Coverage surpluses. As the national government phases in the new salary scales for teachers (from Decree 2277 of 2002), and as the total allocation for SGP continues to increase in real terms, SGP for quality will grow. There are two reforms that could help improve the impact of this allocation:

Box 6.3 Developing a Formula for “SGP-Quality”

In the system outlined above most of the resources (for example, 80%) would still be allocated on an equal per capita basis. However, part of the “SGP-quality” transfer would be awarded to jurisdictions that have increased their scores on student assessments. This award would be temporary, perhaps lasting for three years. One option would be to categorize municipalities, for example those that have 1 percent to 5 percent increase in test scores; 6 percent to 10 percent increases in test scores, and so forth. The jurisdictions would be awarded a special per capita assignment based on its increase in test scores.¹ As whole, this reform would encourage municipalities to focus the SGP-Quality on reforms that encourage increase in learning outcomes.

Although a reform such as this would generate positive externalities to invest in education quality, it would require careful monitoring on the part of the national government to ensure that the awards for quality increases do not exceed the available budget. This will require adjustment in the first few years.

Source: World Bank.

- **The allocation of “SGP-quality” can explicitly recognize efforts to improve student learning**, using established assessment tools such as SABER and the State Exams of the *Instituto Colombiano para la Fomento de la Educación Superior* (ICFES). Although this should not be the sole determinant of the allocation of the SGP for quality, it can become a criterion.
- **Separate costs related to maintenance and infrastructure.** Currently, “SGP-quality” covers a wide range of expenditures that dilutes its central role of increasing education quality. As already discussed, by law many types of recurrent costs take precedence over expenditures on quality, which reduces the total impact of this transfer. In addition to the proposals above, the national government could consider to establishing a separate SGP for maintenance and infrastructure. The calculation of this formula should include some measure of the local government’s contribution to maintenance and infrastructure (Box 6.4).

6.51 The example of Chile in improving education quality could prove a useful experience in this regard. Further analysis is provided in the Bank report “The Quality of Education in Colombia: An Analysis and Policy Agenda” (2008).

6.52 Table 6.2 below summarizes the policy options that could be given consideration in a sequenced fashion over the short-, medium, - and long term.

72. Certified and non-certified receive different amounts and districts receive the payment as part of their SGP for coverage. Other than that, there is no variation across jurisdictions.

Box 6.4 Improving the Distribution of the SGP-quality Transfer for Education: Maintenance and Infrastructure

The national government could make an estimate of the likely maintenance needs based on the existing physical infrastructure and should classify municipalities into different categories, much as is currently done with SGP-Coverage. Then a transfer should be made on a per capita basis, with all municipalities in the same category receiving the same capitation. Creating categories will help distinguish between municipalities that have a lot of dispersed schools compared to one with mostly large urban schools. At the same time, it will not reward municipalities that go on a large building spree and increase their needs for maintenance. Municipalities are in the best position to maintain schools. It may also make sense to transfer formally the ownership of school infrastructure to the municipal level (see below).

Part of the money could be offered on a matching basis, with municipalities that put more money in maintenance receiving a matching grant. In this case, the size of the matching grant would vary based on the fiscal capacity of the municipality (poorer municipalities would get more) and it would have to be capped to ensure fiscal sustainability. This approach would facilitate municipalities engaging in major maintenance efforts from time to time.

Source: World Bank.

Table 6.2 Policy Options for Education

Short-term Policy Options	Medium-term Policy Options	Long-term Policy Options
Policy Option 1: The Path toward Deeper Decentralization—Revise the Human Resources Rules to Allow Local Governments to Have More Authority		
Preparatory work: (a) Announce a range of pay increases, for example, from 2 percent to 5 percent, based on which each local government would determine the pay increase given its budget constraint. (b) Establish fiscal responsibility rules that account for increased responsibilities in HR at subnational levels.	Implement HR restructuring and rationalization: Gradual implementation of HR reform with national government support. Formula: (a) Gradually phase out the <i>complemento</i> ; (b) simplification; (c) ensure predictability in the execution of transfers. Teacher transfers: facilitate transfer within department.	Formula: Introduce “per student” component to increasing share of payroll cost. Distribute rest on present formula. Payments: Explicit policy regarding teachers working in difficult areas, including the payment of hardship allowances.
Policy Option 2: Centralization of Human Resource Management		
Preparatory work: craft regulations; legal strategy for possible claims against departments or central government; revise ability of management systems to adapt to changes.	Teacher Status: converting teachers into central government employees. Payroll cost: national government assumes the full cost of the payroll, transferring the total amount to each jurisdiction.	Equity in teacher distribution: retiring teachers would not be replaced in jurisdictions with student/teacher ratios above the national average; increased competitive hiring in jurisdictions with student/teacher ratios below the national average in order to achieve equitable distribution.
Additional Policy Options		
Formula: Publish and explain distribution criteria in an easy-to-understand format. Responsibilities: (a) Define ownership in schools. (b) Strengthen role of departments vis-à-vis certified municipalities.	Education Quality: Create an SGP for maintenance and infrastructure.	Private Sector. Support departments in working with the private sector. Education Quality: Allocation of “SGP quality” based on efforts to improve education quality, using established assessment tools such as SABER and the State Exams of ICFES.

Source: World Bank.

