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Nicaragua Public Expenditure Review 2001–2006

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REPUBLIC OF NICARAGUA FISCAL YEAR

January 1 to December 31

CURRENCY EQUIVALENTS

(as of March 20, 2008)

Currency Unit	=	Córdoba (C\$)
1 US Dollar	=	C\$. 19.10
1 Córdoba	=	US\$ 0.05

WEIGHTS AND MEASURES

Metric System

ABBREVIATIONS AND ACRONYMS

AMUNIC	Asociación de Municipios de Nicaragua	MDPTM	Modelo de Determinación del Potencial Tributario Municipal
AMURACAN	Asociación de Municipios de las Regiones Autónomas de la Costa Atlántica	MECD	Ministerio de Educación, Cultura y Deporte – Ministry of Education
BCN	Central Bank of Nicaragua	MHCP	Ministerio de Hacienda y Crédito Público – Ministry of Finance
BSG	Budget Support Group	MINSA	Ministerio de Salud - Ministry of Health
BTML	Budget Transfers to Nicaraguan Municipalities Law (Nº 466)	MPMP	Medium-Term Budget Framework
CFAA	Country Financial Accountability Assessment	NDP	National Development Plan
CGR	Office of the Controller General of the Republic	NGO	Non-Government Organization
CGR	Contraloría General de la República	NTCI	Internal Control Technical Norms
CONPES	Economic and Social Planning Council	OAP	Oficina de Administración Pública
CTI	Investment Technical Committee	PAM	Performance Assessment Matrix (of the JFA)
CTM	Comisión de Transferencias Municipales	PEFA	Public Expenditure and Financial Accountability Partnership
CUT	Treasury Single Account	PFM	Public Financial Management
DGFP	Dirección General de la Función Pública – General Directorate for Public Service	PGR	General Budget of the Republic
DGI	General Directorate of Revenues	PIM	Plan de Inversión Municipal
DGP	Dirección General de Presupuesto	PIP	Programa de Inversión Pública - Public Investment Program
END	Estrategia Nacional de Descentralización	PND	National Development Plan
FISE	Fondo de Inversión Social de Emergencia	PTM	Potencial Tributario Municipal
HIPC	Heavily Indebted Poor Country	RAAN	Región Autónoma del Atlántico Norte
IBI	Impuesto de Bienes Inmuebles	RAAS	Región Autónoma del Atlántico Sur
IDB	Inter-American Development Bank	RST	Reference Salary Table
IDR	Instituto de Desarrollo Rural	SETEC	Office of the Technical Secretary to the Presidency
IMF	International Monetary Fund	SICCE	State's Procurement and Public Contracts Integrated System
IMI	Impuesto Municipal sobre Ingreso	SIGFA	Financial Management and Audit Integrated System
INEC	Instituto Nacional de Estadísticas y Censos	SISEC	Civil Service Integrated System
INEC	Instituto Nacional de Estadísticas y Censos – National Statistics Institute	SNF	Fiscal Payroll System
INIFOM	Instituto Nicaragüense de Fomento Municipal	SNIP	Sistema Nacional de Inversión Pública
INSS	Instituto Nicaragüense de Seguridad Social -- Social Security Institute	TRANSMUNI	Sistema de Transferencias Municipales
JFA	Joint Financing Arrangement for Budget Support		
MARENA	Ministerio Ambiente y Recursos Naturales		

Acknowledgments

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NICARAGUA
PUBLIC EXPENDITURE REVIEW
2007

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NICARAGUA—PUBLIC EXPENDITURE REVIEW

PREFACE

Public Expenditure Reviews (PERs) are core diagnostic studies periodically prepared by the World Bank to analyze public sector issues, with a focus on the efficiency and equity of public resource allocation. This PER was undertaken at the request of the Nicaraguan government administration under President Bolaños, whose mandate ended in January 2007, and is mostly based on information up to 2006. Given that time horizon, its capacity to comment on the new programs that have been prepared or are being contemplated by the current government under President Ortega is limited. Furthermore, the analysis in this PER takes as its point of departure the market-based and private sector-led development perspective that was broadly shared by the Bolaños administration and which was reflected in the poverty reduction strategy that was in effect at that time. This perspective differs in several important ways from the more social-oriented and public sector-led development perspective adopted by the current administration. In this context, the reader is reminded that the views expressed in the PER are solely those of World Bank staff and do not necessarily reflect the views or positions of the Nicaraguan government.

The authorities are currently in the process of updating Nicaragua's poverty reduction strategy for the period 2008-2011, to be named the *Plan Nacional de Desarrollo Humano* (PNDH). The PNDH is expected to build on the longer term poverty reduction strategy presented earlier by placing greater emphasis on social development and inclusive growth. As indicated in several position papers presented in 2007,⁺ the Nicaraguan authorities are committed to maintaining continuity with certain key elements of the earlier strategies that have been considered successful. These include (i) maintaining macroeconomic stability and ensuring public debt sustainability as prerequisites for reducing poverty, (ii) advancing on key social indicators toward meeting the Millennium Development Goals, (iii) diversifying the export base and leveraging regional free trade agreements in order to increase access to external markets, and (iv) preserving a policy environment conducive to attracting more private investment, including from foreign sources.

The authorities also have indicated a commitment to change certain elements of the earlier poverty reduction strategy. The most important strategic changes include:

- refocusing attention from the “cluster development strategy” that figured prominently in the earlier growth strategy and which is viewed as favoring the larger, more established economic agents, towards supporting production by the poorest households and small & medium sized enterprises, including through increased access to credit for these sectors,

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⁺ These documents refer to:

- Gobierno de Reconciliación y Unidad Nacional, “Programa Económico-Financiero 2007-2010 (Agosto 2007) Nicaragua: Progress Report National Development Plan 2006 (Agosto, 2007),
- Gobierno de Reconciliación y Unidad Nacional, Secretaría Técnica del Poder Ciudadano (SETEC), “Nicaragua: Progress Report National Development Plan 2006 (August 2007), and
- Gobierno de Reconciliación y Unidad Nacional, “Prioridades del Gobierno de Reconciliación y Unidad Nacional Proceso en Construcción Permanente, (Agosto, 2007)

- discontinuing the privatization agenda, which is viewed as not having worked well especially in the electricity and social security sectors, and placing more emphasis on state intervention and oversight,
- placing greater attention on promoting human development, instead of compensatory policies and what is perceived as too narrow a focus on eliminating extreme poverty, and
- improving access to public services in health and education, in part by providing these services free of charge to beneficiaries and in coordination with other line ministries. This last strategic change is associated with a broader program reorientation away from the principle of targeted interventions toward one that aims for greater universality.

While some of the recommendations offered in this report may require adaptation to these differences in development perspective, the most important fiscal challenges facing the Nicaraguan authorities remain unchanged. This PER is intended to provide a timely reference in drawing attention to these challenges and in helping to identify various opportunities for raising the impact of public expenditures, independent of the preferred development approach.

NICARAGUA—PUBLIC EXPENDITURE REVIEW

Executive Summary

- i. **Nicaragua has made impressive progress since 2001 in reducing the overall fiscal deficit.** A series of internal and external shocks (hurricane Mitch, banking crisis, elections) reopened major fiscal gaps at the end of the 1990s, which threatened to destabilize the economy. Since then, fiscal management has remained prudent in spite of spending pressures, resulting in an improvement of the combined public sector balance (after grants) from a deficit of 5.4 percent of GDP in 2002 to a surplus of 0.2 percent in 2006. Economic growth also recovered during this period, to average almost 4 percent, while inflation remained in single digit figures. This positive outcome was facilitated by a favorable external environment, characterized by rapid growth among Nicaragua's trading partners, a doubling of remittance flows, and massive external debt relief.
- ii. **The decline in the fiscal deficit was brought about entirely through increases in public revenues, which raises some concerns about political sustainability.** In spite of substantial debt service relief (achieved through the HIPC and other initiatives), total NFPS expenditures as a share of GDP now surpass the peak level reached in the immediate aftermath of hurricane Mitch. Meanwhile, tax revenues have risen continuously, from 13 percent of GDP in 2001 to almost 18 percent in 2006. This was made possible through a series of tax reforms, followed by improvements in tax administration and a buoyant tax response to a growing economy. Recent cross-country research, however, suggests that fiscal adjustments that depend mainly on revenue increases are more difficult to sustain over time than those that depend on expenditure reductions. These concerns could be addressed through a more balanced approach when future adjustment needs emerge, combining revenue-raising measures with expenditure cuts in non-priority areas.
- iii. **Nicaragua exhibits a moderate, but manageable, risk of experiencing debt distress, provided that sound macroeconomic policies continue to be applied.** When all ongoing debt relief initiatives have been implemented, Nicaragua external debt, in net present value terms (NPV) declines to about 35 percent of GDP. Nicaragua also has a high level of domestic debt, however, with an NPV of about 19 percent of GDP at end-2006. This adds up to a combined public debt of approximately 54 percent of GDP, which is sustainable if Nicaragua can continue to grow by at least 4 percent per annum, maintain a primary fiscal surplus near the levels achieved in recent years and keep various fiscal pressures in check. Key threats to fiscal stability in the short run are the rising fiscal transfers to the municipalities mandated by Law 466 (without a coincident transfer of spending responsibilities), growing pressures on public wages and the possibility of an energy crisis. In the medium term, a major threat is posed by the actuarial deficit of the pension system.
- iv. **Nicaragua's long run fiscal sustainability will depend closely on how the authorities deal with the actuarial deficit of the pension system.** In 2006, the pension system exhibited an actuarial deficit estimated at around 162 percent of GDP. If the system is allowed to remain as is, then the present fiscal framework is clearly unsustainable, even with a 2 percent primary fiscal surplus. To sustain the resulting domestic debt (including pension liabilities), would require a

substantially larger primary fiscal surplus – on the order of 6 percent if GDP growth remains at 4 percent. This would be an extremely ambitious fiscal target, as well as an extremely inequitable one, considering that the beneficiaries of the pension system generally do not comprise the poorer members of societies. Fortunately, the pension system is not projected to generate cash deficits for a few more years, which gives adequate time to prepare an appropriate pension reform. Two other (though difficult to quantify) contingent fiscal liabilities that need to be taken account of in assessing the risk of debt distress are the liabilities originating from the current bank deposits guarantee in the event of new bank failures and from the finance ministry's open-ended capacity to issue new compensation bonds (BPIs) in response to new claims of compensation for past confiscations.

v. **Nicaragua's somewhat lackluster growth performance raises questions about the effectiveness of public spending, particularly investment spending.** Since the late 1990s, Nicaragua's per capita GDP growth has remained consistently below the average rate seen in other lower middle income countries worldwide, even though it exhibited similar shares of public and private investment spending as this country group. Furthermore, the pace of growth achieved in recent years has not been sufficient to keep up the momentum in poverty reduction, which has suffered a marked deceleration. The poor link between investment and growth in Nicaragua is explained in part by the widespread misclassification of public consumption spending as public investment. Also, earlier research (Nicaragua DPR 2004) had revealed that Nicaragua exhibited particular shortcomings in several key determinants of growth, notably in public infrastructure development and human capital development (education attainment and health). These shortcomings point to possible inadequacies in the level and quality of public spending in these sectors.

vi. **The total amounts of public infrastructure spending and social spending in Nicaragua are broadly in line with the country's economic capacity, but there is much room to improve the quality of public spending.** Nicaragua has been devoting a similar or higher share of GDP on public infrastructure spending as other countries in Latin America, but its Infrastructure Quality index (based on the Global Competitiveness Report, 2006-07) ranks among the lowest in the region and worldwide. Recent World Bank research on the efficiency of social spending also suggests that Nicaragua is less efficient, on average, than other countries in the region. That is, Nicaragua's average efficiency scores – derived by comparing social sector outcomes and public social expenditures – consistently rank below the regional median score.

vii. **Various opportunities have been identified for improving the quality and efficiency of public expenditures in key social and infrastructure sectors.** These opportunities – some of which seek to take advantage of market forces and private initiative – are summarized next.

- In Transport, important efficiency gains could be achieved by (i) shifting a higher share of sector resources toward road maintenance, preferably through the road maintenance fund (FOMAV), using least-cost public bid contractual approaches, (ii) scaling up existing *adoquinado* programs in the expansion of secondary roads, as a more cost-effective alternative to asphalt or gravel roads, (iii) adapting road designs to less costly standards appropriate to local conditions, and (iv) strengthening the institutional capacities of MTI in the areas of planning and programming, and of FOMAV in the areas of contracting and procurement procedures.

- In Water & Sanitation, important efficiency gains could be achieved by simultaneously allowing tariffs to adjust to cost recovery levels and improving the operating efficiency of the water utility, while protecting the poor from price shocks in sector services. This may be achieved by (i) introducing a loss-reduction program in ENACAL, which could include a greater de-concentration of operations, (ii) granting greater autonomy to INAA in setting tariffs based on long-run marginal costs, and (iii) revising the existing system of subsidies to target them to the poor. Also, the introduction of a hygiene education program in rural areas could significantly raise the impact of sector infrastructure in reducing water-related diseases.
- In Energy, it is necessary to step up the level of total sector investment. Given the limited fiscal capacity to increase public investment, this will require improving the investment climate facing private investors. Important measures that could help improve investor confidence in the sector are (i) a lessening of tensions with the private distribution company, identifying common ground for improving service, and (ii) a simplified electricity pricing structure (while re-considering the existing electricity consumption subsidy with a view to targeting it more effectively to the poor). Since energy projects have long gestation periods, it will also be important to update existing studies for hydro-electric and geothermal projects (which are more efficient than the thermal plants that currently dominate electricity generation in Nicaragua) to feed into a long-term sector expansion plan, giving priority to the development of new projects within a regional context.
- In Education, sector outcomes could be significantly improved by (i) shifting a higher proportion of sector resources toward early childhood development, pre-primary education and secondary education, (ii) introducing greater cost recovery at the university level, coupled with an expanded scholarship program exclusively targeted to poor students, (iii) improving the school autonomy program by revising its financing formula and strengthening monitoring and evaluation mechanisms, applying the lessons learned so far from the program's implementation, (iv) developing demand-side programs to reduce the direct and indirect costs that have proven to be barriers of access to schooling for poor families, and (v) improving the quality of education through better human resource management.
- In Health, major efficiency gains could be had by (i) increasing the proportion of the sector budget devoted to preventive health care and health promotion, from the current share of 7 percent to the regional average of 30 percent (with INSS adopting a strong preventive health policy, since its current benefits do not include preventive exams), and (ii) improving the skills mix and allocation of personnel, toward a higher proportion of nurses and greater concentration in rural areas, away from Managua. Significant fiscal savings to finance greater spending on preventive health care and health promotion activities could be had by (i) revising the overly generous sector wage policy (more on this below), (ii) reducing the over-consumption of health services, particularly in INSS, through the implementation of regulation, audit and quality controls in the prescription of pharmaceuticals and other health services, as well as by adopting different capitation payments for INSS that account for gender and age-related costs and risks, (iii) implementing a system of targeted health subsidies, as an alternative to offering free health services for all, and (iv) introducing more efficient drug procurement procedures.

viii. **Many of these opportunities for improving the efficiency of public spending also are available under a more social-oriented, public sector-led development approach.** As noted in the Preface, the Ortega administration does not share the same development perspective as previous administrations and is disinclined to apply discriminatory pricing policies in the provision of public health and education services, as well as toward greater reliance on private and non-governmental group participation, or decentralization, in the provision of certain public services (e.g., education, water & sanitation). This means that some of the opportunities listed above for improving the quality and efficiency of public services (e.g., improving the school autonomy program, de-concentrating ENACAL operations, or a better targeting of health subsidies) are being ruled out. It does not, however, rule out the other opportunities that have been identified, in particular those seeking to strengthen public sector management, improve regulatory systems, create monitoring and evaluation mechanisms, streamline public procurement and enhance public planning capacities. In fact, these measures become even more important in the context of a public sector-led development approach.