3.2. Health

3.2.1. Challenges

6.53 The country has taken an innovative approach in reforming its health sector. Decentralization was a core element of the changes that were introduced since the early 1990s in terms of organization, financing, and service delivery. Yet despite continued efforts to improve the system several challenges still remain:

- Subnational governments are reluctant to using own revenue as complementary funding to SGP-financed services: in demand subsidies, local resources are only about a tenth of total resources in 2005.
- There is an oversupply of first-level health hospitals: in 2005 the average Bed Turnover Rate was roughly 48 percent while second- and third-level hospitals seem to be operating at full capacity with occupation rates above 80 percent.
- There are overlaps in financing, provision, and oversight functions among the different levels of government.
- Public hospitals are partially protected from market competition—which was one of the core reforms of the health sector reform—by requiring minimum or preferential contracting on the part of insurers and, more recently, by departments.
- Public health interventions are often fragmented, thus losing economies of scale.

The obstacles outlined above undermine resource management and efficiency in subnational governments, which, as portrayed earlier, is very heterogeneous across the different jurisdictions. At the same time, there are additional resources from the recently reformed SGP transfer which will become available in the next years. It is clear that without improving the present institutional arrangements, and altering the incentive structure, the new resources are a missed opportunity to improve the health system.

3.2.2. Strategy for Going Forward

6.54 In order to address above-mentioned challenges, the following strategy seems to be suitable in order to align the incentives in the health system.

- **From earmarking to unlocking local creativity and allocative efficiency.** Efficiency problems in health management have been addressed previously by establishing higher levels of earmarking, and more central controls. This strategy is no longer effective because it does not eliminate the underlying incentive problems, but perpetuates them. In terms of sequencing, first transparency should be increased in resource management, before more decisionmaking space is provided. When there is more transparency and more accountability is in place, allocative efficiency can materialize. This could be further enhanced by reducing earmarking; improving human resource management; as well as providing incentives for subnational governments to make more use of own revenue to finance health expenditures.
- **Improving the service delivery chain from subnational governments to frontline providers (hospitals).** Past reform strategies have also long emphasized the flow of funds from the national level to subnational governments through improving the transfer system. These transfers have clearly achieved more equity in terms of per capita distribution, but have failed to address the core incentive problems for service delivery: the service delivery chain among subnational governments, insurers, and hospitals needs to be more transparent

and opportunities for corruption eliminated. This would also break the vicious cycle of national transfers rewarding inefficiencies and perpetuating local demands for more resources in order to cover suboptimal management practices.

- **Combining horizontal and vertical accountability.** The previous decentralization process has emphasized top-down controls of subnational governments on behalf of the central government. The future strategy should take this as a starting point, but enhance local autonomy at the same time; this would strengthen vertical accountability (among levels of government). At the same time, horizontal accountability towards the users of services should be strengthened by fostering results-based management.
- **Adjusting to local conditions and asymmetric decentralization.** The different local conditions in Colombia, as well as the very heterogeneous levels of efficiency, warrant flexible approaches for health management. Asymmetric decentralization can play an important role in facilitating such flexible approaches. Efficiency gains could, for instance, be achieved by selectively providing more autonomy in some areas of resource management.

3.2.3. Policy Options for the Health Sector

6.55 Based on the strategy outlined above, the following are policy options in critical areas of the health sector aimed at improving resource management.

6.56 (a) **Institutional framework.** One area which clearly needs improvement are the institutional arrangements among levels of government.

- In some local health organizations, municipalities are “judge and jury” of their own actions. In order to better separate roles and responsibilities, municipal authorities should not be longer members of the Directive Boards of Hospitals. Control and reporting should be improved by delegating oversight to external agencies.
- Capacity building should be carried out in high priority areas which are important for transparency; particularly important are budget management and flow of funds.
- Information flow should be improved between subnational governments, hospitals and insurers. This is, among others, the basis on which transfers are calculated.
- A long term goal is to strengthen vertical and horizontal accountability particularly in two areas: strengthen oversight capacity of national and local agencies as well as at the citizen level; strengthen enforcement capacity.

6.57 At the same time, it is important to realize that the health sector is subject to competition among departments and municipalities as long as a share of the population is still uninsured—and where responsibilities for serving these different groups is not on a single level of government. A design flaw at the initiation of the decentralization process, this sub-optimal division of responsibilities will persist unless there is substantial progress in enrolling a higher share of the population.

6.58 (b) **Human resource management.** Improving management of human resources is critical for achieving higher allocative efficiency. It is the one area where savings achieved at the

local level are not subject to central rules and regulations. Reform of human resources is already under way, but should be deepened in the following areas:

- **Human resource restructuring program in hospitals.** The MPS should continue with the “restructuring program”.
- **Improved staffing.** (i) With the new law on *Talento Humano en Salud*, the ESEs should be required to report annually on their staffing profile.(ii) providing assistance to define the “best” staffing profile for the “market” of the specific hospital.
- **Improving rules for selection process.** Once selection process (CNSC-led) has certified the “quality” of a group of candidates, allow local participation (e.g., hospital director, *Junta Directiva*) to make final selection from this qualified group. This option is workable as long as local government is not sitting in the hospital Board. Otherwise political favoritism could impede this mechanism to be effective.
- **Adjusting levels of pay.** In the long term, there is the option to allow departments to adjust the level of pay of health personnel. Similar to the education sector, an important weakness in the current salary structure in the health sector is that the significant differences in the cost of living in different parts of the country are not reflected. The national government could allow departments to establish pay within a range, for example from 2 percent to 5 percent; each local government would determine the pay increase and assume the additional fiscal cost implied, in the scope of strengthened fiscal responsibility rules. This area of reform could proceed in an asymmetric fashion. Table 6.3 highlights critical indicators that could be established in order to select capable subnational governments.
- **Support for transitioning towards new human resource structure.** The *planta básica* (input to the Staffing Plan, which is revised/approved annually by the *Junta Directiva*) should be fully applied through: support from the MPS to cover the cost of the transition—including severance payments—given that given that ESEs typically are not going to have the capital to pay transition costs. There are several alternative options: the transition could be financed through a retirements; or some ESEs could project a surplus and devote that surplus over a few years to paying transition costs.
- **Capacity building.** ESEs should be required to design and implement institutional development plans (which may also be approved annually by *Junta Directiva*).

6.59 (c) **Public hospitals.** These entities are an important element for the service delivery in the health sector. Past reform efforts have long focused on a reform of public hospitals; these efforts should continue however the following options could be considered:

- **Expansion of hospital restructuring programs.** Currently not all public hospitals are part of these programs; coverage should be expanded.
- **Promoting efficiency-enhancing contracting mechanisms.** The current regulatory framework with preferential contracting rules out efficiency gains in areas where market forces could be working and effective. In these areas, the central government could first reduce the regulatory privileges to public hospitals; and over the medium to long term phase them out completely. It is important to note that if these rules are eliminated the restrictions on the private sector should also be lifted in parallel.

- **Strengthening accountability mechanisms.** In areas where there are structural limitations for market competition to be effective, accountability mechanisms should be improved. This could be achieved through several means, for instance by establishing service delivery targets for hospitals which are made public, or benchmarking.

6.60 **(d) Funding.** The financing of the health services remain a critical area of improvement. Several policy options laid out above will contribute to achieving a better working funding system, however, the following are three areas where the system would still need to be improved:

- **Supply subsidies and improvement of benefits design:** rationalize the provision of services not covered by the POSS by reorganizing the portfolio of services financed with supply subsidies (examples: Antioquia, Bogotá).
- **Creating incentives for higher own fiscal effort and complementary local finance:** relax formulas for commitment of local own revenue and corresponding regulations.
- **Achieving a closer match between supply and demand:** (i) Revise and tailor supply allocation formula; (ii) Reduce restrictions to participation of private sector.
- **Relax ear-marking rules:** in the long term, subnational governments could be provided more autonomy to spend resources according to their own needs. This could proceed in an asymmetric fashion, providing autonomy to those departments or municipalities which have a solid track record in improving efficiency as well as service delivery. Table 6.4 highlights some of the criteria that could be used to select capable subnational governments.

6.61 **(e) Public Health.** The organization and provision of public health services appears to be fragmented. The following are options:

- **Modes of delivery:** encourage regional economies of scale in public health activities.
- **Adjusting responsibilities:** revise catalog of public health responsibilities and adjust corresponding regulations.
- **Coordination:** establish coordination mechanisms or instruments for different levels of government. This would need to be complemented by providing incentives so that subnational governments do not cause overlaps in financing and rather complement public health activities.
- **Financing of public health:** relax and fine-tune allocation formula of SGP to meet population epidemiological profile and risk factors.

Table 6.3 Health Sector: Criteria for Asymmetric Decentralization

	Criteria for Asymmetric Decentralization			Institutional Arrangements
	Ex-ante Evaluation	Monitoring Indicators	Ex-post Evaluation	
Determine teacher salary (within centrally defined bands).	<p>Fiscal responsibility indicators: ratio own revenue/payroll cost.</p> <p>Productivity indicators (coverage in public health programs; hospital waiting lists; among others).</p>	<p>Fiscal responsibility indicators: percentage of payroll cost as share of own revenue.</p> <p>Evolution of productivity and quality indicators: coverage in public health programs; hospital waiting lists; ratios of health status improvement and/or morbidity; emergency services, among others.</p> <p>Monitor staff mobility as an effect of different levels of pay.</p>	<p>Assessment after 5 years: corrective measures if productivity and quality indicators show decline (and consider recentralization in extreme cases).</p>	<p>In pilot departments: individual agreements based on clear objectives, including financing framework and organizational autonomy.</p> <p>Provide more autonomy based on good performance.</p>
Relax ear-marking of health expenditures.	<p>Service delivery targets (measured over several years).</p> <p>Productivity and efficiency indicators of public hospitals.</p> <p>Closer match between supply and demand has been achieved.</p> <p>Fiscal responsibility indicators (for human resources) are in line with targets.</p>	<p>Productivity indicators of public hospitals.</p> <p>Service delivery indicators.</p>	<p>Productivity indicators of public hospitals.</p> <p>Service delivery indicators.</p>	<p>In pilot departments: individual agreements.</p>

6.62 Table 6.4 summarizes the policy options that could gradually put the system on a more efficient track for health management.

Table 6.4 Policy Options for Health

	Short-term Policy Options	Medium-term Policy Options	Long-term Policy Options
	<i>Strategic goal:</i> Ensure that the resource flow among departments and municipalities to frontline providers (insurers, hospitals) is more transparent.	<i>Strategic goal:</i> Create conditions for competition in public hospitals to be effective. Achieve higher allocative efficiency in departments and municipalities through more local fiscal contributions and hospital restructuring. Adjust national resource flow for better targeting in all municipalities, particularly of first-level providers.	<i>Strategic goal:</i> Complete the system of oversight and controls. Monitoring of performance targets along with gradual sanctions for low performance.
Institutions	<p>Institutional arrangements at the local level: (a) Eliminate participation of Municipal authorities in Directive boards of hospitals. (b) Improve control and reporting: delegate oversight to external agencies.</p> <p>Capacity building: Strengthen local management capacity in high priority areas (budget, flow of funds) for transparency.</p>	<p>Improve the information of the sector. Improve the information flow between subnational governments, hospitals and insurers.</p> <p>Capacity building: continue with strengthening local capacity in high priority areas.</p>	<p>Strengthening vertical and horizontal accountability: (a) Strengthen oversight, by both national and local agencies, and at the citizen level. (b) Strengthen enforcement capacity.</p>
Human resources	<p>Human resource restructuring program in hospitals. The MPS should continue with the “restructuring program” providing assistance to define “best” staffing profile for the “market” of the specific hospital; provide resources to cover the transition costs of restructuring, including severance payments.</p> <p>Improved reporting on staffing. With the new law on <i>Talento Humano en Salud</i>, require ESEs to report annually on their staffing profile.</p>	<p>Improved Staffing Plan. Application of the <i>planta básica</i> (input to the Staffing Plan, which is revised/approved annually by the <i>Junta Directiva</i>) through:</p> <p>(a) support from MPS for resources for transition; or gradual adjustment over time with retirements (other own resources) to make transition.</p> <p>(b) Build into ESE an institutional development plan (also approved annually by <i>Junta Directiva</i>).</p> <p>(c) For some ESEs, project a surplus and devote that surplus over a few years to paying transition costs.</p>	<p>Improving rules for selection process. Once selection process (CNSC-led) has certified the “quality” of a group of candidates, allow local participation (e.g., hospital director, <i>Junta Directiva</i>) to make final selection from this qualified group. This option is workable as long as local government is not sitting in the hospital Board. Otherwise political favoritism could impede this mechanism to be effective.</p> <p>Adjusting levels of pay. Consider option to determine pay (within centrally defined bands).</p>

Public hospitals	Strengthen accountability mechanisms: (a) Promote efficiency-enhancing contracting mechanisms. (b) Disclosure of public information on hospital performance.	Restructuring programs: expand hospital restructuring programs for higher coverage. Contracting: Reduce regulatory privileges to public hospitals (minimum contracting requirements).	Contracting: eliminate regulatory privileges to public hospitals (minimum contracting requirements). If this is eliminated also the restrictions on the private sector should be lifted in parallel. Strengthen accountability mechanisms: in areas with no competition, strengthen and introduce additional accountability mechanisms (service delivery targets; benchmarking)..
Funding	Supply subsidies and improvement of benefits design: Rationalize the provision of services not covered by the POSS by reorganizing the portfolio of services financed with supply subsidies (examples: Antioquia, Bogota).	Achieving a closer match between supply and demand: (a) Revise and tailor supply allocation formula. (b) Reduce restrictions to participation of private sector.	Creating incentives for higher own fiscal effort and complementary local finance: Relax formulas for commitment of local own revenue and corresponding regulations. Relax earmarking: provide more decisionmaking space for subnational governments provided some minimum criteria and performance thresholds are met.
Public health	Responsibilities: revise public health responsibilities and corresponding legal framework. Modes of delivery: encourage regional economies of scale in public health activities.	Coordination: implement coordination mechanisms or instruments and provide incentives to subnational governments to do so.	Funding: relax and fine-tune allocation formula of SGP to meet population epidemiological profile and risk factors.

3.3. Roads

3.3.1. Challenges

6.63 Decentralization of road management was pursued since the early 1990s. Implementation was adjusted several times as shortcomings in financing and institutional capacity became apparent. Even today several problems have remained:

- (i) Responsibility for the maintenance of sub-national roads is not fully decentralized, nor always unambiguous.
- (ii) The quality and reliability of information for the management of the road network is sub-optimal.
- (iii) A variety of resources available for the sector, including earmarked revenues at departmental and municipal level as well as transfers from national government are not prioritized for, or primarily available for maintenance. There is no specific funding source, user related or otherwise, dedicated to maintenance of sub-national roads.

(iv) These resources are not optimally allocated and are moreover volatile from year to year.

6.64 These problems impede better management of scarce resources. If not tackled, the desired improvements in quality of roads are unlikely in many departments and municipalities.