Public Employment and Remuneration

ix. **The public sector budget payroll has been increasing as a share of GDP, posing a potential threat to macroeconomic stability.** Although the total size of public sector employment in Nicaragua still represents a smaller share of the population than in other countries in the region, the annual growth in public employment has been exceeding the population growth rate since 2001 (2.4 percent per annum versus 1.9 percent). At the same time, average public sector salaries have been growing faster in real terms than private sector salaries (at 3.7 percent p.a. versus -0.4 percent). The threat of macroeconomic destabilization became more acute in mid-2006, amidst growing pressures from public sector unions that succeeded in raising the minimum wage and in boosting the salaries of health sector personnel, based on regional benchmark levels that bear little relation to Nicaragua's economic and fiscal capacity.

x. **Adequate framework legislation to govern public sector remuneration is urgently needed to ensure an orderly, transparent and efficient process of wage determination in the public sector.** The absence of such framework legislation is undermining the authorities' efforts to manage public wage pressures in an orderly manner. Good framework legislation is characterized by (i) broad coverage, encompassing all public sector agencies covered by the Civil Service Law, (ii) transparency (which is enhanced by maintaining a simple wage structure built around a base salary, with few bonuses and no in-kind compensation), (iii) the principle of merit-based pay, where the remuneration system rewards good individual and team performance, subject to the prevailing fiscal constraints, (iv) non-discrimination, and (v) a responsiveness to market forces. A sensitivity to market forces is very important for ensuring that the public sector is neither over-paying its employees (and thus over-taxing the economy), nor allowing the quality of its work-force to deteriorate. The adequacy of public sector wages is best gauged by the frequency of labor turnover and quality of applicants for different positions, as well as by carrying out periodic market surveys of private sector wages in Nicaragua – not by comparing them to the rates paid in other countries or to the prices of particular commodities.

xi. **The efficient implementation of this framework legislation would be enhanced through the introduction of a uniform Reference Salary Table (RST).** The pace of introduction may need to be gradual, however, and calibrated to conform with Nicaragua's fiscal limitations. (Prior to introducing the RST, it is important to estimate the fiscal impact of

alternative salary structures.). The RST will also need to be periodically revised and adapted to changing labor market conditions and relative scarcities of different skills.

xii. **A key prior action needed for the efficient implementation of proper framework legislation and development of an RST is the creation of a centralized data base on public employment and remuneration that covers the entire public sector.** Article 8 of the Civil Service Law provides a sufficient legal basis for requiring all public sector agencies to submit such information to the Ministry of Finance. The status of consultants (especially those consultants that are currently occupying permanent positions) and their contractual arrangements also require special attention in the implementation of the framework legislation and RST; both may need some adaptation to avoid fiscal problems.

xiii. **There is a need to undertake a teacher census to determine with greater precision the geographic distribution of teachers and their work hours and serve to inform decisions on the deployment of teachers (within urban areas and across rural/urban areas).** In the longer term, there is also a need to devise a better compensation policy for teachers within the framework legislation discussed above that includes more incentives to attract better teachers, encourage the upgrading of unqualified teachers (“*empricos*”) and reward good teaching performance. In seeking to link teacher compensation to teaching performance and results, it will be important to analyze the recent student assessment data (from 2006) with the objective of identifying the main factors associated with good teacher performance and results. The education sector accounts for 44 percent of total central government employment, which means that the impact of the proposed public wage framework legislation will largely hinge on a successful application in this sector.

Fiscal Decentralization

xiv. **Political decentralization presents, both, opportunities and fiscal challenges for poverty reduction.** It can improve the efficiency of resource allocation under the right circumstances, but it can also lead to fiscal imbalances or gaps in the provision of critical public services in the event that municipalities lack adequate institutional capacity. A commonly-accepted argument for decentralization is that by shifting the locus for government decision making closer to citizens, choices about the use of public resources will be better aligned with locally-defined preferences. The experience to date in Nicaragua, however, indicates that municipal officials consider poverty reduction to be mostly a central government responsibility. In moving the decentralization agenda forward, a process of consultation and dialogue with mayors, AMUNIC, and civil society organizations will be critical to encourage a consensus around a vision for municipal governments as key protagonists in Nicaragua’s development. Decentralization can encourage citizen-centered development that includes concerted efforts to ameliorate poverty.

xv. **Defining the proper roles for different levels of government needs to be at the forefront in designing a full-fledged decentralization strategy in Nicaragua.** Over the last ten years, the polemics surrounding decentralization in Nicaragua have focused primarily on the share of national income to be transferred to municipalities. Less attention has been devoted to the appropriate roles of each level of government, or to an analysis of the local government capacity required to carry out given tasks. For the decentralization process to advance in Nicaragua, producing a document of this nature should be the first order of business.

xvi. **The growth of public spending on current transfers is threatening to undermine fiscal stability.** Central government spending on current transfers increased by almost 2 percent of GDP between 2004 and 2006, in part reflecting the increase in fiscal transfers to the municipalities mandated by Law 466 of 2003. The growth in these fiscal transfers is set to continue under the law until they reach 10 percent of total central government revenues by 2010. Since the law does not mandate a corresponding transfer of expenditure responsibilities, central government expenditures are poised to increase by another 0.8 percent of GDP over this period. Until 2006, the central government was able to “neutralize” these budget transfers by cutting capital expenditures in the areas that most closely overlap with municipal activities, and requiring the municipalities to co-finance the investment activities of central government agencies (especially FISE and IDR) in the municipalities. This option for reducing expenditures is more or less exhausted. It is, therefore, critically important to implement other corrective measures to neutralize the adverse fiscal consequences of the increasing transfers. This could include raising taxes, reducing other central government expenditures of lower priority and transferring additional expenditure responsibilities from the central government to the municipalities (alongside the additional revenue transfers).

xvii. **To address the fiscal imbalance triggered by the municipal transfers law, it may be necessary to revise the legal framework governing municipal responsibilities.** When additional fiscal resources are transferred to the municipalities without an equal transfer of expenditure responsibilities, there is a danger that increases in municipal spending on items of low social priority will crowd out spending on items of higher social priority, as the central government is forced to make cuts in order to maintain fiscal balance. The framework that currently governs the assignment of responsibilities to municipal governments dates from 1997, and needs to be reviewed in light of the substantial increase in resources available to municipalities that has subsequently taken place.

xviii. **As the activities to be carried out by local government are defined, it is critical to quantify their costs, as well as the administrative demands those roles place on central and local governments.** In many decentralized government systems, for example, maintenance of physical infrastructure in education and primary health care falls to local government; but that is not presently the case in Nicaragua. How much do those activities cost? How would (revised) municipal roles fit within the sector-specific service delivery models in Nicaragua? And how complex are the administrative demands (e.g., contracting, personnel management, oversight, accounting, etc.) for carrying out any of these new mandates effectively?

Public Expenditure Management

xix. The PER has assessed Nicaragua’s public financial management (PFM) performance, using an international framework of reference that addresses seven critical dimensions: (i) credibility of the budget, (ii) comprehensiveness and transparency, (iii) budget planning, (iv) predictability and control in budget execution, (v) accounting, recording and reporting, (vi) external scrutiny and audit, and (vii) donor practices that affect PFM. The assessment reveals that significant progress has been made since January 2004 in the implementation of the 2003 CFAA Action Plan, but that some areas require further attention. Based on that assessment, the following measures are considered critical for scaling up ongoing efforts to reform and modernize public financial management (PFM).

xx. The ***comprehensiveness and transparency of fiscal information*** would be significantly increased by (i) enforcing compliance with the requirements of Law 550 on preparation and publication of execution reports for all budgets, as well as of financial statements, (ii) revising the rules and their application vis-à-vis current expenditures in investment projects, (iii) enforcing comprehensive publication of procurement data through the State's Procurement and Public Contracts Integrated System (SICCE), (iv) expanding dissemination of audit reports, and (v) enforcing compliance by decentralized entities (by function and territory) with the requirements of Law 550 on provision of information, while creating capacity in the MHCP to analyze that information and monitor aggregate fiscal risk.

xxi. ***Budget planning*** would be strengthened through (i) increased budget flexibility by reducing the amount of earmarking of budget allocations (18.8 of primary expenditures are currently earmarked), (ii) continued implementation of the medium term budget framework, with an emphasis on the executing entities' capacity to prepare or refine costed sectoral strategic plans properly reconciled with the fiscal framework, (iii) a better integration of public investment programming (PIP) into the medium term and annual budget formulation process, with due consideration to recurrent cost implications, and development of SNIP's monitoring and evaluation tools, and (iv) an increased performance orientation of the budget under proper sequencing arrangements, including the accountability framework, the dimensions and scope of indicators, and the capacity to measure the marginal cost of changes in performance.

xxii. The ***predictability and control in budget execution*** would be improved by (i) enforcing compliance with the timely recording of expenditure commitments, e.g. through automatic links with the SICCE, (ii) streamlining the mechanism of direct payments by the Treasury, through better coordination with the Central Bank, (iii) continuing the development of the Civil Service Integrated System (SISEC) and the extension of the Fiscal Payroll System (SNF) with a view of developing a consolidated payroll system, which in turn should be subject to systematic audits, (iv) developing information to assess performance of the Technical Internal Control Norms (NTCI) implementation, (v) building internal audit capacity, and (vi) increasing efficiency and transparency of the procurement system through the development of SICCE and the reform of the legal and regulatory framework, in line with international good practice.

xxiii. ***Accounting, recording and reporting*** functions would be enhanced by (i) supplementing budget execution reports with data on bank balances, first, and with financial statements based on accrual accounting later, and (ii) examining with greater detail and support the efforts of the different sectors, mainly of the Ministries of Education and Health, to compile and process more information on the resources received (or not) allocated to service-delivery units (schools and health centers).

xxiv. ***External scrutiny and auditing*** would be strengthened by (i) ensuring sustainability and continuous improvement of the Controller General of the Republic's (CGR) external audit reporting on budget execution reports and public sector financial statements, (ii) monitoring better the timely and thorough response to audit recommendations, and (iii) fostering access by the National Assembly to external audit reports, and the development of mechanisms to their review, discussion and monitoring.

xxv. The donor community in Nicaragua also has an important opportunity to help the Nicaragua authorities to ***strengthen overall public financial management*** by (i) aligning their assistance under the Joint Budget Financing Arrangement (JFA), (ii) ensuring the timely

provision of projections and disbursements (and greater convergence between both), in cash and in kind, and (iii) relying increasingly on national institutions and procedures in the implementation of investment projects. In turn, the authorities may consider introducing elements into Law 550 to better balance their capacity to receive short-term grants (which have a modest fiscal impact), and the Legislature's right to approve budget modifications.

xxvi. **Concluding Summary.** Nicaragua has come a long way since the beginning of this decade in bringing its overall fiscal balances under control. This puts Nicaragua in a good position for combating poverty in a sustained manner. To maintain that position, however, it will need to overcome further challenges that threaten to undermine fiscal stability in the medium term, notably a rapidly growing public wage bill and fiscal transfers to the municipalities. Looking beyond macroeconomic stability, Nicaragua also needs to pick up the pace of economic growth in order to generate greater momentum in poverty reduction. In this regard, the PER has identified various options for improving the quality of public expenditures in key areas relevant for economic growth. It also pointed out the most important measures needed to modernize public expenditure management and, thereby, facilitate the adjustments needed to improve the quality of public spending in a cost-effective manner. It is hoped that these insights prove useful to the authorities in their efforts to promote faster growth and poverty reduction in Nicaragua.

CHAPTER I COUNTRY CONTEXT AND MAIN FISCAL CHALLENGES

1.1 Public Expenditure Reviews (PERs) are core diagnostic studies periodically prepared by the World Bank to analyze public sector issues, with a focus on the efficiency and equity of public resource allocation. This PER is being prepared as part of a package of economic and sector work for Nicaragua, which also includes a Poverty Assessment (PA), Institutional and Governance Review (IGR) and Energy Sector Strategy Study. Its ultimate aim is to improve the effectiveness and transparency of public resource allocation in a way that promotes economic growth and poverty reduction.

1.2 The PER was undertaken at the request of the administration of President Bolaños, whose mandate ended in January 2007. The background work for this PER primarily consists of “desk studies” that review the evolution and impact of public expenditures since the previous PER was completed in 2001. It is based on information up to the end of 2006 and, therefore, does not evaluate any new programs that the current administration under President Ortega has been preparing or may be contemplating. Also, it takes as its point of departure the market-based and private sector-led development perspective that was broadly shared by previous administrations, but not by the current one. Nevertheless, it is hoped that this PER may serve as a timely reference in drawing attention to some important fiscal challenges facing Nicaragua and in helping to identify various opportunities for raising the impact of public expenditures, independent of any particular development perspective. The PER is also meant to provide necessary analytical foundations for the Bank-supported program in Nicaragua, including a new series of Poverty Reduction Support Credits (PRSCs) and associated technical assistance operations contemplated in the 2007 Country Partnership Strategy for Nicaragua. By the same token, the PER should serve to facilitate donor coordination, especially in the context of joint budget support operations and sector-wide approaches.

1.3 The main audience of the proposed PER are the Nicaraguan economic authorities, principally but not exclusively comprising the staffs of the Ministry of Finance and Public Credit (MHCP), the Technical Coordination Secretariat of the Presidency (SECEP) and the Economic Commission of the National Assembly. A second target audience is the staff of the World Bank and of other donor agencies that participate in the Budget Support Group (BSG)¹ and are involved in the design and implementation of PRSCs. Finally, the PER may prove useful to academics and other members of civil society that have a stake in good governance and public sector management, such as the members of the National Council on Economic and Social Planning (CONPES).

1.4 Several donor agencies have been proposing to carry out separate expenditure reviews in specific sectors over the medium term.² To avoid overlaps and duplication, the PER has maintained a narrow focus on a few important cross-cutting public finance issues, and aims for breadth, rather than depth, in discussing sector expenditure trends. This may provide a useful

1. The Budget Support Group consists of 9 bilateral and multilateral donors that are providing budgetary support to Nicaragua under a common framework. This framework is contained in a Joint Financial Agreement and a Performance Assessment Matrix that was signed by participating donors in 2005.

2. This includes IDA, which is in the process of preparing a Social Sector Expenditure Review, scheduled for completion in 2009.

backdrop for the sector reviews being contemplated by different donors. (Annex L presents a generic outline of the main topics generally treated in sector expenditure reviews, which can serve as a model to promote a certain degree of uniformity and consistency of coverage across the separate sector reviews.) Depending on the response and interest of the new authorities to this initial PER, a follow-up second volume may be considered next year, with more in-depth analyses of public spending in specific sectors.

A. Country Context

1.5 Nicaragua is one of the poorest countries in Latin America, with a per capita gross national income of only US\$ 980 in 2006 (Atlas method) and a total population of 5.3 million.³ According to the 2001 Living Standards Measurement Survey (LSMS), 46 percent of the population lived below the national poverty line, while 15 percent lived in extreme poverty. This represented a significant decline in extreme poverty since 1993, but only a modest decline in terms of overall poverty rates. Data from the 2005 LSMS indicate that there has been no significant change in the incidence of poverty since 2001, but some further reduction in the depth of poverty.⁴ Poverty is heavily concentrated in rural areas and associated with agricultural sector activities, which still account for 12 percent of GDP (excluding livestock and fisheries); a relatively large proportion of by regional standards.

1.6 Nicaragua also has among the least advanced social indicators in Latin America, which broadly corresponds to the differences in per-capita income levels. It is notable, however, that Nicaragua's health indicators are comparable to the averages observed across other lower-middle income economies, even though its average per-capita income is less than half as large; Table 1.1

Table 1.1 Key Social Indicators, 2006

	NIC	CRI	SLV	GTM	HND	CA Ave.	LAC Ave.	Lower-Mid Income Ave.
GNI per capita (Atlas; US\$)	980	4,990	2,590	2,610	1,200	2,767	4,767	1,918
Population growth (annual rate)	1.9	1.8	1.8	2.4	2.3	2.0	1.3	0.9
Education								
Adult Literacy Rate (%)	77	95	81	69	80	80	90	89
Gross enrollment (%)								
Primary	112	110	113	114	113	112	118	113
Secondary	66	79	63	51	66	65	85	74
Health								
Life Expectancy at Birth (yrs)	70	79	71	68	69	71	73	71
Infant Mortality Rate (/1000)	30	11	33	32	31	27	26	31
U-5 Child malnutrition (%)	10	2	10	23	17	12	7	13

Source: World Bank, Development Economics LDB and WDI databases;.

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3. Nicaragua's population figures were revised downward after the 2005 census, which yielded a total estimated population of 5.1 million, versus an earlier estimate of 5.5 million. This resulted in an upward revision of the country's GNI per capita for 2005, from US\$910 to US\$950.

4. The findings from the 2005 LSMS indicate little change in poverty indicators: the overall national poverty headcount rate increased slightly, from 45.8 percent in 2001 to 46.1 percent in 2005, while the extreme poverty rate fell from 15.1 percent to 14.9 percent. Furthermore, the poverty gap also appears to have declined over this period

1.7 From a macroeconomic standpoint, Nicaragua has stood out since the 1980s in both regional and worldwide comparisons on account of its extremely high fiscal and external deficits, which have routinely exceeded 10 and 30 percent of GDP, respectively. These large imbalances were initially associated with a large accumulation of external debt during the 1980s. Subsequently, when Nicaragua was no longer considered creditworthy for new lending on market terms, the macro-imbalances were sustained by large amounts of foreign aid and accumulation of debt arrears. As a result of these imbalances, Nicaragua had become by the early 1990s one of the most highly indebted countries in the world (with a total external debt almost reaching 400 percent of GDP), one of the top aid recipients, and one of the most macro-economically unstable countries in terms of fluctuating GDP and aggregate consumption.

1.8 Nicaragua advanced significantly in stabilizing the economy during the 1990s, but a major fiscal gap was reopened by Hurricane Mitch at the end of 1998, a banking crisis that followed in 2000-01 and a relaxation of fiscal control prior to the 2001 presidential elections. The banking crisis, in particular, boosted Nicaragua's domestic public debt burden from around 20 percent of GDP to over 30 percent. Since then, Nicaragua has succeeded in shrinking its fiscal and external deficits through greater fiscal discipline and tax reforms, the gradual reactivation of economic activity and exports, and massive external debt relief, especially under the HIPC and MDRI initiatives.⁵ Nevertheless, the fiscal and external deficits still remain high by regional standards and a source of concern to policymakers. (The combined public sector deficit, before grants, was over 6 percent of GDP in 2004, while the current account deficit was over 15 percent of GDP.) Both gaps reflect the relatively large amount of aid that Nicaragua continues to receive, coupled with a rapidly rising inflow of private capital, most recently attracted by the improved trading opportunities offered by CAFTA.

Recent Economic Developments

1.9 After dropping to less than 1 percent in 2002, economic growth recovered to average around 4 percent in 2004-2006; Table 1.2. An important source of growth has been the increase in exports (including maquila), which have doubled since 2002 to reach an estimated US\$1,800 million (or 33 percent of GDP) in 2006, while aggregate demand has been stimulated by a rapid growth of private remittances, which more than doubled since 2002 to reach an estimated US\$685 million in 2006 (or 12 percent of GDP). Imports also increased significantly during that period, driven in part by rising oil prices, which has had the result of maintaining the current account deficit roughly the same in US-Dollar terms, but declining as a share of GDP, and permitting the accumulation of international reserves above the targeted levels.

1.10 Fiscal management has been prudent in spite of frequently contrary political pressures. This has led to the progressive reduction in the combined public sector deficit, after grants, from -6.6 percent of GDP in 2001 to -0.6 percent in 2006. As noted in Chapter II, this decrease in the deficit was mainly achieved through fiscal revenue growth, some improvement in the operating balances of public enterprises and a significant decline in the operating losses of the Central Bank.

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5. These developments have had the effect of reducing Nicaragua's total external public debt (in nominal terms) to around 70 percent of GDP (or 35 percent in NPV terms) in 2006.

1.11 Nicaragua's overall positive economic performance since 2002 was supported by a PRGF-arrangement approved in December 2002 and a series of budget-support operations from the World Bank (PSAC, PRSC-I and II) and other donors. Although progress under these arrangements has occasionally stalled, the authorities eventually succeeded in bringing the program back on track again. Accordingly, the World Bank disbursed the second tranche of PRSC-1 in March 2006 and approved a one-tranche PRSC-2 in October 2006, while the IMF successfully concluded its Eleventh (and final) Review under the PRGF arrangement in December 2006.⁶

Table 1.2 Nicaragua: Key Macroeconomic Indicators and Projections

(In percent of GDP, unless indicated otherwise)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
	-----Actual-----						Prelim.	-----Projected-----		
Output and Prices										
Real GDP (% change)	3.0	0.8	2.5	5.3	4.3	3.7	3.8	4.0	4.5	5.0
Inflation Rate (eop CPI, %)	4.6	4.0	6.6	9.3	9.6	9.5	16.9	9.5	7.0	7.0
Real Effect. Exch. Rate (% change)*	2.6	2.8	3.9	0.5	-2.0	1.3	-1.0	--	--	--
Savings and investment										
Investment	26.8	24.9	24.8	28.0	29.6	29.5	29.2	29.2	29.1	28.6
Public	7.4	5.0	5.4	6.7	6.9	5.8	6.9	7.8	8.0	7.9
Private	19.4	19.9	19.4	21.3	22.7	23.7	22.3	21.4	21.1	20.7
Savings	8.8	7.0	7.6	15.4	14.7	13.7	12.2	11.2	13.8	13.9
Public	-0.2	-0.4	2.0	2.9	2.1	1.8	2.4	1.6	2.4	2.3
Private	9.0	7.4	5.6	12.5	12.6	11.9	9.8	9.6	11.4	11.6
Balance of Payments										
Current Account balance	-19.4	-19.1	-18.3	-12.6	-14.9	-13.2	-17.3	-25.0	-24.0	-23.0
Gross Int. Reserves (US\$ mill.)	383	454	504	670	730	924	1,103	1,192	--	--
Memorandum Items										
Nominal GDP (C\$ millions)	55,155	57,376	61,959	71,156	81,233	93,007	105,644	124,338	138,252	155,326
GDP (US\$ millions)	4,103	4,026	4,102	4,465	4,855	5,264	5,726	6,419	6,787	7,262

Source: Banco Central de Nicaragua and IMF.

Notes: * (+) denotes depreciation. **Merchandise exports and imports include maquila. ***Includes ALBA-related flows as of 2007

1.12 Nicaragua's macroeconomic performance has remained broadly favorable during the first year of the Ortega Administration, which has kept a tight rein on public finances and succeeded in negotiating a new PRGF program that was approved by the IMF Board in October 2007. Economic growth in 2007 is estimated to have been close to the projected level (4.2 percent) and the primary and the overall fiscal balance outcomes for 2007 are estimated to be much better than projected, though partly on account of an under-execution of public investment projects. However, the inflation rate (Dec-to-Dec) turned out to be considerably higher than program projections (17 percent versus 7.3 percent). This last outcome is mainly attributable to several external shocks, which included a category 5 Hurricane (Felix) in early September 2007, followed by an unusually wet rainy season and rapidly rising international prices of basic grains and fuels, rather than to a weakening policy stance.

6. An IMF press release issued upon completion of the Executive Board discussion on December 11, 2006 stated that, "Nicaragua's performance under the PRGF arrangement continues to be satisfactory, reflecting the authorities' prudent and pro-active management. Notwithstanding the challenging circumstances of an election year, macroeconomic stability has been maintained. Growth has remained positive, inflation has begun to decline, and the overall external position has been strengthened. International reserves have remained stable and the decline in deposits experienced in the run up to the elections is being reversed. However, progress on structural reforms has been slow and fraught with political difficulty.

Macroeconomic Outlook and Key Fiscal Concerns

1.13 The country's macroeconomic prospects remain broadly favorable, though fraught with much uncertainty in light of the possible slowdown of the global economy and rising international fuel and food prices. Economic growth is expected to maintain the 4 percent pace averaged by Nicaragua's economy over the last three years and gradually accelerate to 5 percent in the medium term, buoyed by continuing export growth (favorable coffee prices and growing maquila production) and a favorable investment environment supported by CAFTA, as well as stabilizing oil prices. Inflation is projected to return to within single digits. This generally positive outlook is conditioned on the continued adherence to a prudent fiscal policy stance.⁷ As indicated in Chapter II (Section C) and the 2007 IDA-IMF debt sustainability analysis (DSA), Nicaragua's risk of experiencing debt distress is moderate, but manageable, provided that sound macroeconomic policies are applied. The HIPC and MDRI initiatives have significantly reduced the risk of debt distress,⁸ but the high level of domestic debt continues to pose a significant risk in the medium term. Reducing that debt and the associated probability of debt distress in the medium and long-term will continue to require sound macroeconomic policies, among which fiscal discipline is key.

1.14 Several developments over the last years have threatened to undermine fiscal discipline, among them,

- the passage of the Municipal Transfers law in 2003, which mandates the transfer of a growing share of central government revenues to the municipalities without a corresponding transfer of expenditure responsibilities,
- growing pressures on public sector wages and salaries from the public sector unions (a strike by the health workers crippled the health system at the beginning of 2006, resulting in an unbudgeted increase in medical staff salaries),
- increasing resistance to price adjustments in transport, electricity and other public services in the face of rising oil prices, which required increased subsidization or reductions in service quality, and the
- gradual financial deterioration of the pension system in the absence of further reforms, which also would require increased subsidization by the central government or eventually trigger the system's collapse.

These developments pose important challenges that the authorities will need to address in order for the positive outlook described above to fully materialize.

B. Two Key Development Issues

1.15 The 2001 Nicaragua PER drew attention to several broad issues that included the need for (i) further fiscal adjustment to restore fiscal sustainability, with primary attention to expenditure cuts in the short run and raising tax revenues in the medium term, (ii) achieving a better balance

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⁷ Two other major sources of risk for the realization of this positive macroeconomic scenario are a slowdown in the U.S. and global economies, which emerged as a significant threat in late 2007, and a deteriorating investment climate on account of continuing political tensions between the Executive and Legislative branches of government.

⁸ A second commercial debt buy-back operation, which was concluded in 2007, should contribute to the normalization of financial relations with international creditors and help reduce further the probabilities of future debt distress.

in the composition of public expenditures by removing the bias in favor of capital spending and giving more attention to operating and maintenance expenditures, (iii) gradually introducing a medium term expenditure framework to permit better expenditure planning and budgeting, (iv) designing mechanisms to improve donor coordination (including through sector wide approaches) in the context of a high aid dependence, (v) improving the mechanisms to track and target public funds designated for poverty reducing activities and, (vi) reviewing the justification for earmarking revenues and considering how it can be reduced. That PER served as analytical background for the PSAC and PRSC-I, which supported actions to address these reform needs, and the authorities have made significant progress in implementing its recommendations. While many of these issues are still being addressed and continue to be relevant for Nicaragua, additional issues for public sector management have gained prominence in the last few years. These include a need to devote more attention to fiscal decentralization, and to human resource management and remuneration in the public sector.

1.16 Fiscal Decentralization. The Fiscal Transfers Law approved in 2003 mandated the transfer of 4 percent of tax revenues to the municipalities in 2004. Furthermore, the law also mandated that the share of revenues to be transferred is to increase by at least 1 percent every year – provided that GDP grows by at least 1 percent in the previous year – until it reaches at least 10 percent. While this law is welcomed by many who emphasize the merits of greater decentralization in public decision-making, it also poses a sudden fiscal challenge for the central government, considering that previously the transfer share had generally averaged around 1 percent of total central government budget, while the currently mandated revenue transfer has not been accompanied by any mandated expenditure transfers.

1.17 The Fiscal Transfers Law has been modified twice since its initial passage, and the authorities have passed executive decrees that sought to limit the fiscal impact of the Law by reducing expenditures at the central level on items that the Municipal Law identifies as being a municipal responsibility. These corrective efforts, however, only partly succeeded in limiting the threat of fiscal destabilization. This is in part because the authorities relied solely on expenditure cuts as a mitigating measure, without changing any laws to ensure long-term fiscal sustainability. Furthermore, various shortcomings of the Municipal Law limit its capacity to serve as a framework for guiding the decentralization process. A meaningful decentralization process requires new legislation that establishes unambiguously the expenditure responsibilities of the municipalities, together with complementary measures that allow the municipalities to control all the inputs needed to produce services and the transfer of enough resources and different funding mechanisms to allow municipal governments to discharge those responsibilities, finding a balance between national and local expenditure objectives. This issue is addressed in Chapter V.

1.18 Public Sector Salaries and Staffing. Public sector wages and salaries have been increasing as a share of GDP since the mid-1990s. Although the size of the public wage bill still appears to be relatively modest by the standards of some neighboring countries, its growth has been a source of concern as a potential threat to macroeconomic stability. That concern was heightened in mid-2006 with the passage of an Education law that – until it was amended – had threatened to raise total spending teacher salaries in an unsustainable manner. Related concerns are the high variation in public sector wages across entities and job categories within the public sector, and the lack of a general wage and staffing policy framework in the government. Though the National Congress approved a Civil Service Law in 2004 that was designed to address these

two concerns, implementation of the Law has been slow, resulting in tense annual wage negotiations that often prove disruptive and lead to outcomes that often bear little relation to the country's economic capacity.⁹

1.19 Another consequence of weaknesses in the existing civil service framework is the excessive reliance on consultants, who are often paid under donor-financed projects that are registered as public investment. In addition to engendering an economic misclassification of public expenditures, this practice also has contributed to (i) undermining the financial sustainability of key public sector positions and even of institutions themselves,¹⁰ (ii) widening existing wage disparities within agencies, with depressing consequences on staff morale, (iii) the wasting of training resources on temporary staff, (iv) the emergence of potential contingent fiscal liabilities arising from consultants' rights to social benefits, and (v) decreasing the likelihood of continuity of projects and activities managed by consultants. These issues are addressed in Chapter IV.

C. Summary Outline of the PER

1.20 This PER updates the analysis contained in the 2001 PER with respect to several key issues that remain relevant today and which are described in paragraph 1.15, while also covering new ground in terms of analyzing the new challenges facing the authorities in the areas of fiscal decentralization and civil service reform.

1.21 Chapter II presents an overview of public finances, reviewing the evolution of total public revenues and expenditures, and discusses the nature of the adjustment process that has taken place since 2001. It reviews the composition of public expenditures, along economic, institutional and functional dimensions, and provides some cross-country comparisons to assess the overall size of public spending in Nicaragua. This chapter also reviews the progress made since 2001 in restoring fiscal sustainability, and concludes by pointing out several key fiscal challenges facing the authorities in the short and medium term.

1.22 Chapter III picks up from the discussion in the 2004 Nicaragua Development Policy Review, focusing on the link between public expenditures and economic growth, and drawing particular attention to the public infrastructure, education and health sectors. It evaluates the quantity and quality of public spending in Nicaragua, with summary assessments of public spending and sector performance in these three key sectors. (These summary assessments draw on more extensive sector discussions contained in Annexes C through I of the PER.). It also summarizes the main findings on the efficiency of public expenditures from recent cross-country comparative data compiled by the World Bank.

1.23 Chapter IV focuses on the overall size and composition of public employment, and on the structure of remuneration. It discusses recent reforms to restructure and professionalize the civil

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9. For instance, public sector doctors went on strike in late 2005 to demand salaries comparable to those paid in other Central American countries, whose per-capita GDPs are all higher than Nicaragua's. The strike lasted more than six months and had a perceptible impact on the health indicators of the poorer segments of the population. It eventually resulted in the passage of legislation in December 2006 that gradually equates health sector salaries to a regional benchmark.

10. Recent cases include the Nicaraguan Municipal Support Institute (INIFOM) and the Agricultural Technology Institute (INTA), both of which rely on donor projects to cover their salary bills and which have had major difficulties in financing salaries after closure of such projects.

service in Nicaragua. The size, structure and evolution of the public wage bill are compared to that in other sectors and countries in the region. The chapter concludes with a set of recommendations on further steps needed to modernize and streamline remuneration policy in Nicaragua's public sector.

1.24 Chapter V reviews the status and prospects of fiscal decentralization in Nicaragua. While much of the impetus for decentralizing public expenditures has been political, there are also strong reasons for seeking to decentralize on the basis of efficiency considerations. This chapter (i) recounts key steps in the decentralization process since 1987, particularly as those relate to the assignment of roles and resources, (ii) discusses the budget transfer rules from central to municipal governments, followed by an analysis of municipal expenditures, (iii) scrutinizes the accountability mechanisms for municipal expenditures, and (iv) highlights key fiscal imbalances that undermine the present system, and current efforts underway to remedy those shortcomings. The chapter concludes with a series of policy options and potential areas of World Bank support.

1.25 Chapter VI assesses the overall performance of public financial management (PFM) institutions and systems in Nicaragua, based on an international framework of reference that addresses seven critical dimensions: (i) credibility of the budget; (ii) comprehensiveness and transparency; (iii) budget planning; (iv) predictability and control in budget execution; (v) accounting, recording and reporting; (vi) external scrutiny and audit; and (vii) donor practices that affect PFM.¹¹ It also reviews the progress made in modernizing public expenditure management systems in the period since the 2004 Country Financial Accountability Assessment (CFAA), spelling out the remaining obstacles in the way to improving public financial management and providing strategic recommendations on how to move forward.

Links to Other Economic and Sector Work

1.26 The **2001 Public Expenditure Review** has served as the starting point for tracking fiscal developments in Nicaragua since 2000. More recent core Economic & Sector Work on Nicaragua prepared by the Bank includes the **2003 Poverty Assessment**, the **2004 Development Policy Review**, the **2004 Country Financial Accountability Assessment (CFAA)**, the **2004 Country Procurement Assessment Report (CPAR)**, and the **2004 Decentralization Policy Study**.

1.27 In parallel to this PER, the Bank has also prepared a **Poverty Assessment**, an **Institutional and Governance Review (IGR)**, and an **Energy Strategy Study**. The Poverty Assessment analyzes the results from the 2005 LSMS and reviews the poverty impact of public expenditures. This PER, therefore, devotes less attention on the poverty implications and incidence of public spending, and focuses more on aspects of expenditure management and growth. Similarly, it focuses on the fiscal aspects relating to the energy sector, which has become another area of vulnerability, rather than duplicating the work of the Energy Strategy Study.

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11. This chapter is based primarily on PFM performance measurement analytics undertaken through a partnership of the Government of Nicaragua with the British Department for International Development (DFID), the European Commission (EC), the Inter-American Development Bank, and the World Bank. The performance measurement framework was developed by the Public Expenditure and Financial Accountability (PEFA) partnership.