3.3.2. Strategy

6.65 The following strategy should address the various challenges outlined above. The elements of this strategy are the following:

- **(i) Defining responsibilities.** Decisions are made on the designation of the road network and its allocation for maintenance responsibility. Such decisions are backed by a road inventory and condition survey (on which basis road assets could be valued). The departments would need to have the capacity to continue to update the road survey.
- **(ii) Prioritizing funding for maintenance.** Maintenance funding should always have priority and its needs should be met before considering road improvement or new construction. To this end a specific and distinct funding source based on user generated revenues should be put in place. A priority activity for the subnational road administrations is to work out, with the help of the center, what resources will need to be raised on an annual basis. The new “road funds” could be introduced on a gradual, willing participant basis.
- **(iii) Phasing out earmarking: Accept allocative inefficiencies in the short term, but implement other reforms that will help them be resolved in the long term.** The earmarking of the Gasoline and Diesel Tax (ACPM) might not be optimal from an allocative efficiency point of view, but it is clearly needed in the short term to guarantee a minimum level of road investment. Earmarking should be seen as an interim solution and should be phased out in the long term and replaced with a user pay based fuel charge which will be introduced progressively in the departments. Departments should still be held accountable for use of resources, including maximizing the opportunities that they have to prioritize maintenance.
- **(iv) Start from the bottom-up with a cost-benefit link at subnational levels and then establish compensation policies through central government transfers.** The national transfer system is another significant constraint and bottleneck for better subnational road management. However it is more effective to strengthen the cost-benefit link at the departmental and municipal levels first, and then complement it later with a national funding mechanism for ensuring equity. This would avoid the risk that central funding distorts local incentives.

3.3.3. Policy Options

6.66 Based on the strategy outlined above, the different policy options are the following.

(a) Defining Responsibilities:

- Encourage departments to do a basic road inventory and survey as a short-term measure. A road survey will not avoid that levels of government intrude on one another, but will at least make overlaps more transparent.
- Differentiating between ownership and responsibilities for maintenance. An intermediate measure that could mitigate some of these constraints is to clearly define ownership for roads vis-à-vis responsibilities for maintenance, which could be assigned to others, for instance on an agency basis (based on considerations of economy and efficiency), for example, the *Instituto Nacional de Vías* (INVIAS) on behalf of municipalities.

(b) Institutional strengthening:

- The center should continue to support subnational governments in the technical, management, and financial areas according to clear and consistently applied criteria and in line with the policy provisions set out in the CONPES Plan Vial Regional.
- Complete a baseline survey of the capacities and competences in all departments and municipalities.
- Develop an evaluative tool that could be used by Ministry of Transport to assess and rank department road management.
- Cost out the capital and recurrent cost implications of meeting the basic criteria for technical competence.
- Design the central support system - both technical and financial - to support increasing capacity at sub-national level.

Box 6.5 The Importance of User Charges as an Alternative Funding Source to Earmarked Revenue

The proposed strategy is predicated on moving away from earmarking of taxes and duties as a primary form of financial support to maintenance of the sub-national network. Why is this? In general, earmarking of taxes reduces budget flexibility and reduces the efficiency of the resource allocation process. Specifically in the case of Colombia earmarking of resources for the road sector is done in an ineffective way in that: the same resource may be made available for a variety of end uses e.g. debt restructuring as much as for transport expenditures. And in all events, the current system does not prioritize any earmarked resources for maintenance which is the most important expenditure to be undertaken by the sub-national authorities. By contrast a road user charge can be related to usage and is both a fairer way of allocating the burden of payment and also a more efficient way of delivering dedicated resources to the road sector - see implementation steps below.

Road funds could provide part of the solution for the sub-national network in Colombia with the advantage of raising a higher level of resources at the decentralized level and being able to relate what is raised directly to the maintenance needs on the network. Ideally the funding mechanism would be a newly created fuel levy expressed in cents per liter. A second best solution would be to allocate a portion of existing gas taxes and re-label this as a levy (as was done in some of the Central American cases). It may be prudent to proceed with such a reform on a pilot case-by-case basis with “willing participant” departments. It will also be necessary to come up with a mechanism to allocate funding between the secondary (department) and tertiary (municipal) which could be based on traffic levels or more simply by network size.

Source: World Bank.

(c) User charges and earmarking:

- Carry out a road use charge study (using Bank model), establish underlying maintenance costs to be recovered.
- Financing study to review different structures of road user charges (Box 6.5) that could be employed - come up with recommendation for initial levy.
- Institutional study to review alternative structures for funds management and governance.
- Phasing out earmarking. Departmental and municipal earmarked revenues destined for the road sector should be seen only as an interim measure pending a satisfactory implementation of user charges. Explicit and transparent criteria would need to be developed for the allocation of these revenues giving a high priority to maintenance.

(d) Establishing a national transfer:

6.67 In addition to providing a framework for the delivery of the financial resources for road maintenance, the government also needs to consider a framework with the following objectives. The central funding (subsidy) mechanism could work at two levels:

- (i) regardless of capacity and extent of devolution of responsibility, each department should be allocated a proportion of not more than 50 percent of the subsidy payment owing the department according to a formula to be agreed upon (for instance, based on network size etc); this payment would primarily follow the objective to establish equity in resource availability per department and to support departmental access to resources (including debt) for investments (Plan Vial Regional);
- (ii) the full amount could be paid out and the responsibility formally transferred once a series of benchmarks of technical capacity had been reached (this could be done as one or 2/3 separate steps). This could proceed in an asymmetric fashion (refer to Table 6.5). The key criteria for departments to be eligible to receive funding from central government would be the following: (a) the department does use an acceptable planning tool for the prioritization of maintenance expenditure; (b) road inventory and condition survey are carried on a regular basis; (c) the department does have a contracting system that enables it to efficiently and cleanly allocate work; (d) sufficient qualified staff are in place to manage and monitor the works program - to be implemented through private contractors; and (e) acceptable audit and disclosure policy in place.