CHAPTER II

OVERVIEW OF PUBLIC SECTOR SPENDING AND FISCAL SUSTAINABILITY

A. Overview of the Public Sector and the Composition of Public Spending

2.1 At the national level, Nicaragua's public sector consists of the central government (comprising 12 ministries, 3 powers of the State and various subordinated agencies), over 50 decentralized institutions (including the social security institute, 10 public universities, and 2 regional governments and councils), 10 public enterprises and 4 public financial institutions. At the local level, Nicaragua is divided into 152 municipalities, which are the most basic political administrative units. Between the local and national levels there is an intermediate political administrative level consisting of 15 departments and 2 autonomous regions on the Atlantic coast (RAAN and RAAS). In contrast to the Municipal governments, which are elected by popular vote every 4 years and have their own budget and legislative powers, the Departmental governors are appointed by the President of the Republic (who is elected every 5 years) and serve as an extension of the Executive branch of the national government. The two autonomous regions represent a mix of the departmental and municipal forms of governmental organization: each is led by a regional Governor appointed by the President of the Republic and by a regional Council whose members are elected by popular vote every 4 years.

Table 2.1 Nicaragua: Financial Structure of the National Public Sector Budget; 2007

	Budget	% of Total	Domestic Resources			External Resources	
			Treasury	Own Revenues	Credits	Grants	Credits
Central Government	24,156	64.3%	19,915	--	-3,125	4,017	3,349
Decentralized Institutions	7,845	20.9%	2,970	6,560	-1,685	--	--
o/w INSS	3,961	10.5%	--	5,544	-1,584	--	--
Regional Governments	161	0.4%	161	--	--	--	--
Public Enterprises	4,415	11.7%	137	3,514	-256	297	723
o/w ENEL	1,621	4.3%	--	1,793	-455	--	283
ENACAL	1,687	4.5%	98	744	175	288	383
Public Financial Institutions	847	2.3%	--	865	-134	--	116
Other Autonomous Entities	169	0.4%	169	--	--	--	--
Total	37,593	100%	23,352	10,939	-5,200	4,314	4,188
<i>% of projected GDP</i>	<i>35.7%</i>		<i>22.2%</i>	<i>10.4%</i>	<i>-4.9%</i>	<i>4.1%</i>	<i>4.0%</i>

Source: MHCP, Proyecto del Presupuesto General de la Republica, 2007 (Draft 2007 Budget). Notes: Own revenues include social security contributions. These figures exclude the budgetary transactions of the Municipalities, the public universities and the Central Bank, other than transfers from the Central Government.

2.2 The relative sizes of the different entities comprising the national public sector are shown in Table 2.1, which is based on the 2007 draft budget that was sent to the National Assembly. By far the largest entity is the central government, which accounts for almost two-thirds of the consolidated national public sector budget. The decentralized institutions account for another 21 percent of the total budget, with the social security institute, INSS, alone responsible for half of that amount. The public enterprises account for most of the remaining public expenditures (11.7 percent), with the two largest entities being the electric utility (ENEL) and the water utility (ENACAL). About 80 percent of total central government spending is paid for with resources

from the treasury, while the remainder is paid with foreign aid, either in the form of grants or concessional credits. Except for INSS, the decentralized and autonomous institutions, as well as the regional governments, rely mostly on transfers from the central government to finance their expenditures. The public enterprises and public financial institutions, in contrast, primarily finance their expenditures through the sale of services.

2.3 The 2007 draft budget also gives us an approximation of the State's overall footprint on the economy. The economic size of the national government is estimated to be around 32 percent of projected GDP (derived by netting out the central government transfers¹² from the total consolidated budget in Table 2.1). In addition, the total spending by the municipalities, net of the transfers received from the central government, is between 1 and 2 percent of GDP. Finally, if we add the projected operating losses of the central bank, plus the total spending by the public universities (net of central government transfers), we arrive at a grand total of around 35 percent of GDP for the combined (national + local) public sector spending contemplated in the 2007 budget.¹³

Fiscal Balances of the Non-Financial Public Sector

2.4 During the 1980s, Nicaragua developed a massive public debt and a high dependence of foreign aid, both of which were reflected in huge fiscal deficits compared to other countries in Latin America. By 1998, the government had largely succeeded in reducing its fiscal deficit to sustainable levels, through a combination of structural reforms, austerity measures and debt relief. These efforts were largely undone by hurricane Mitch, which struck the region in October 1998 and reopened a large fiscal gap. The deficit of the non-financial public sector increased from under 2 percent of GDP in 1998 to almost 9 percent in 2000, and was mainly financed through increases in foreign aid and concessional credits; Table 2.2. Although post-hurricane reconstruction activities and the associated aid flows had been winding down by 2001, the fiscal deficit before grants continued to grow to almost 10 percent of GDP. This represented a primary deficit after grants of -2.8 percent that was clearly unsustainable, forcing the incoming Bolaños administration to make drastic adjustments in 2002 to avoid a fiscal crisis. The deficit before grants has been declining gradually since 2002, yielding a primary fiscal surplus after grants.

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12. These transfers refer to the treasury resources that are financing expenditures by entities other than the central government.

13. These expenditure estimates for entities excluded from the national budget (universities, municipalities and Central Bank) are largely based on conjecture. Data on total spending by the public universities is not publicly available. Considering that the cost recovery practiced by the public universities continues to be very limited, however, total spending by that sector is not likely to diverge very much from the transfers received from the central government. With respect to municipal spending, the Bank's 2004 Policy Note on 'Municipal Decentralization in Nicaragua' indicates (pg. 8) that the total municipal spending financed from municipal revenues is roughly equivalent to the amount of municipal spending financed with central government transfers – which represent 1.2 percent of GDP in 2007 draft budget. The operating losses of the Central Bank for 2007 are projected at 0.7 percent of GDP in the Medium Term Expenditure framework that accompanies the 2007 draft budget.

Table 2.2 Nicaragua: Fiscal Balances of the Non-Financial Public Sector
(As percent of GDP, unless indicated otherwise)

	1998	1999	2000	2001	2002	2003	2004	2005	2006
Revenue	21.5	21.2	21.1	20.4	21.2	22.8	25.1	25.9	27.6
<i>Of which: Taxes</i>	15.1	14.8	14.5	13.4	14.2	15.9	16.5	17.4	17.8
Expenditure	23.2	28.1	30.0	30.0	26.3	28.9	30.1	30.2	31.3
<i>Of which: Interest</i>	3.2	3.3	3.6	3.8	2.9	3.1	2.1	1.9	1.8
Overall Balance									
before grants	-1.7	-6.9	-8.9	-9.6	-5.1	-6.1	-5.0	-4.3	-3.7
after grants	0.5	-1.8	-4.4	-6.6	-1.9	-2.3	-1.3	-0.9	0.2
Primary Balance a. grants	3.7	1.5	-0.8	-2.8	1.0	0.8	0.8	1.0	2.0
<i>Memo items:</i>									
Primary Balance (Combined Public Sector)				-2.8	-0.3	0.1	0.3	0.8	2.2
Nominal GDP (C\$ million)	37,805	44,198	49,952	55,155	57,376	61,959	71,156	81,233	93,007

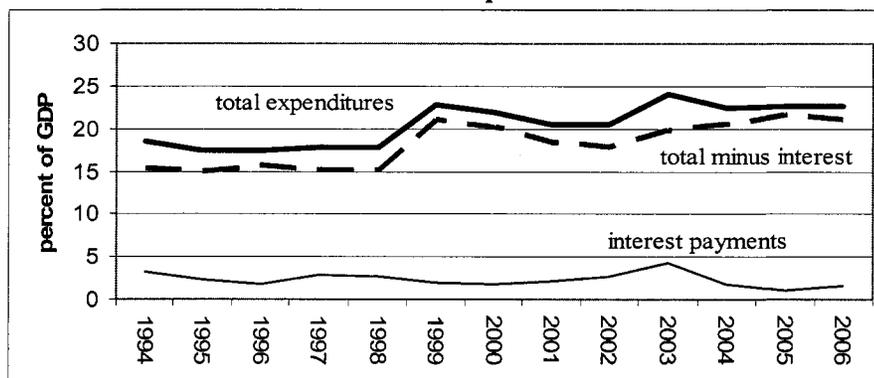
Source: Central Bank of Nicaragua and IMF.

2.5 The reduction of the fiscal deficit was brought about entirely through increases in fiscal revenues, rather than a decline in expenditures. Although total expenditures exhibited a significant decline in 2002 and 2003, they have since then grown again as a percent of GDP to surpass the levels reached in the immediate aftermath of hurricane Mitch. In contrast, tax revenues rose continuously, from 13 percent of GDP in 2001 to almost 18 percent in 2006. This increase was made possible through a series of tax reforms, followed by improvements in tax administration and a buoyant tax response to a growing economy.

Economic Composition of Central Government Expenditures

2.6 The 2001 PER had noted that the GDP share of total central government expenditures remained remarkably stable during the 1990s, prior to hurricane Mitch, and was mainly influenced by the evolution of interest payments

Figure 2.1 Nicaragua: Evolution of Total Central Government Expenditures



Source: Statistical Annex Tables.

on the public debt. Following hurricane Mitch, non-interest central government spending spiked up from under 15 percent of GDP in 1996-98 to around 21 percent in 1999-2000, reflecting a surge of investment spending associated with reconstruction activities and increased aid inflows.

As the reconstruction surge subsided, non-interest spending declined temporarily. Since 2002, however, it has been drifting upward again, reaching 21 percent of GDP in 2006;¹⁴ Figure 2.1.

2.7 The growth in non-interest central government spending after 2002 is mainly attributable to an increase of investment spending and an increase in current transfers. The increase in public investment is closely linked to increases in foreign aid flows; Table 2.3. The increase in foreign aid, moreover, reflects the restoration of macroeconomic discipline and adoption of important structural reforms, which led to a new PRGF program with the IMF in 2003 and facilitated greater access to concessional credits.¹⁵ The increase in public investment spending after 2002 also coincided with the Bolaños administration's renewed emphasis on investment in productive activities under its National Development Plan (PND), which regarded the acceleration of growth as the main ingredient for reducing poverty.

Table 2.3 Nicaragua – Economic Composition of Central Government Expenditures
(As percent of GDP)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Total Revenues	13.0	14.6	15.9	15.4	14.9	13.8	14.8	16.4	17.2	18.1	18.8
o/w Tax Revenues	--	--	14.3	13.9	13.6	12.6	13.4	15.1	15.7	16.8	17.4
Total Expenditures	17.4	17.8	17.8	22.9	21.9	20.5	20.4	24.1	22.4	22.6	22.7
Current Expenditures	11.4	11.9	12.4	12.2	12.4	13.1	13.8	15.5	12.8	13.0	15.5
Consumption	6.9	6.1	7.0	7.3	7.6	7.7	7.6	7.7	7.2	7.3	8.2
Wages & Salaries	3.7	3.8	4.4	4.5	4.6	4.9	5.1	5.3	4.9	4.9	5.2
Goods & Services	3.2	2.3	2.6	2.8	3.0	2.8	2.5	2.4	2.3	2.4	3.0
Interest	1.7	2.8	2.6	1.9	1.8	2.1	2.7	4.3	1.9	1.0	1.7
Internal	0.2	0.3	0.8	0.7	0.6	0.7	1.6	2.5	1.6	0.6	--
External	1.6	2.5	1.8	1.2	1.2	1.4	1.1	1.9	0.3	0.4	--
Current Transfers	2.8	3.0	2.7	2.9	3.0	3.3	3.6	3.5	3.8	4.7	5.5
Capital Expenditures	6.0	5.9	5.4	10.7	9.5	7.4	6.6	8.6	9.6	9.5	7.3
o/w Fixed Investment	3.3	3.1	3.2	5.2	5.3	3.9	4.2	5.5	6.0	5.4	3.5
Capital Transfers	2.5	2.8	2.2	4.9	4.2	3.5	2.4	3.1	3.7	4.1	3.9
Overall Deficit (before grants)	-4.4	-3.3	-1.9	-7.5	-7.0	-6.7	-5.6	-7.8	-5.3	-4.5	-3.9
Net Financing											
External Grants	4.1	2.6	0.0	4.4	3.3	3.5	3.7	5.3	2.8	3.8	3.8
Net External Financing	3.0	0.8	1.5	5.4	2.5	1.8	2.0	4.0	5.7	3.5	2.7
Net Domestic Financing	-2.8	-0.1	0.4	-2.3	1.3	1.4	-0.1	-1.5	-3.2	-2.8	-2.6

Source: Ministerio de Hacienda y Credito Publico. Note: Figures represent actual expenditures on a cash basis.

2.8 As shown in Table 2.4 below, the share of total central government spending in the Infrastructure and Production sector has been stagnant since 2002, which suggests that most of the increase in investment spending took place in other sectors. This is corroborated by Nicaragua's somewhat modest growth performance during the last four years. Averaging 9 percent of GDP during 2003-06, public investment in Nicaragua is about twice as high as in other countries in the region. At the same time, Nicaragua's per capita growth performance in recent years has not significantly exceeded the regional average, which suggests that either the large amount of public investment has been displacing private investment or is not contributing to a faster accumulation of productive capital; see paras. 3.4-3.5.

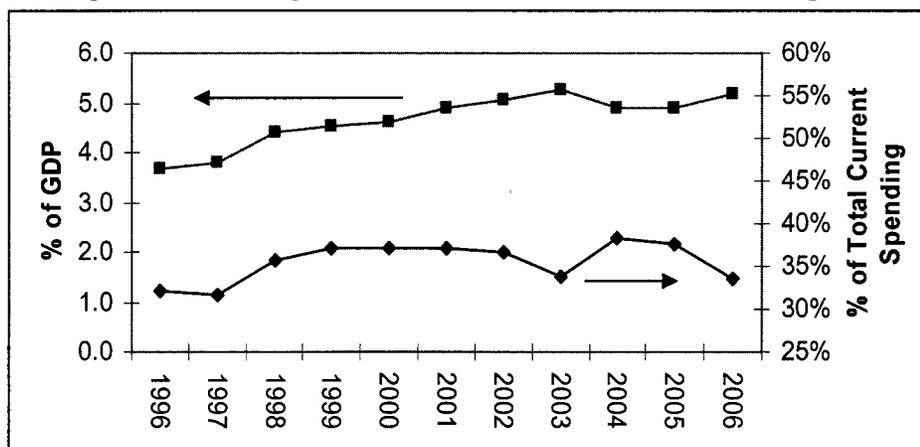
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14. The jump in expenditures to over 24 percent of GDP in 2006 is partly explained by the elections in 2006, which cost over 1 percent of GDP.

15. It is important to recognize in this context that donor-financed public expenditures are generally recorded as capital expenditures, even though they may be financing current expenditures.

2.9 Consumption spending, on the other hand, has hardly changed since 2002, and while interest payments on the public external debt have declined significantly as a result of various debt relief initiatives since the mid-1990s, this was mostly offset by increased interest payments on the domestic public debt, increased current transfer payments and an upward drift in public salary expenditures as a share of GDP; Figure 2.2. Most notable is the increase in transfer payments during the last two years, which is partly explained by the increase in central government transfers to the municipalities, as mandated by the Law of Municipal Transfers (*Ley No. 466*) that was passed in 2004.

Figure 2.2: Nicaragua: Evolution of Central Government Wage Bill



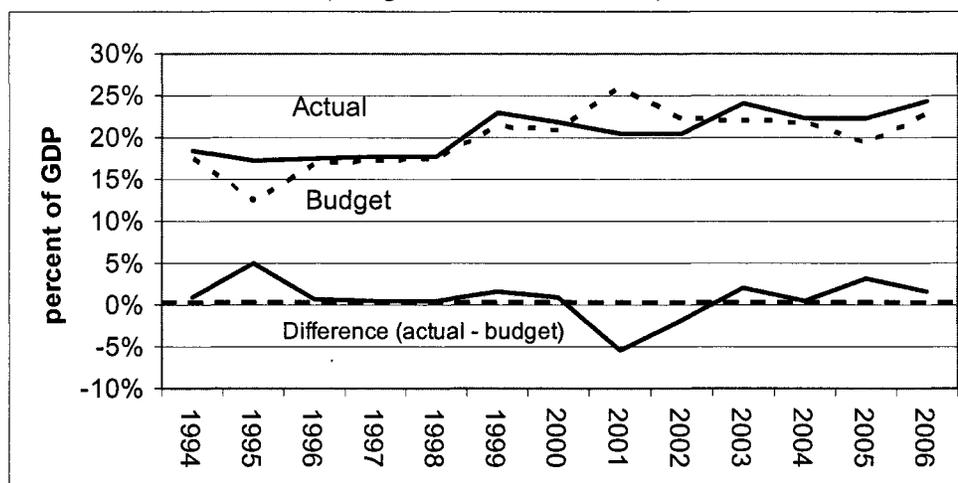
Source: MHCP.

2.10 Even though the GDP share of actual central government spending has been steadily drifting upward since 2001, the budgets presented to Congress have been exhibiting a declining trend, until 2006; Figure 2.3. Another noteworthy feature of the initial budgets presented to Congress each year is that they systematically under-estimate the budget execution: since 1992, actual central government expenditures have exceeded, on average, the initial budget presented to Congress by 1 percent of GDP, and they have only fallen below the initial budget in two years over that entire period, namely 2001 and 2002.¹⁶ This pattern reveals continuing problems in public expenditure management, especially in the area of budgeting.

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16. The prevalence of budget earmarking (e.g., the public universities are constitutionally entitled to receive 6 percent of the total central government budget) generates an incentive to under-program the budget, and to take a very conservative approach by not including aid-financed project expenditures in the budget until the requisite financing has been secured. Until recently, the Executive could increase the budget during the course of the fiscal year without requiring immediate legislative approval if adequate sources of funding (loans and grants) became available, and approval could be obtained by means of retroactive amendments of the budget law; see Chapter VI, paras. 6.113-6.117. With the passage of the Financial Management and Budget Regime Management Law (No. 550) of 2005, however, this practice is no longer permitted as legislative scrutiny of any budget changes has been strengthened.

Figure 2.3: Total Central Government Expenditures; 1994-2006
(Budgeted versus Executed)



Source: Ministerio de Hacienda y Crédito Público.

Table 2.4 Nicaragua – Sector Composition of Central Government Expenditures

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006 ^b
	<i>As percent of GDP</i>										
Social Services	6.5	6.5	5.9	9.0	8.6	7.4	8.1	9.5	10.0	10.9	9.9
o/w Education	2.8	3.1	3.0	3.9	3.8	3.6	3.9	4.2	4.0	4.7	4.3
Health	2.6	2.4	2.2	3.2	3.1	2.8	2.9	3.3	3.0	3.4	3.0
Infrastructure and Production	3.5	4.2	4.7	6.8	5.9	4.8	3.6	3.8	4.4	4.0	4.3
Defense and Security	2.1	1.7	1.6	1.6	1.7	1.7	2.0	2.1	1.8	1.8	1.8
General Services	3.5	2.3	2.5	2.8	3.9	3.5	2.6	2.5	2.7	3.4	3.2
Others	0.0	0.3	0.2	0.6	0.0	0.9	1.0	1.4	1.5	1.3	1.6
Interest on Public Debt	1.7	2.8	2.6	1.9	1.8	2.1	2.7	4.3	2.0	1.2	1.8
TOTAL	17.4	17.8	17.6	22.8	21.9	20.3	20.0	23.6	22.4	22.6	22.6
	<i>As percent of Total Expenditures</i>										
Social Services	37.6	36.3	33.5	39.3	39.3	36.2	40.4	40.3	44.6	48.2	43.8
o/w Education	16.2	17.7	16.9	17.2	17.4	17.7	19.3	18.0	17.7	20.8	19.1
Health	14.7	13.4	12.4	14.1	14.2	13.8	14.5	13.9	13.3	15.0	13.4
Infrastructure and Production	20.4	23.7	26.9	29.8	26.9	23.6	18.2	16.2	19.6	17.7	19.0
Defense and Security	11.8	9.6	9.1	7.2	7.8	8.2	10.0	8.7	8.1	8.0	7.9
General Services	20.2	12.6	14.4	12.4	17.8	17.2	13.2	10.4	12.0	15.0	14.3
Others	0.0	1.9	1.2	2.8	0.0	4.3	4.9	6.0	6.7	5.8	7.1
Interest on Public Debt	10.0	15.9	14.9	8.5	8.2	10.5	13.3	18.3	8.9	5.3	7.8
TOTAL	100	100	100	100	100	100	100	100	100	100	100

Source: Ministerio de Hacienda y Crédito Público. Note: Figures for 2006 refer to budget.

Sector Composition of Central Government Expenditures

2.11 The 2001 PER had noted a significant shift in the sector distribution of central government expenditures after hurricane Mitch, with the social sectors accounting for almost two-thirds of the total increase in non-interest expenditures and the Infrastructure and Production sectors accounting for the other third. Since 2001, social sector spending has continued to expand, both as a share of GDP and as a share of total central government expenditures; Table 2.4. In fact, the increase in total central government spending after 2001 is entirely accounted for by the increase in social sector spending. Close to one-half of the total central government spending currently takes place in the social sectors. The shares of public spending on the Infrastructure and Productive sectors, on the other hand, have reverted to their lower pre-hurricane Mitch levels, and currently account for around 20 percent of total spending.

Institutional Composition of Central Government Expenditures

2.12 The largest central government institutions are the Ministries of Health and Education, which together account for around 30 percent of total central government spending. The next largest institutions are the Ministries of Governance (police) and of Transport & Infrastructure, each of which accounts for between 5 and 10 percent of total central government spending. It is also noteworthy that about one-third of total central government spending is in the form of transfers to other institutions outside the central government.

2.13 The increase in transfers to other institutions represents the most important shift in the institutional composition of central government spending since 2002. As shown in the next-to-last column of Table 2.5, the share of total central government spending devoted to transfers has increased by 33 percent between 2002 and 2006. Meanwhile, spending shares have declined in all central government institutions, except for the Ministry of Economy, the Ministry of the Family, the Attorney General's office, and the Supreme Electoral Council, which coordinated the 2006 Presidential elections. Except for the Electoral Council, these latter entities spend relatively little in absolute terms, however, and therefore have only played a limited role in influencing the overall composition of central government expenditures.

2.14 The institutions that have been most influential in the growth of central government expenditures since 2002 have been the Ministries of Education and Health, as well as the decentralized institutions. As shown in the last column of Table 2.5, total non-interest central government expenditures increased by 2.73 percent of GDP from 2002 to 2006. Of that increase, the Ministry of Education contributed 0.43 percent of GDP, and the Ministry of Health contributed another 0.38 percent. Even though these two ministries experienced a decline in their shares of total central government spending, they are mainly responsible among the central government agencies for the increase in public spending. The most important source of increased public spending, however, has been the increase in transfers to decentralized and autonomous institutions outside of the central government. Within that spending category, the transfers to the municipalities increased by 0.82 percent of GDP, which represents the single most important source of growth in central government expenditures over that period.

Table 2.5 Nicaragua – Institutional Composition of Central Government Expenditures
(As percent of total central government expenditures)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2006 vs 2002	
	<i>as percent of Total CG expenditures (excluding debt service)</i>										% change spending share	absolute change in GDP shares
National Assembly	1.9	2.1	1.6	1.7	1.9	2.0	2.0	1.7	1.7	1.6	-16%	-0.01
Supreme Court	3.2	4.0	2.8	3.2	3.7	3.8	4.0	3.4	3.7	4.4	14%	0.21
Supreme Electoral Council	1.1	1.3	0.7	0.8	6.7	2.1	0.8	2.2	1.4	4.8	131%	0.61
Comptroller General	0.6	0.7	0.4	0.4	0.6	0.7	0.6	0.6	0.6	0.6	-14%	0.00
Office of the Presidency	3.7	2.3	4.7	3.1	2.2	2.4	1.8	1.4	1.3	1.4	-44%	-0.15
Ministry of Governance	5.5	5.8	4.4	4.1	5.3	6.4	6.2	5.4	5.4	5.4	-16%	-0.03
Ministry of External Relations	2.8	2.6	1.9	2.2	2.5	2.6	2.2	1.9	1.8	1.8	-30%	-0.09
Ministry of Defense	6.0	4.9	3.4	3.4	3.7	4.9	4.4	3.6	3.3	3.4	-32%	-0.18
Ministry of Finance	2.9	3.6	2.4	2.3	0.9	0.9	0.7	0.6	0.6	0.6	-34%	-0.04
Ministry of Economy	0.7	1.6	0.7	0.8	0.9	1.1	1.4	1.4	1.4	1.8	63%	0.17
Ministry of Education	14.8	13.4	13.8	15.2	13.6	15.1	15.0	14.2	14.9	15.2	0%	0.43
Ministry of Agriculture & For.	4.7	4.4	4.9	3.7	3.4	3.4	3.3	2.9	2.6	2.8	-18%	-0.03
Ministry of Transport & Infrast.	9.7	13.1	15.9	14.3	12.1	9.3	8.7	9.2	8.2	4.6	-50%	-0.70
Ministry of Health	16.0	14.6	15.3	18.5	15.3	16.5	16.8	14.7	15.3	16.1	-2%	0.38
Ministry of Labor	0.5	0.5	0.6	0.9	0.6	0.5	0.4	0.4	0.5	0.5	-5%	0.01
Ministry of Environment	2.5	2.6	1.7	2.4	1.9	1.7	1.8	2.3	1.6	1.5	-13%	0.00
Ministry of the Family	0.4	0.6	1.5	2.2	1.2	1.3	2.5	2.9	2.2	1.6	23%	0.09
Municipal Development Institute	1.1	1.3	3.7	3.3	1.4	1.1	1.0	1.1	0.9	0.0	-100%	-0.19
Attorney General	0.3	0.3	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.2	18%	0.01
Other Institutions	21.8	20.2	19.2	17.3	22.0	23.9	26.2	29.9	32.6	31.7	33%	2.23
o/w IDR (PNDR)	4.0	4.5	5.6	5.6	4.6	3.1	2.9	2.7	3.0	2.6	-17%	-0.03
FISE	0.8	0.8	--	0.9	0.6	2.6	4.9	5.8	4.7	1.7	-36%	-0.12
Transfers to Universities	5.9	6.2	4.5	4.9	5.8	6.7	6.6	5.2	5.4	6.5	-2%	0.14
Transfers to Municipalities	0.0	0.0	0.3	0.7	1.0	1.5	1.2	2.8	4.9	5.4	260%	0.82
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0%	2.73

Source: Ministerio de Hacienda y Credito Publico. Note: Total CG expenditures exclude debt service.

B. The Pattern of Recent Fiscal Adjustments and Size of Government

2.15 The earlier discussion suggested that the fiscal adjustments and disciplined policies applied over the last 5 years, coupled with external support through the HIPC and MDRI initiatives, have brought the fiscal situation largely under control from a sustainability perspective. As shown in Table 2.2, however, the fiscal deficit was reduced entirely through increases on the revenue side, without any significant reductions on the expenditure side. This pattern of adjustment raises some concerns with respect to the permanence of past fiscal reforms.

2.16 A significant body of research on the link between the composition of fiscal adjustments and the likelihood of successful fiscal reform has questioned the permanence of fiscal adjustments that are mainly revenue based. Using a sample of OECD countries, Alesina and Perotti (1995) find that successful adjustments¹⁷ have relied mostly on expenditure cuts (especially reductions in transfers and the public wage bill), while unsuccessful ones have mostly relied on tax increases. Using a somewhat different methodology, Von Hagen and Strauch (2001) arrive at a similar conclusion. They found that ‘unsuccessful consolidations have relied almost exclusively on increasing revenues, while successful ones put heavy emphasis on cutting

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17. Alesina and Perotti (1995) “Fiscal Expansions and Fiscal Adjustments in OECD Countries” define a successful adjustment as “a very tight fiscal stance in year t such that the gross debt/GDP ratio in year t+3 is at least 5 percentage points of GDP lower than in year t”.

government spending'. In a similar vein, a "survival analysis" applied to a sample of 29 developing countries by Gupta et al. (2004) finds that a reallocation of current expenditures to capital outlays tends to render fiscal adjustments more permanent, while large levels of wages and salaries, transfers, and subsidies tend to have the opposite effect. Other studies, however, indicate that expenditure based adjustments are also not in themselves sufficient to maintain healthy public finances over the medium term; Gupta et al (2003).¹⁸ These research findings suggest that the Nicaraguan authorities must remain wary of pressures to overturn previous fiscal reforms, and should seek to pursue a more balanced approach when new adjustment needs emerge, by combining revenue raising measures with expenditure cuts.

2.17 The last time that the Nicaraguan authorities faced a major fiscal adjustment need was in 2001, as post-hurricane Mitch reconstruction assistance was winding down. A benchmarking exercise carried out in the 2001 PER indicated that Nicaragua's tax ratio of around 13 percent of GDP was considerably lower than the LAC average (but similar to the lower middle income countries in Central America), while its total expenditure level was very close to the regional average; Table 2.6.¹⁹

On the basis of such regional comparisons, the 2001 PER had

	Tax Revenues/GDP		Total Expenditures	
	2000/2001	2003/2005	2000/2001	2003/2005
Nicaragua	13.1%	15.8%	21.2%	22.4%
Central America 3*	12.1%	13.1%	17.5%	17.8%
Latin America & Car.	14.9%	16.2%	22.4%	22.7%

Source: World Bank, Development Data Platform, LDB Database. Note: Central America 3 refers to El Salvador, Guatemala, and Honduras .

recommended placing relatively greater weight on increasing revenues, before cutting back on expenditures. If the same benchmarking exercise were carried out today, it would result in a much more balanced recommendation, considering that total public expenditures continue to be roughly similar to the regional average, while total public revenues have now also reached the regional average, and even surpassed it in 2006, as Nicaragua's tax ratio rose to an estimated 17 percent.

Is Nicaragua's Public Sector Oversized?

2.18 By focusing entirely on revenue mobilization, recent fiscal adjustments have had the effect of gradually expanding the size of public expenditures. This raises the question of whether Nicaragua's public sector may have grown too large. Leaving aside for the moment considerations of fiscal sustainability, there is little to go by in seeking to assess whether a

18. Gupta, Sanjeev, E. Baldacci, B. Clements and E.Tionsen (2003), "What Sustains Fiscal Consolidations in Emerging Market Countries? (IMF Working Paper No. 03/224). It is also important to keep in mind that most of the studies cited here have focused on emerging market and OECD economies, which typically have higher levels of spending and taxation than low income countries such as Nicaragua. Extending this research to lower income countries is clearly called for.

19. In 2001, Nicaragua's national income accounts were still unrevised, reflecting a substantially undervalued GDP. As a result, the public expenditure and tax ratios based on the official figures were substantially higher than the regional averages. The PER's recommendations were based instead on adjusted figures that reflected an estimated GDP under-valuation of 70 percent, which was subsequently borne out by the revised national income accounts that were published in 2003.

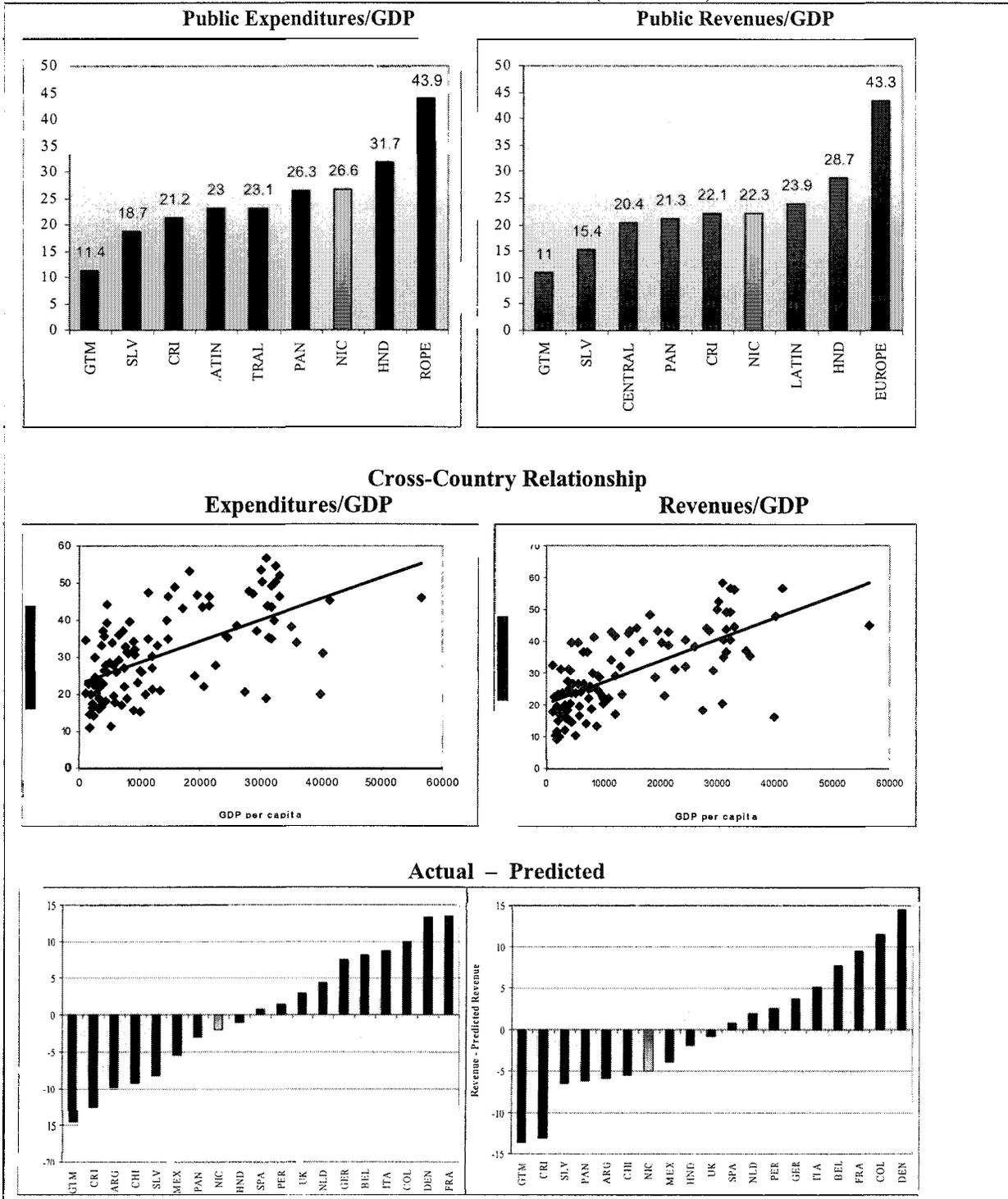
country's public sector is too large, too small or about right. National preferences for public versus private goods differ across countries, and this is reflected in significant variations in the size of public sectors. One way of forming a judgment about the appropriate size of government is through the use of international comparisons, as done in the previous benchmarking comparison of central government revenues and expenditures. The top panels of Figure 2.4 present a similar comparison of total public revenues and expenditures across various countries and country groupings²⁰ as shares of GDP, using a broader measure of government, namely the Non-Financial Public Sector. Based on these figures, Nicaragua appears to have a somewhat larger public sector than the Central American average under both measures of government size, and in comparison to the Latin America average with respect to the expenditure-based measure.