(e) Pooling of national resources:

6.68 This measure does not appear to be viable politically in the short term, but it is likely to be more feasible in the long term. Once resource management for roads has improved within departments and municipalities, this should create demand for better, more organized, and coherent national road financing.

Table 6.5 Road Sector: Criteria for Asymmetric Decentralization

	Criteria for Asymmetric Decentralization			Institutional Arrangements
	Ex-ante Evaluation	Monitoring Indicators	Ex-post Evaluation	
Transfer of roads combined with central financing.	<p>Assessment of technical capacity:</p> <p>(a) Acceptable planning tool for the prioritization of maintenance expenditure is in place.</p> <p>(b) Road inventory and condition survey are carried on a regular basis.</p> <p>(c) Contracting system that enables it to efficiently and cleanly allocate work.</p> <p>(d) Sufficient qualified staff to manage and monitor the works program (to be implemented through private contractors); and</p> <p>(e) Acceptable audit and disclosure policy in place.</p>	<p>Allocation of maintenance expenditures.</p> <p>Service delivery indicators.</p>	<p>Assessment after 5 years: corrective measures if service quality indicators show decline.</p>	<p>In pilot departments: individual agreements.</p>

6.69 Table 6.6 below summarizes the policy options and how they could be sequenced across the short-, medium-, and long-term.

Table 6.6 Policy Options for Roads

Short-term Policy Options	Medium-term Policy Options	Long-term Policy Options
<i>Strategic goal:</i> Ensure basic working of the system. Make costs of inefficiency transparent. Set the rules of the game in terms of what is expected of subnational road authorities and the expectation that they gradually move towards assuming full responsibility.	<i>Strategic goal:</i> Once basic working of the system is ensured, establish cost-benefit link for road services at departmental and municipal levels.	<i>Strategic goal:</i> Ensure predictability and equity of national funding coupled with (selective) performance incentives along with gradual sanctions for nonperformers.
<p>Road survey: Encourage departments and municipalities to perform basic road survey. Pick “winners” or willing departments and then expand gradually to others.</p> <p>Earmarking of ACPM/Gasoline tax: (a) Clearly define expenditure items for use of resources (road maintenance); (b) establish national monitoring of use of earmarking, based on incentives for proper reporting.</p>	<p>Subsidio a la Sobretasa de Gasolina: (a) Distribute according to maintenance needs, not per equal shares. (b) Departments should be required to report back on use of funds which would also be audited.</p> <p>At departmental level, gradually phase out earmarking from ACPM/Gasoline tax. Once maintenance is at reasonable level, create more budget decisionmaking space for more allocative efficiency at subnational levels.</p> <p>Establish road maintenance fund at <u>departmental</u> level. Create user-pay-related funding resource collected at departmental level solely for maintenance purposes.</p>	<p>Pooling of national funding sources: (a) Phase out <i>Subsidio a la Sobretasa</i>, (b) define share of FAEP to be allocated to roads, and (c) pool other revenue.</p> <p>Establish national compensation mechanism: (a) Transfers to departments for ensuring equity (compensation for lowest traffic and number of road users); (b) at the margin, create transfer with distribution based on performance, along with sanctions for nonperformers.</p>

3.4 Strengthening Own Revenue

6.70 Once the sector and institutional problems are addressed, it would be desirable to engage in reforms that would strengthen the own revenue base of departments and municipalities. It would be important to provide more un-earmarked revenue, which is particularly desirable for departments. This could be achieved either simultaneously or alternatively through:

- (i) Improving tax administration of currently un-earmarked taxes combined with providing the option to adjust tax rates more flexibly (for instance, within centrally defined bands);
- (ii) The assignment of new tax bases;
- (iii) The creation of an un-earmarked transfer.

6.71 **(i) Adjusting tax rates in already decentralized taxes.** Two taxes which are already managed partially by subnational governments are the tax for liquor, beer, and tobacco; as well as the gasoline tax (base shared among departments and municipalities). In order to prevent

fiscal coordination problems, and undesired effects of smuggling, it would be important that departments are allowed to adjust the rates only within centrally defined bands. Table 6.8 below mentions criteria that could be used to select individual departments both ex-ante, during, and in an ex-post fashion.

6.72 (ii) Assignment of new tax bases. Few taxes lend themselves to decentralization. That it is more difficult to decentralize taxes than to decentralize expenditures is so well established that there is an expression to describe this reality: vertical mismatch. The main taxes, in particular, are only good as central government taxes, for various but strong reasons. The personal income tax, for instance, is the main vehicle for progressive taxation and income redistribution, which is largely a national responsibility;⁷³ what can be decentralized is a personal income tax surcharge: the tax remains a national tax, paid to the central government, but subnational governments can in addition levy a given percentage (say 5 percent or 10 percent) of this national tax.

6.73 Which of these “decentralizable” taxes would be best suited for asymmetric decentralization? The most visible and painful taxes are good candidates because they would induce subnational government politicians and bureaucrats to be more efficient. This would be the case of automobile ownership taxes, which can easily be compared between subnational governments, or of excise taxes, or of taxes on sales. This is not the case of taxes paid by enterprises: consumers—and voters—often believe that the tax burden can be shifted more easily to others. What matters is that a clear and visible link be established between the taxes paid and the services delivered, to incite voters to exert a pressure upon politicians to be efficient. Or, in the case of asymmetric decentralization, to make politicians think twice before demanding an increased decentralization package.