2.19 These measures cannot be taken at face value, however, as there exists a positive and statistically significant relationship between the size of the government and income levels across countries; shown in the middle panels of Figure 2.4. Accordingly, the bottom panels in Figure 2.4 present the measures of government size controlling for differences in per capita income levels. That is, they measure the size of government as the difference between the actual size of public sector revenues (or expenditures) and the size predicted by the income level of that country. Based on these adjusted figures, Nicaragua continues to exhibit levels of public spending and revenues that are higher than the regional averages, but they do not stand out in a wider global comparison.

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20. The Latin American average is based on Argentina, Mexico, Chile, Peru, and Colombia. The average for Europe is based on Belgium, Denmark, Germany, Ireland, Italy, and Netherlands.

Figure 2.4: Measures of Government Size: Expenditures and Revenues of the Non-Financial Public Sector (% of GDP)*/



Note: */ Left hand side always refers to Expenditures and right hand side to Revenues. All numbers are for (2004).

Source: Own calculations based on IMF's Article IV Staff Reports

C. Fiscal Sustainability

The Evolution of Nicaragua's Public Debt

2.20 Nicaragua has reduced its external debt substantially in recent years. From being one of the most highly indebted countries in the world, with an external debt that almost reached 400 percent of GDP in 1994, Nicaragua's external public debt in nominal terms is currently around 84 percent of GDP. This decline in the public external debt ratio was mainly due to the debt relief provided by the Paris Club and multilateral institutions, as well as increased fiscal discipline. Debt relief was provided through various mechanisms, including a commercial debt buy-back operation, bilateral debt relief, the Heavily Indebted Poor Countries (HIPC) Initiative and, most recently, the Multilateral Debt Relief Initiative (MDRI).²¹ Total external debt reached US\$4.5 billion in nominal terms at end-2006. Of that amount, about US\$780 million is scheduled to be forgiven by the IDB as its contribution under the MDRI. When all the debt relief has been awarded under these initiatives, the NPV of external debt is projected to fall to about 35 percent of GDP (HIPC methodology).^{22 23}

2.21 Although Nicaragua succeeded in getting rid of much of its external public debt, it continues to be saddled with a significant domestic public debt. That debt originated mainly from two sources:

- The largest source of domestic debt are the Compensation Bonds (*"Bonos de Pago de Indemnización, BPIs*) issued by the Ministry of Finance since the early 1990s to settle the property disputes that emerged from the confiscations and land reforms carried out in the 1980s. They carry maturities of 15 years and interest rates of 4.5 percent (on average).
- The next largest source of domestic debt are Central Bank negotiable bonds (*"Certificados Negociables de Inversión, CENIS*) issued with maturities of up to three years and with market interest rates determined by a competitive bidding process. (Interest rates have varied with a recent range between 8 and 15 percent.) CENIS were created initially to mop up liquidity through open market operations, but the bulk of them have served to rescue public banks that encountered financial difficulties in the 1990s and to assist in the resolution of several failed private bank failures that were intervened during 2000-01.

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21. Nicaragua reached the HIPC Decision Point in December 2000 and the HIPC Completion point in January 2004. The IMF and World Bank have been providing additional debt relief under the MDRI since January 2006 and July 2006, respectively, while the IDB agreed to participate in the MDRI in December 2006

22. The end-2006 estimate of public external debt (US\$4,527 million) includes debt forgiveness from the IMF and IDA of US\$203 million and US\$982 million, respectively, during 2006 following the MDR Initiative. (It is important to note that these overall debt figures refer to actual debt levels to date, and not to the full-delivery scenario figure that would be observed if all the HIPC debt relief were fully delivered as of end-2006.) Adding the recently announced debt forgiveness by the IADB, public external debt at the end of 2006 would be US\$3,741 million (or about 70 percent of GDP in nominal terms and close to 35 percent of GDP in net present value terms.) A full HIPC debt relief delivery scenario, with all non-Paris Club creditors participating, would reduce the nominal debt below US\$3 billion.

23. A second commercial debt buy-back operation, which was concluded successfully in 2007, will eliminate external debts on the order of US\$1.3 billion in nominal terms. These commercial debts, however, mainly consist of interest arrears and penalties that are not included in the US\$4.5 billion external nominal debt figure, as estimated by the Central Bank of Nicaragua. In other words, the elimination of this debt does not affect the official debt figures.

2.22 The domestic debt has fallen since 2003 as a result of declining fiscal deficits that have permitted substitution of more expensive domestic market debt with concessional external debt. Financing requirements on domestic debt in the next few years, however, are expected to remain large, as the original BPIs are beginning to fall due.

2.23 The domestic public debt is dollar-indexed and currently estimated at around US\$ 1.2 billion, or 23 percent of GDP (and about 19 percent of GDP when expressed in net present value terms). This means that the NPV of the total public debt (after HIPC and MDRI are fully implemented) remains close to 54 percent of GDP, which is still fairly large by developing country standards and remains a source of fiscal vulnerability.

Debt Sustainability

2.24 The question we turn to now is whether the fiscal adjustments carried out over the last five years, combined with the debt relief received, have left Nicaragua in a fiscally sustainable position. To address this question, we utilize a simple analytical model developed in the Nicaragua Development Policy Review (World Bank (2004))²⁴. Broadly speaking, fiscal sustainability is determined in this model by comparing the expected flow of future net public revenues to the flow of future debt payments required to service the country's outstanding public debt. If the present value of the future flow of net revenues exceeds the present value of the flow of debt servicing requirements, then the government's fiscal policy stance and debt levels are said to be sustainable. If it falls short, they are not sustainable.

2.25 As a heavily indebted poor country, Nicaragua's capacity to borrow externally remains severely constrained, and mostly confined to official borrowing on concessional terms. Since concessional funding is limited, this means that the evolution of Nicaragua's external debt since the early 1990s has been supply-determined by donors. For the sake of simplicity, it is assumed that donors are prepared to continue extending concessional financing in an amount that maintains Nicaragua's total external debt constant in US Dollar terms at current levels.²⁵ With this assumption about donor behavior, attention can focus entirely on the domestic debt.

2.26 The present value of the expected future flow of public revenues (net of debt service payments on the concessional external debt and expressed as a share of GDP) can be derived as a function of the average GDP growth rate and of the primary fiscal balance, as shown in Table 2.7.²⁶ The figure determined for a particular combination of growth and fiscal surplus rates can then be compared to the net present value of the expected flow of debt servicing requirements (also net of debt service payments owed on the external debt). Given that this debt was mostly contracted on market terms, the present value of those debt service flows will be much closer to the nominal value of the underlying stock of debt than is the case with the external, concessional debt. Accordingly, each cell in Table 2.7 can be interpreted as the maximal amount of domestic

24. The model is presented in Annex A of the Nicaragua Development Policy Review (World Bank 2004).

25. One implication of this assumption is that the ratio of the external debt stock to GDP declines gradually over time at a speed that depends entirely on the rate of GDP growth. A less conservative assumption would have been to assume that the external debt stock increases at the same rate as the dollar inflation rate, which means that its real value in US\$ remains constant over time. As long as the rate of growth of the external debt stock does not exceed the rate of growth of nominal GDP (i.e., the joint growth rate of inflation and real GDP), its projected trajectory is considered sustainable.

26. See Annex B for a more detailed description on how the figures in Table 2.7 were calculated.

debt (expressed as a share of GDP) that can be sustained under a given combination of the primary fiscal surplus and real GDP growth. (Note from these figures that higher rates of economic growth and higher primary fiscal surplus rates permit the public sector to sustain a higher domestic debt level.) Whether a particular combination of fiscal surplus and economic growth is sustainable or not then depends on whether the actual net present value of the domestic debt lies below or above the figure corresponding to these parameters in Table 2.7.

Table 2.7: NPV of Future Stream of Public Revenues
Based on the fiscal parameters values of 2006
(percent of GDP)

Real GDP growth		1%	2%	3%	4%	5%	6%
Primary Fiscal Surplus ratio after grants	-3%	-42	-47	-54	-65	-82	-116
	-2%	-28	-30	-34	-39	-47	-63
	-1%	-14	-13	-13	-13	-12	-10
	0%	1	4	8	13	23	43
	1%	15	21	28	39	58	96
	2%	30	38	49	65	93	149
	3%	44	55	69	91	128	202
	4%	59	72	90	117	163	255
	5%	73	89	111	143	198	308

Note: * The future stream of public revenues is net of the external (concessional) debt service.

Source: Estimations based on the model in Annex A of the World Bank (2004), Nicaragua: Development Policy Review.

2.27 The primary fiscal surplus for Nicaragua's combined public sector varied between 0 and 0.5 percent of GDP during 2003-2005, before increasing to 2.2 percent in 2006. GDP growth, in turn, averaged almost 4 percent per annum during 2003-05. According to Table 2.7, a growth rate of 4 percent together with a 0-primary fiscal surplus would sustain a domestic debt of roughly 13 percent of GDP. If the same growth rate is coupled with a primary surplus of 2.0 percent, it could sustain a domestic debt of 65 percent of GDP.²⁷

2.28 Turning now to the actual level of Nicaragua's domestic public debt, we noted earlier that the Net Present Value of that debt was estimated at 19 percent of 2006 GDP. Based on the figures in Table 2.7, this stock of domestic debt could not be sustained with a primary surplus of 0, but it is well below the maximal debt level that could be sustained with the 2 percent primary surplus achieved in 2006.

Other Public Liabilities

2.29 There are several additional public sector liabilities that also have to be taken into account in assessing a country's fiscal sustainability, even though they are not securitized. The most important of these liabilities is the implicit debt associated with the actuarial deficit of

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27. It is worth pointing out that when this same exercise was carried out in the 2004 DPR, the same growth rate of 4 percent and fiscal surplus ratio of 2 percent would only have been able to sustain a much lower maximum domestic debt level (equivalent to 40 percent of GDP). The reason for this difference is that several other economic parameters have substantially improved during the intervening years, raising Nicaragua's debt sustaining capacity. The most important parameter improvement in this regard has been the decline in the estimated real domestic interest rate (from 10 to 8 percent), see Annex B.

Nicaragua’s pension system. Table 2.8 presents various estimates of the actuarial debt arising from the pension system under the alternative parameter reforms. Using an 8 percent discount rate,²⁸ which coincides with the estimated real interest rate for domestically issued debt, the Net Present Value of the pension system’s actuarial deficit under the current parameter setting is estimated at 162 percent of GDP. A modest reform involving only a slight increase in contributions would reduce that contingent liability to 58 percent of GDP, while a more ambitious reform that raises both the contribution rate and retirement age would reduce that deficit further of 34 percent of GDP. Of course, under a sufficiently drastic parametric reform the actuarial deficit could even be brought down to zero.²⁹

Table 2.8
Nicaragua - Total Domestic Public Liabilities (as of November 2006)

	NPV of Debt	
	<i>In US\$ millions</i>	<i>As % of GDP</i>
Domestic Debt	1,040	19%
Bonos de Pago por Indemnización (BPI)	778	14%
CENIS	209	4%
Other	53	1%
<hr/>		
Actuarial Deficit of Social Security System <i>(under alternative parametric reforms)</i>		
Option 1 (no reform)	8,700	162%
Option 2 (modest reform)	3,115	58%
Option 3 (ambitious reform)	1,826	34%
Option 4 (drastic reform)	0	0
<hr/>		
Grand Total		
Option 1		181%
Option 2		77%
Option 3		53%
Option 4		19%

Source: Nicaraguan Central Bank, Ministry of Finance - Comisión Técnica Interinstitucional, and World Bank, Nicaragua Development Policy Review (2004)

2.30 From Table 2.8 we see that the long run sustainability of the fiscal framework depends closely on how the authorities deal with the actuarial deficit of the pension system. If the current system is allowed to remain unreformed, then the fiscal framework is clearly unsustainable, even with a 2 percent primary fiscal surplus. To sustain the resulting domestic debt (including pension liabilities), estimated at 182 percent of GDP, the primary fiscal surplus would have to be raised to around 6 percent of GDP; assuming that GDP growth remains at 4 percent. Conversely, we can conclude from the figures in Tables 2.7 and 2.8, that the 2 percent primary surplus

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28. A real interest rate of 8 percent may be considered high for discounting future streams with long horizons, such as those associated with pension systems. While using a lower interest rate raises the net present value of the same future stream of pension deficits (and hence the size of the implicit public debt), it also enhances the economy’s capacity to sustain debt under given fiscal parameters. The overall impact on sustainability, therefore, is difficult to assess without engaging in a more detailed analysis.

29. These estimates are comparable to the ones discussed by the High Level Commission for reform of the pension system in Nicaragua and the Inter-institutional Technical Committee. They have estimated that the actuarial deficit of the pension system in NPV terms could reach as high as four times the size of GDP if the current system remains unchanged to as low as no deficit at all with a very drastic parametric reform is introduced. See, “Proyecciones Financieras de Reformas de Pensiones” Comisión Técnica Interinstitucional, Nicaragua, Ministry of Finance, June 2006, and “Carta – Escenario de Reforma al Sistema de Pensiones” Nicaragua, Ministry of Finance, November 2006.

reached in 2006 is only sustainable with a pension reform on the order of Option 3. Under Option 3, the total domestic debt is reduced to 53 percent of GDP, which is comfortably below the maximal domestic debt ratio (65 percent) that can be sustained with a 2 percent fiscal surplus and 4 percent growth. Fortunately, the pension system is not projected to generate cash deficits for a few more years, which gives adequate time to prepare an appropriate pension reform.

2.31 In addition to the liabilities associated with the pension system, there are also other contingent liabilities that need to be taken account of in assessing the risk of debt distress. One potential fiscal liability originates in the financial sector and is related to the de-jure and de-facto government guarantee of deposits in the event of a bank failure. Although it appears that prudential regulations and the institutional capacity of the Superintendency of Banks to detect imprudent behavior have been strengthened through previous financial sector reforms, the risk of another bank crisis cannot be ignored as long as the government maintains a legal or even moral responsibility to bail out depositors in the event of a crisis.

2.32 Finally, another important, but difficult to quantify, contingent fiscal liability refers to the government's open-ended capacity to issue BPIs in response to new claims of compensation for past confiscations. There is a danger that the ability to issue BPIs offers a seemingly easy way out in resolving property conflicts that the judiciary is unable or unwilling to handle.

D. Main Conclusions

2.33 The preceding review finds that Nicaragua has made impressive progress since 2001 in reducing its overall fiscal deficit. The decline of that deficit, however, was brought about entirely through increases in public revenues, which raises some concerns with respect to the future permanence of past fiscal reforms. To address those concerns, and considering the relative evolution of public revenues and expenditures in recent years, the authorities may wish to consider a more balanced approach when future adjustment needs emerge, by combining revenue-raising measures with expenditure cuts.

2.34 A debt sustainability analysis found that Nicaragua's combined public debt of approximately 54 percent of GDP appears sustainable as long as the country continues to grow at the average rate achieved in recent years and maintain positive fiscal surpluses on the order of 1 to 2 percent. This result coincides with the finding that emerged from the joint IDA-IMF debt sustainability analysis carried out in August 2007, indicating that Nicaragua exhibits a moderate, but manageable, risk of experiencing debt distress, provided that sound macroeconomic policies continue to be applied. Nevertheless, Nicaragua still remains vulnerable to destabilization from various potential developments that could undermine fiscal discipline. The most important threats in the short run were identified as the rising fiscal transfers to the municipalities mandated by Law 466, growing pressures on public wages, and the possibility of an energy crisis.