6.74 On the other hand, some taxes do not lend itself to asymmetric decentralization and need to be rolled out nation-wide. This is the case of the “compensating VAT” which would provide additional revenue for subnational governments, particularly departments, provided some administrative arrangements are in place.⁷⁴ Refer to Table 6.7 for detailed indicators for this type of tax.

73. If the personal income tax were a SNG tax, adding up income from various sources collected in various SNGs (wages here, capital income there, etc.) would be next to impossible, making it impossible to assess the total income of a particular individual or family, and therefore to have a really progressive tax. Different income tax rates in different SNGs would induce people to locate, at least nominally, in low tax rates SNGs. Finally, the personal income tax is usually a technically complicated tax to assess, and many, not to say most, SNGs, even in developed countries, would be unable to cope with the many exemptions or deductions or tax credits that characterize the personal income tax. It can similarly be shown that the other main tax sources, such as a value-added tax, or a corporate income tax, or a natural resources tax, not to mention import or export taxes, do not lend themselves easily to decentralization. We are left with a limited number of “decentralizable” taxes: taxes on immovable properties, taxes on automobile ownership, excise taxes (on beverages or on fuels or on electricity consumption), taxes on business activities, taxes on sales, taxes on wages.

74. The CVAT would work in the following way: on sales within a province, the provincial VAT would be charged along with the traditional national VAT. On sales across jurisdictions, no provincial VAT would be charged in the province of origin (zero-rating), but when a final sale (or next stage of production sale) occurs in the province of destination, then the province’s VAT rate would apply to that sale (deferred payment). To eliminate the incentive for households (final consumers) in other provinces to pose as registered traders, a federal “compensating VAT” (CVAT) rate would be applied to all inter-provincial sales – whether they be to households or registered traders. The “compensating VAT” not only would discourage evasion, but it would establish a chain of credits when goods move across boundaries between registered traders, thus maintaining one of the most desirable features of the VAT. For further details refer to: World Bank (2003): Argentina, Reforming Policies and Institutions for Efficiency and Equity of Public Expenditures, Report no. 25991-AR, Washington DC.

Table 6.7 Criteria for Asymmetric Revenue Decentralization

Criteria for Asymmetric Decentralization				Institutional Arrangements among levels of government	
	Ex-ante Evaluation ⁷⁵	Monitoring Indicators ⁷⁶	Ex-post Evaluation ⁷⁷		
Responsibilities which could be decentralized in taxes already partially managed at the subnational level.	For departments: Establish tax rate for liquor, beer, and tobacco tax.	Monitor degree of formality/informality.	Assess the evolution of application of tax rate over a period of 3 years and consider corrective measures.	Consider origin-based system (producer stage) with centralized tax administration if there are considerable weaknesses regarding informality of the economy.	
	For departments: Establish tax rate for gasoline tax (currently shared base among departments and municipalities)	Establish indicators: ratio of tax revenue to vehicle, or to population.	Assess the evolution of application of tax rate over a period of 3 years and consider corrective measures. Monitor sources of horizontal inequity and discuss corrective measures (structure of tax; compensatory transfers, other).		
Currently centralized taxes	Surtax for personal income tax (from zero to three percent; flat rate on each income bracket).	Option: define expenditure need for newly decentralized tax. Indicator: revenue collected by registered taxpayer. Option: degree of coverage in decentralized service (which is financed through tax).	Assess the evolution of application of tax rate over a period of 3 years and consider corrective measures. Monitor sources of horizontal inequity and discuss corrective measures (structure of surtax; compensatory transfers, other).	Needs a national legal framework. Implementation: could be done by individual agreements (convenio individual uno-por-uno: region-nacion).	

75. Criteria to select those subnational governments suitable (=informal arrangement) or eligible (=formal arrangement) for asymmetric decentralization.

76. To keep track of individual SNG performance.

77. Criteria to evaluate performance and take action: train subnational governments, re-centralize, or further decentralize, etc.

Criteria for Asymmetric Decentralization			Institutional Arrangements among levels of government
	Ex-ante Evaluation ⁷⁵	Monitoring Indicators ⁷⁶	Ex-post Evaluation ⁷⁷
Compensating VAT (C-VAT)	Needs to be rolled out nation-wide. No asymmetric approach possible if C-VAT is applied on final sales in province of destination. Should there be a nation-wide ex-ante indicator?	Monitor based on national standards; revenue collection as share of departmental GDP. Monitor degree of informality of economy: reduction in unregistered retailers.	Degree of taxpayer registration and informality: reduction in unregistered retailers. Standards: revenue collection as share of departmental GDP. Needs a national legal framework.

6.75 (iii) **Creation of an un-earmarked transfer.** This transfer should be established without additional expenditures for the central government. One option is through the National Royalty Fund. The national share of the Fund could be increased for distribution purposes. The un-earmarked transfer could follow the goal of compensating for lack of fiscal capacity. In Colombia currently no transfer explicitly compensates for it; in addition, increased fiscal autonomy—through the options laid out above; that is, assignment of new tax bases as well as providing subnational governments the possibility to adjust rates—will increase horizontal disparities.