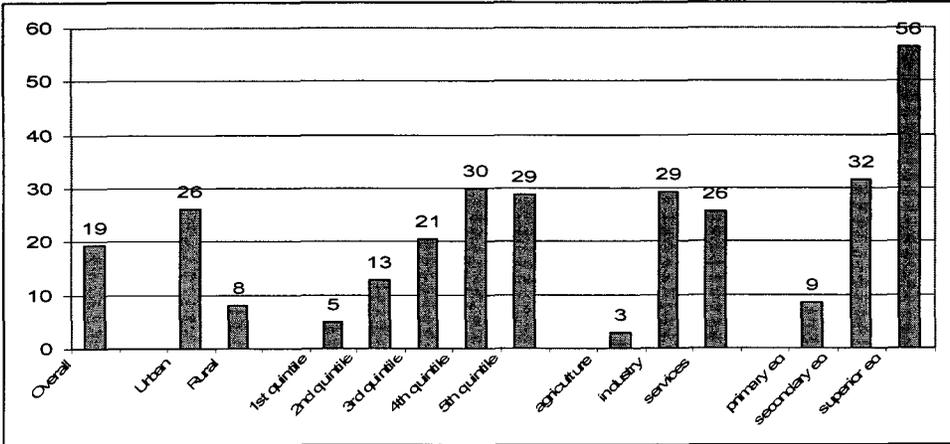
2.35 In the long run, Nicaragua's fiscal sustainability will also depend closely on how the authorities deal with the actuarial deficit of the pension system, which is currently at an unsustainable level. To render the implicit debt associated with the pension system sustainable would require a substantially larger primary fiscal surplus – on the order of 6 percent, if GDP growth remains at 4 percent. This would be an extremely ambitious fiscal target, as well as an

extremely inequitable one, considering that the beneficiaries of the pension system generally do not comprise the poorer members of societies (see Box 2.1). Fortunately, the pension system is not projected to generate cash deficits for a few more years, which gives adequate time to prepare appropriate pension reforms that would reduce the actuarial deficit in a socially equitable manner to a fiscally sustainable level.

Box 2.1 Pension System Coverage in Nicaragua

Nicaragua exhibits very high levels of labor market informality – about 65.7 percent (using small and micro enterprises as the marker of informality) or 82.8 percent (using the lack of contribution to the social security system as a marker of informality) of the economically active population. (Source: Estela Monroy 2006). Accordingly, the share of the population that is eligible for pension benefits is very small. Nicaragua ranks 4th lowest in a sample of 15 Latin American countries in terms of the percentage of the population covered by the pension system (only Bolivia, Paraguay and Peru have lower coverage). According to the 2005 LSMS, only 13.5 percent of the population over 60 years of age report receiving benefits from the pension system. Another notable characteristic of the pension system in Nicaragua is the great disparity in coverage across rural-urban areas, income quintiles, occupations and education attainment levels. As indicated in the Figure below, it is the richest population quintiles, most educated, urban population that benefit most from pension system. Not the rural, agriculture-based segments of the population, where most poverty is concentrated. The coverage of health insurance provided through INSS exhibits identical disparities in coverage; see 2005 Nicaragua Poverty Assessment.

INSS Coverage Rates; 2001



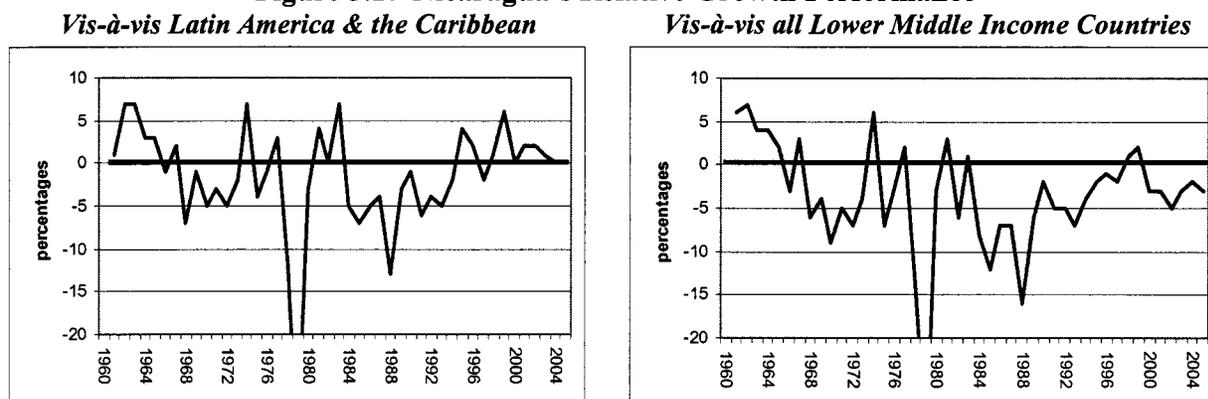
Source: Rofman and Lucchetti (2006)– from LSMS 2001.

CHAPTER III
THE EFFICIENCY OF PUBLIC SPENDING IN NICARAGUA

A. Growth and Poverty Reduction Performance

3.1 Nicaragua's growth performance since the mid-1990s has been reasonably good by regional standards, but somewhat lackluster in comparison to developing countries elsewhere. In fact, except for 1998-99, Nicaragua's per capita GDP growth has remained consistently below the average rate exhibited by all lower middle income countries worldwide; Figure 3.1. Furthermore, the pace of growth achieved in recent years has not been sufficient to keep up the momentum in poverty reduction, which has exhibited a marked deceleration since the end of the 1990s: following a steady decline in the extreme poverty headcount ratio from 19 percent in 1993 to 15 percent in 2001, the latest Living Standard Measurement Survey (LSMS) in 2005 only revealed an insignificant change vis-à-vis 2001.

Figure 3.1: Nicaragua's Relative Growth Performance



Source: World Bank, World Development Indicators. Notes: The graphs present the difference between Nicaragua's per capita GDP growth rate and the average rates in LAC, or in all Lower Middle Income Countries. The underlying figures on GDP per capita are based on purchasing power parity (PPP).

3.2 A decomposition of per capita GDP growth into the rate of capital accumulation and the rate of productivity growth can offer some insights for understanding the pattern of growth. The findings from such a growth decomposition analysis were reported in the 2004 Nicaragua Development Policy Review (DPR), which concluded that Nicaragua's difficulties in achieving fast sustained growth were attributable partly to insufficient rates of capital accumulation, but more importantly to insufficient productivity growth, which is largely related to the quality of investment. The 2004 DPR also had pointed out that Nicaragua exhibited particular shortcomings in several of the key determinants of growth, namely in education attainment, public infrastructure, financial sector development and governance.³⁰

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30. These key determinants of growth were identified in a cross-country study by Loayza, Norman, Pablo Fajnzylber and César Calderón (2006) "Economic Growth in Latin America and the Caribbean." (World Bank, Latin America and the Caribbean Region), which provided the analytic underpinning for the DPR.

3.3 These findings draw attention to the quantity and quality of public investment, both in human and physical capital, which contributes to the accumulation of the country's total capital stock. This chapter seeks to assess whether Nicaragua's public sector is devoting an adequate amount of resources toward aggregate investment, as well as toward the key sectors (education and infrastructure) identified as critical for raising economic growth in Nicaragua. The second issue addressed is the quality of these investments. The objective of this assessment is to determine whether the shortfalls in development outcomes are mainly due to insufficient public spending in particular areas or to shortcomings in the efficiency of public spending.

B. The Level and Efficiency of Public Investment

3.4 Nicaragua appears to devote a much higher share of its GDP toward gross fixed capital formation (GFCF) than the average in Latin America; Table 3.1. This difference relative to other Latin American countries is mainly attributable to a significantly higher rate of public investment spending. While the share of private investment is roughly the same in Nicaragua as in the rest of Latin America, the share of public investment is more than double the regional average. In this regard, Nicaragua resembles other lower middle income economies. Admittedly, public and private investment ratios have been significantly higher in the fast growing East Asia region, but the similarity to the ratios exhibited by other lower middle income economies suggests that Nicaragua's relatively modest growth rate is not primarily attributable to insufficient public investment or the crowding out of private investment.

Table 3.1
Relation between Growth Rates and Gross Fixed Capital Formation; 1990-2005

	Nicaragua	Latin America & Caribbean	Lower Middle Income	East Asia
		<i>average annual rates, 1990-2005</i>		
Annual GDP growth (%)	3.13	3.63	5.25	8.19
		<i>as percent of GDP</i>		
Total GFCF	23.94	19.13	26.15	32.44
Private GFCF	16.50	16.13	16.88	18.06
Public GFCF	7.44	3.00	9.69	14.38
Average ICOR*	7.65	5.27	4.98	3.96
		<i>Correlation Coefficients with GDP growth</i>		
Total GFCF/GDP	0.57	0.21	0.78	0.57
Private GFCF/GDP	0.54	0.08	0.78	0.31
Public GFCF/GDP	-0.19	0.15	-0.29	0.23

Source: World Bank, World Development Indicators. Note: * The average ICOR is calculated as the Total GFCF/GDP divided by the average GDP growth rate.

3.5 Where Nicaragua does stand out is with respect to the productivity of total investment, as measured by the average Incremental Capital Output Ratio (ICOR). While the average ICORs observed in Latin America and other lower middle income economies are not too far apart from the average value observed in East Asia, Nicaragua's ICOR is nearly twice as large. That is, somehow the investments undertaken in Nicaragua are much less efficient in terms of generating or eliminating obstacles to growth than those undertaken in the other countries. One possible

explanation is that Nicaragua is not directing its public investments toward the most productive activities. In this regard, it is notable that Nicaragua exhibits a negative correlation between public investment and economic growth, which contrasts with the positive correlation observed for East Asia, as well as with the positive correlation between private investment and economic growth exhibited everywhere. Other lower middle income economies exhibit a similar correlation pattern as Nicaragua, however, indicating that this factor may not have been the most critical for explaining the differences in economic growth. Another, more compelling explanation for the difference in average ICORs is that Nicaragua's overall public investment figures are grossly over-estimated.

3.6 As indicated in Table 3.2, over 40 percent of total public spending in the social sectors was classified as capital spending during 2003-05. It is hard to imagine such a high proportion of capital spending in these service-delivering sectors. Furthermore, the capital spending reported for the social sectors accounted for almost half of the total central government investment expenditures. This suggests that either current expenditures are being mis-classified as capital expenditures or the public sector is at risk of investing far beyond its capacity to maintain and operate the accumulated capital. This would explain the high average ICOR rates observed earlier, as the high reported public investment rates are either not contributing to the growth of the total capital stock or the capital stock is not being adequately maintained and operated.

Table 3.2
Nicaragua: Capital Expenditures of the Central Government, by Sector

	2000	2001	2002	2003	2004	2005	2006
<i>Sector Investment as % of Total Public Investment Expenditures</i>							
Social Sectors	45%	28%	40%	47%	47%	49%	38%
Infrastructure & Prod.	51%	53%	46%	39%	41%	37%	45%
Defense and Police	1%	1%	2%	1%	1%	1%	1%
General Services	3%	5%	3%	3%	2%	6%	4%
Other	0%	13%	9%	11%	9%	6%	12%
Total	100%	100%	100%	100%	100%	100%	100%
<i>Sector Investment as % of Total Sector Public Expenditures</i>							
Social Sectors	43%	29%	33%	42%	46%	43%	28%
Infrastructure & Prod.	87%	84%	83%	86%	90%	88%	78%
Defense and Police	6%	6%	6%	6%	7%	7%	4%
General Services	13%	11%	8%	9%	6%	17%	9%
Other	na	99%	49%	57%	58%	48%	53%
Total	42%	37%	32%	36%	43%	42%	32%
<i>memo item: Net foreign grants/credits as % of Total Public Capital Expenditures</i>							
	62%	69%	85%	92%	56%	47%	55%

Source: Statistical Annex Tables. Figures for 2006 are preliminary

3.7 The misclassification of current as capital expenditures arguably is responsible for most of the over-reporting of public investment levels, especially in the social sectors. To begin, it is important to keep in mind that Nicaragua is one of the most aid-dependent countries in the region. As indicated in Table 3.2, net foreign inflows since 2000 have averaged around two-

thirds of total public capital spending.³¹ Furthermore, as a rule, public expenditures that are explicitly linked to these inflows are automatically classified as capital expenditures, independent of the true economic use of those funds.³² This pattern of expenditure misclassification is expected to eventually change with the introduction of sector-wide approaches and the increasing recourse to budget-support funding.

3.8 The Infrastructure and Production sector also exhibits a high proportion of investment spending, with over 75 percent of total spending classified as capital expenditures. About half of total spending in this sector (the Production part) consists of public support to agriculture, environment and rural development activities, which are highly dependent on aid and largely involve the delivery of public services. The ratio of investment to total public spending reported for those sub-sector activities, averaging 88 percent during 2002-2004, therefore also appears to be heavily distorted by the misclassification of current as capital expenditures. The other half of total spending in this sector (the Infrastructure part), however, is dominated by the transport sector, which by its very nature involves much higher proportions of investment spending than the other, more service oriented sectors. That is, the investment figures reported for infrastructure spending are more indicative of the true amount of investments taking place. Therefore, to the extent that the reported infrastructure investment figures appear unusually high, they would more likely be reflecting true imbalances between investment and recurrent spending, rather than a misclassification of expenditures.

Table 3.3
Infrastructure Sector Investment in Latin America; 1991-1998

	Total Public Infrastructure			Transport Infrastructure			Water Infrastructure		
	Total	Public	Private	Total	Public	Private	Total	Public	Private
	<i>in percent of GDP</i>								
Argentina	1.7	0.5	1.2	0.4	0.2	0.2	0.1	0.1	0.1
Bolivia	6.9	2.8	4.1	2.2	1.8	0.4	0.7	0.1	0.6
Brazil	2.2	1.1	1.1	0.2	0.1	0.1	0.2	0.2	0.0
Chile	4.3	1.5	2.7	1.2	1.0	0.3	0.3	0.3	0.1
Colombia	5.1	3.9	2.2	1.0	0.9	0.1	0.5	0.5	0.0
Ecuador	4.5	3.4	1.0	0.6	0.5	0.1	0.8	0.8	0.0
Mexico	1.8	0.9	0.9	0.8	0.3	0.6	0.2	0.2	0.0
Peru	1.4	0.4	0.9	0.2	0.1	0.0	0.0	0.0	0.0
Venezuela	1.0	0.1	0.8	0.1	0.1	0.0	0.0	0.0	0.0
Average	3.2	1.6	1.7	0.7	0.5	0.2	0.3	0.2	0.1
Nicaragua	na	3.4	na	1.6	1.6	0.0	0.8	0.8	0.0

Source: World Bank, Project Database on Infrastructure Investment in LAC, Office of the Chief Economist for Latin America & the Caribbean. Data refers to investments in roads, railways, electricity/gas, water and telecoms. Data for Nicaragua refers to capital spending over the period 2002-05 and is estimated on the basis of information in the PER statistical annex and government budget.

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31. Not all of these inflows are used to finance capital spending. A significant portion also has been provided in the form of budget support and substitutes for domestic financing of the deficit. Even so, sector-specific external grants and credits represent almost 100 percent of the total capital budget in education and around 68 percent in health.

32. The reasons for such a rule are well known: on one hand, most donors traditionally have insisted on restricting their development aid to investment activities on the grounds that financing recurrent spending leads to unsustainable outcomes. On the other hand, the national authorities generally have no choice but to record aid-financed project expenditures as investment expenditures, given the finite time horizon and limited commitment of funds associated with these projects.

Has Nicaragua been spending enough on Public Infrastructure?

3.9 Nicaragua's public sector invests a significantly higher share of GDP in public infrastructure than the Latin America average; Table 3.3. Even though Nicaragua privatized the public telecommunication enterprise and much of the electricity sector, and no longer has a railway, its total public infrastructure investment ratio is over twice the regional average. While reliable figures are not readily available on private investment, Nicaragua's public investment in these sectors exceeds the combined public and private investment observed in most of the other countries over the previous decade. In the transport and water & sanitation sub-sectors, Nicaragua's investment ratios represent an even greater multiple of the regional averages. Nicaragua's GDP share of public investment in the water & sanitation sector, for example, is about 4 times the regional average.

3.10 The preceding finding suggests that Nicaragua's public sector has not been investing too little in public infrastructure, or at least not in the transport and the water & sanitation sectors. On the other hand, Nicaragua also has a greater public infrastructure deficit than the average in Latin America, and so should be investing more. In that regard, Nicaragua is comparable to the other HIPC country (Bolivia) that is represented in Table 3.3. Also, this conclusion needs to take into consideration that not all of the total public investment reported for these sectors constitutes true investment expenditures, but may be disguised current expenditures. The absence of data on private investment expenditures in some of these sectors adds to the difficulty in assessing the adequacy of total investment spending. Although the private sector is not significantly involved in the transport and water sectors (except in terms of road maintenance activities), it is very closely involved in the electricity and telecommunications sectors. The telecommunications sector appears to be expanding in a satisfactory manner. In energy, however, the growth in effective installed generation capacity has fallen behind the growth of electricity demand since 2001, reflecting inadequate investment levels; see Annex H.