3.5. Monitoring and Evaluation

6.76 A successful system of decentralization, and particularly one that moves forward in an asymmetric fashion, needs a good monitoring and evaluation system. Without doubt that comparative data and evaluation will facilitate public debate and benchmarking, making it more difficult for political leaders to make choices that serve their own interests more than those of their people. It will also provide information for the central government on which to develop corrective measures for the decentralization process. Developing such a system is mandatory based on the legal reforms of the SGP transfer that were adopted in mid-2007.

6.77 Designing and implementing such a monitoring system however is challenging given the absence of a solid base of international experience. To begin with, there is no consensus at all that anything regarding subnational expenditures should be monitored; and what should be monitored. To date, only a few countries—even those with a comparably higher degree of decentralization than Colombia—have set up explicit monitoring systems for subnational expenditures;⁷⁸ countries who have advanced in the implementation make use of a wide array of different models and approaches for monitoring and which are often still being tested and adjusted (Table 6.8).

Table 6.8 Types of Subnational Government Monitoring

Country	What is being monitored?	What indicators?
Spain State Agency for the Evaluation of Public Policies and Quality of the Services.	In process: quality of public services at the regional level. This is still in development. Legality and efficiency of public acts: Audit Offices of the Auditor General at the regional level. However, in practice these institutions have complied only with their first task (legality), and so far their efficiency controls have been ineffective.	For service quality: in development. Legal controls.
Argentina Ministry of Finance.	Monitoring of fiscal targets and indicators in scope of fiscal responsibility law. No service delivery indicators are monitored consistently and in unified fashion on behalf of the federal government.	Fiscal targets (described in law).

78. But even in countries such as Argentina, where roughly 40 percent of public spending is executed from provincial and municipal levels, there is no explicit monitoring system in place. Even some European countries, such as Spain, are still in the process of setting up subnational government monitoring systems.

Country	What is being monitored?	What indicators?
USA Budget Office (OMB) of the Executive/Office of the White House.	Monitoring of effectiveness of specific programs which are paid for by the federal government but executed through the states. No	Program-specific. Around 80 indicators. Traffic-light system highlighting degrees of effectiveness.
France Cour des Comptes	Conduct examinations of accounts of all public entities, including subnational governments. Evaluations of subnational policies and expenditures still in development.	Auditing: legal controls.
Chile Ministry of the Interior: Subdirección de Desarrollo Regional (SUBDERE)	“Programa de Mejoramiento de la Gestión (PMG) Territorial”: measuring effectiveness of programs managed by central government delegations in the regions. SUBDERE monitors municipalities through SINIM (Sistema Nacional de Indicadores Municipales): <ul style="list-style-type: none"> Fiscal indicators (not expenditure programs) Human resource profile 	PMG: <ul style="list-style-type: none"> Indicators defined for each sector and region. SINIM: <ul style="list-style-type: none"> Specific fiscal indicators, on revenue and expenditures. Human resource: qualifications, gender.
United Kingdom, Independent Commission: Audit Commission for England and Wales at the National Level.	Two areas: (i) Audit (on the proper and transparent use of public funds). (ii) “Comprehensive Performance Assessments” (CPA): The Commission assesses the performance of authorities and the services that they provide for local people. The assessments are aimed at helping authorities to focus on improvement. The assessments comprise evidence from other inspectorates plus the Commission's judgements.	The use of resources assessment is conducted yearly at all councils by their external auditors. It is integrated with audit work carried out under the Code of audit Practice. Auditors report scored judgments on five themes which look at how well a council manages its finances and delivers value for money. The scores are combined by a set of rules to produce an overall use of resources score for the Commission.

Source: World Bank.

6.78 Based on these country cases and initial lessons learned, the following are some guidelines that could be useful for developing such a monitoring and evaluation system in Colombia.

- For a results-based and outcome-focused M&E system to evolve in the future, there are fundamental reasons to believe that resolving the present partial decentralization situation would provide a big step forward.
- These indicators would need to be tailor-made and agreed upon with individual departments. Indicators and targets can be indicative at first; in some areas of responsibility they could gradually evolve into explicit, enforceable agreements.
- Select one pilot sector and then roll the system out gradually.
- Sanctions, if spelled out, need to be gradual in order to be credible.

- The system should safeguard the (limited) autonomy of subnationals to combine the inputs local governments to select those services. The system needs to be compatible with principles of decentralization.

4. Final Considerations

6.79 The reform of the transfer system and the improvement of services are demanding challenges. Successfully strengthening the intergovernmental system for these purposes could be very salutary. However, balancing these two often competing goals requires negotiating tradeoffs between the different alternatives and decentralization models that have been outlined above.

6.80 These include changes in the short, medium, and long term, and involve a combination of reforms that the national government can implement on its own and some that are likely to require new congressional authorization. These decisions are likely to have significant political consequences, and reforms should be proposed within Colombia's political context. Many reforms can be made in the short term, building on current consensus. Other changes will require a longer period to be accepted and implemented.

6.81 Colombia has been advancing in its decentralization path leading to several improvements in key sectors. The country has certainly the potential to improve its intergovernmental system even further in benefit of the social and economic development goals that it aspires.

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