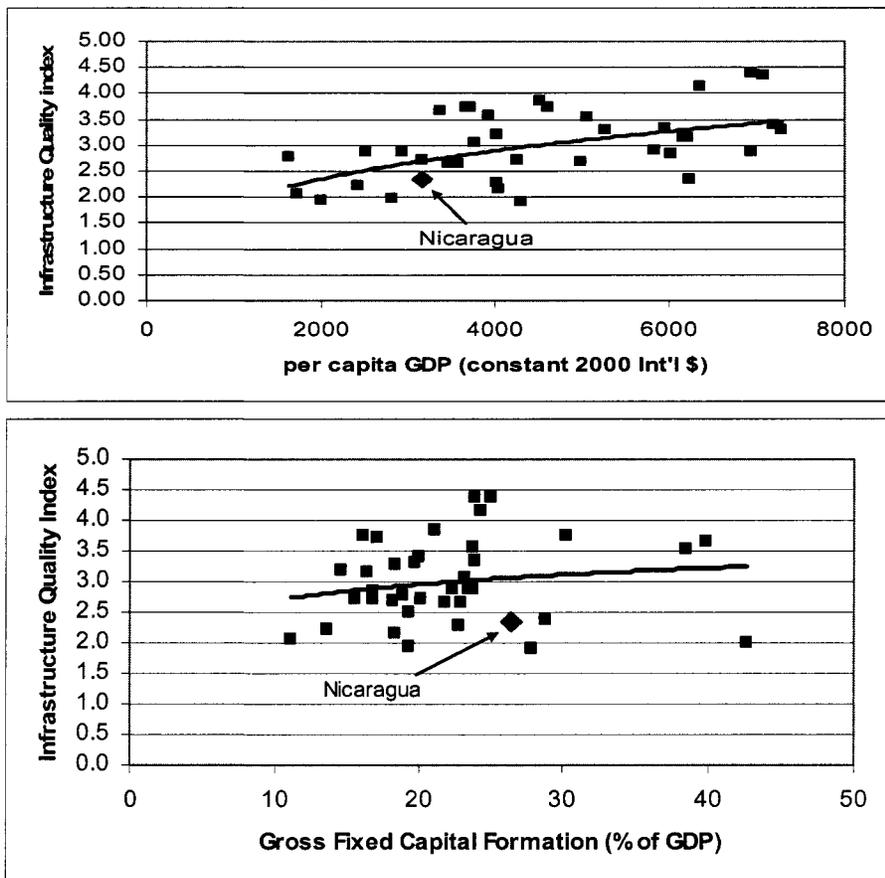
The Efficiency of Public Infrastructure Spending

3.11 In spite of what appears overall to be a significant level of investment in public infrastructure, Nicaragua's infrastructure quality indicators are among the lowest worldwide. According to the infrastructure quality index of the World Economic Forum's 2006/2007 Global Competitiveness Index, Nicaragua ranks 101st out of a total of 125 countries; that is, in the bottom quartile.

3.12 Nicaragua's relatively poor performance in this area is in part associated with its overall lower level of development, as measured by per capita GDP. Even after taking into account differences in the level of per capita income, however, Nicaragua continues to exhibit a level of infrastructure quality that is below the norm for countries with similar income levels; top panel of Figure 3.2. Furthermore, Nicaragua's shortfall in infrastructure quality is particularly pronounced after accounting for differences in gross fixed capital formation as a share of GDP; lower panel of Figure 3.2. While its ratio of gross fixed capital formation (averaged over 2001-05) ranked in the top quartile of the distribution of these ratios among lower middle income countries, its infrastructure quality index ranks in the lowest quartile. These findings suggest that the quality of investment in Nicaragua exhibits significant deficiencies, both in terms of helping

to generate economic growth and in terms of providing adequate infrastructure services. The next three sections present summary reviews of the transport, water & sanitation, and electricity sectors in Nicaragua, with the purpose of identifying the main sources of deficiencies in each sector.

Figure 3.2. Per Capita GDP, Gross Fixed Capital Formation and Infrastructure Quality across Lower Middle Income Countries



Source: Lopez-Claros et al (2006), The Global Competitiveness Report 2006-2007, and World Bank, World Development Indicators. This figure is based on data for 49 lower middle income countries.

Summary Review of Public Expenditures in Transport

3.13 Recent Sector Performance. Nicaragua's road network had deteriorated to the point where only about 12 percent of the network was in good condition in the early 1990s. By the end of 1999, this proportion had risen to 19 percent, in spite of the setback produced by hurricane Mitch, and reached 20 percent in 2006. This outcome was achieved with annual budgetary allocations to the transport ministry (MTI) of around 2.0 percent of GDP, (or around 10-15 percent of total central government expenditures). In 2005 and 2006, however, MTIs budget execution declined significantly, below the level considered adequate for a country at Nicaragua's stage of development and recovery; see Annex F.

3.14 Nicaragua's overall road sector performance is considered adequate from a resource allocation viewpoint. Noteworthy improvements in this regard are (i) the increasing reliance on a road maintenance fund (FOMAV) to maintain the most trafficked roads, and (ii) an increasing reliance on *adoquines* (cement paving blocks) as a cost-effective alternative to gravel-surfaced roads, especially for rural traffic.³³ Although the ratio of sector recurrent to capital expenditures has been unusually low over the last decade, this has been reflecting a focus on reconstruction needs and is not expected to continue. Road improvements are now selected largely on the basis of their economic justification (using the World Bank's HDM model), providing further comfort in that allocations are being made on an efficient basis. Concerning the other transport sub-sectors, most transport services for roads, ports and airports in Nicaragua are concessioned, or owned and operated by the private sector, and have modest direct fiscal implications.³⁴

3.15 Key Sector Challenges. In spite of the improvements observed over the last decade, Nicaragua still exhibits the lowest road infrastructure quality indicators in Central America. The increased regional competitiveness that is expected to emerge with CAFTA heightens the urgency to address this infrastructure deficit. The challenge is how to close the infrastructure deficit within the constraints of a limited fiscal budget.

3.16 Measures to Improve Allocative and Operational Efficiency. To meet the challenge of closing Nicaragua's infrastructure deficit in the road sector, it is important to prevent MTIs budget from declining below the average levels in 2001-2005. In the roads sub-sector, which presents the greatest infrastructure deficit, the volumes of traffic are generally not large enough to render viable the private provision of infrastructure. Closing this infrastructure gap, therefore, will continue to depend mainly on public sector provision. Before contemplating any increases in MTI's budget, however, it is necessary to reverse MTI's recent declines in budget execution. In addition, the following measures would help to raise the impact of public expenditures.

- *Greater reliance on adoquinado programs.* Given the success of the trunk road rehabilitation program so far, the next order of priority is to improve the grid of secondary and major rural roads (the distributor network) that link to the trunk roads and serve the productive zones. The scaling up of existing *adoquinado* programs represents a cost-effective alternative to asphalt or gravel paving of roads, especially for the secondary network.
- *Emphasizing road maintenance.* It is essential that the rehabilitated roads are not left to deteriorate (as in the past) and once again allowed to become bottlenecks. A comprehensive maintenance program, including guaranteed funding arrangements via FOMAV and the use of least-cost public bid contractual approaches for works implementation, are an indispensable part of the strategy to increase paved road coverage.
- *Adapting road design to local conditions.* There has been a growing tendency to design roads to meet excessively high administrative standards (e.g. insisting that all collector roads must

33. The reliance on *adoquines* has contributed to an increase in technical efficiency by minimizing the consumption of economic resources in its construction and maintenance. Road users also realize increased savings over the gravel-surfaced alternative. In most low traffic volume situations, gravelling has long been the preferred option for surfacing when upgrading earth roads because it is less costly than asphalt. However, Nicaragua is ahead of many countries in addressing the paradox of improving low traffic volume by using the non-traditional *adoquinado* option, which provides an all-weather service quality similar to asphalt but has a lower life-cycle cost than gravel.

34. While anecdotal evidence suggests that operational efficiency varies highly across these sub-sectors, the PER has not reviewed these other sectors in sufficient depth to emit an opinion.

be 7 meters wide) rather than adhere to less costly standards that are appropriate for the prevailing traffic volumes and likely growth rates.

- *Clarifying and strengthening sub-sector institutional arrangements:* While its institutional capacities have improved, MTI is still affected by overall weaknesses in planning and programming. There is a need to develop MTI's basic capacity to carry out road condition inventories, to fully install the Pavement Management system, to seek least cost solutions to technical and engineering problems associated with road and bridge maintenance, as well as to help foster the development of the local consulting and contracting industries. Furthermore, the FOMAV needs appropriate technical assistance, particularly in contracting and procurement procedures so that it can develop the capacity eventually to manage the maintenance of the entire core road network. For overall sustainability and efficient road management, further analytical work is needed to identify the appropriate roles and responsibilities of the key players (both at central and local level, and including INIFOM, IDR and the municipalities) and to promote synergies while avoiding a duplication of efforts
- *Improving urban mobility* by restructuring public transportation services and developing improved mass transit corridor management in Managua. This could be designed as part of an integrated bus routes development and improved traffic demand management program.

Summary Review of Public Expenditures in Water & Sanitation

3.17 Recent Sector Performance. Public investment in water and sanitation, which averaged 0.75 percent of GDP during 2002-06, is high by regional standards. Sector outcomes have been mixed, however: while access to sanitation improved, access to water has stagnated and effective water & sanitation use has gone down; Table 4 in Annex G. Two factors are primarily responsible for the uneven impact of sector investments. First, the identification of sector investments has been flawed. Decisions on expenditure priorities have been basically driven by emergency and political considerations, very rudimentary planning by ENACAL and FISE, and donor offers of grants and concessionary loan financing. The second important factor refers to the poor performance of the sector's main public operator. ENACAL has been a loss-making public enterprise, whose financial situation has deteriorated to the verge of illiquidity during 2003-2006, due to a high percentage (56 percent) of unaccounted-for water (half of which may be due to illegal connections), low labor productivity (7.6 employees per 1000 water connections), and low collection and micro metering rates that clearly lag behind regional standards. Also, a dramatic increase in the energy bill, combined with a tariff freeze (in nominal Córdoba terms) that has been in place since 2003, has resulted in cost-coverage ratios between 0.69 and 0.86 that explain the negative operating cash flows since then.

3.18 Key Sector Challenge: Achieving 100 percent coverage in water and 95 percent coverage in Sanitation by 2015 are two important MDGs highlighted in Nicaragua's poverty reduction strategy. They are also critical for achieving the country's health-related MDGs. The key challenge facing Nicaragua is to expand service coverage indicators without significantly expanding the sector budget.

3.19 Measures to Improve Allocative and Operational Efficiency. To meet this sector challenge, Nicaragua needs to significantly improve the efficiency of sector expenditures and sector management. The water and sanitation sector strategy developed by the sector policymaking agency, CONAPAS, provides a good starting point for addressing the problems

that currently constrain the sector, and the basis for a more systematic planning process. Important measures that would help to improve sector performance and efficiency are listed below:

- *Planning:* Designating a policy body (such as CONAPAS) with sufficient political weight and institutional capacity is an important first step for improving sector planning. As long as the sector strategy is operational and has adequate political backing, a Sector Wide approach would be the preferred mode of cooperation for donors.
- *Regulation:* Giving INAA full autonomy in tariff setting could improve cost-coverage ratios. In terms of political timing, the Government/ENACAL may first need to improve efficiency and service before adjusting tariffs – although there is never a perfect time for tariff increases. Also, INAA’s power of supervision needs to be strengthened by systematically linking any subsidies from the general budget to improvements in performance indicators, to be defined in the concession contract between ENACAL and INAA.
- *Subsidization.* The current system of sector subsidies needs to be reviewed and possibly revised in order to target the direct and indirect subsidies more effectively to the poor.
- *Urban areas:* Improving the service quality and efficiency of ENACAL is one of the most urgent priorities in the sector. Important opportunities for reducing ENACAL’s losses exist in the commercial area (through the reduction of non-technical losses, and increase of metering and collections), as well as in terms of reducing personnel and energy cost. A greater de-concentration of ENACAL’s operations also is an alternative that could be considered, balancing economies of scale and proximity to clients. The Matagalpa-Jinotega experience with de-concentrated service provision may offer useful lessons in this regard.
- *Rural areas:* FISE has developed considerable experience in local development and in cooperating with municipalities and communities in the sustainable operation of water systems, which leaves it well placed to assume a lead responsibility for the rural sub-sector, in collaboration with municipal governments (in a supportive role) and the rural water communities (CAPs), whose legal status needs to be secured so that they can manage and operate their systems more effectively.
- *Integrated approach to sanitation:* Hygienic behavior is critical for improving health outcomes, particularly in rural areas. As access to water and sanitation infrastructure expands, a hygiene education program could significantly leverage the impact of this infrastructure in reducing water-related diseases.

Summary Review of Public Expenditures in Energy

3.20 Recent Sector Performance. Public spending on electricity infrastructure has been modest, as most new generation capacity over the last decade has been provided by the private sector. There has been commendable progress in expanding access, with Nicaragua’s electrification coverage increasing from 47 percent in 2001 to 54 percent in 2005, in good measure due to the operation of the National Electric Industry Development Fund (FODIEN). However, little progress has been made in diversifying power generation away from petroleum and distribution losses (28 percent) continue to be the highest, by far, in the region. Most importantly, there has been little new investment in electricity generation, so the power reserve

margin has fallen to 6 percent of total average demand, once again resulting in system-wide blackouts and power rationing. While the recent installation of additional generation capacity with Venezuelan assistance offers a short-run remedy to this problem, additional actions are needed to ensure a long-run solution to the sector's shortcomings.

3.21 Key Sector Challenges: As in the case of transport, Nicaragua lags far behind the other countries in the region in access to electricity, putting the country at a strong competitive disadvantage in the context of CAFTA. The main challenge in the short to medium term is to secure sufficient generation capacity to eliminate blackouts and accommodate the anticipated growth in energy demand. The longer term challenge is to expand electrification rates to levels comparable to other countries in the region. In view of the massive infrastructure investments needed to achieve these targets, and the limited fiscal resources, meeting this challenge will require significant private sector participation.

3.22 Measures to Improve Allocative and Operational Efficiency. To meet these challenges the recent Energy Sector Policy Note prepared by the World Bank focuses attention on the need to (i) defuse the confrontation with the private distribution company and seek a common ground for improving service, with the ultimate aim of re-establishing investor confidence and encouraging sector investments, (ii) simplify the electricity pricing structure (and abiding by it), while re-considering the existing electricity consumption subsidy, which represents the largest single fiscal cost emerging from the sector, but may not be reaching the poorest households, (iii) extend electricity service by strengthening the rural electrification fund, FODIEN, and (iv) update existing studies for hydro-electric and geothermal projects to feed into a long-term sector expansion plan, giving priority to developing new projects within a regional context.

C. The Level of Social Sector Spending

3.23 Overall public social spending has represented a somewhat lower share of GDP in Nicaragua than in most other countries in Latin America; Table 3.4. That difference in public spending, however, mainly reflects lower spending on social protection, especially pensions. In education and health – which are more indicative of investments in human capital – Nicaragua spends roughly the same as other countries in the region, both as a share of GDP and as a share of total public spending. The distribution of public spending within each sub—sector, however, exhibits significant variations, both in health and in education, as discussed below.

Has Nicaragua been spending enough on Education?

3.24 The aggregate social spending measures in Table 3.4 only give a partial sense of whether Nicaragua is investing an appropriate amount in education. Since Nicaragua has a higher proportion of school age children than the regional average, it would have to spend more than the average to provide the same amount of education services per child. Table 3.5 and 3.6 provide adjusted measures of the public expenditure effort that goes into primary and secondary education in Latin America, taking into account the respective differences in net enrollment rates and in the school-age populations.

Table 3.4: Social Sector Spending in Central and Latin America; 1990-2003

	<i>as % of GDP</i>				<i>As % of Total Public Expenditures</i>			
	1990/91	1994/95	1998/99	2002/03	1990/91	1994/95	1998/99	2002/03
Total Public Social Sector Spending								
Costa Rica	15.7	16.0	16.6	18.9	na	na	63.6	64.5
El Salvador	na	na	na	7.1	na	na	na	35.9
Guatemala	3.3	4.0	6.0	6.5	29.5	41.4	44.9	50.0
Honduras	7.9	7.8	7.5	13.0	36.4	32.0	31.4	51.8
Nicaragua	6.6	7.1	7.6	8.8	34.0	39.9	37.1	40.0
Panama	16.3	17.3	16.5	17.5	40.2	43.5	45.5	45.4
<i>LAC Average</i>	<i>9.3</i>	<i>10.6</i>	<i>11.9</i>	<i>12.0</i>	<i>40.5</i>	<i>44.0</i>	<i>46.8</i>	<i>44.1</i>
Public Spending on Education								
Nicaragua	2.6	2.8	3.4	4.1	13	15.8	16.7	18.5
<i>LAC Average</i>	<i>2.9</i>	<i>3.4</i>	<i>3.9</i>	<i>4.3</i>	<i>13.9</i>	<i>15.2</i>	<i>15.9</i>	<i>16.7</i>
Public Spending on Health								
Nicaragua	2.8	2.8	2.7	3.0	14.0	15.8	13.3	13.5
<i>LAC Average</i>	<i>2.3</i>	<i>2.5</i>	<i>2.6</i>	<i>2.7</i>	<i>9.8</i>	<i>10.0</i>	<i>10.1</i>	<i>9.9</i>

Source: CEPAL, Panorama Social de America Latina, 2006.

3.25 These tables indicate that Nicaragua is making a similar expenditure effort in primary education as other countries in the LAC region on average. At the secondary level, however, Nicaragua's public expenditure effort is little more than half the regional average, suggesting an important public spending shortfall in that area.³⁵

3.26 In contrast to secondary level education spending, Nicaragua appears to be spending much more per student at the tertiary level than other countries in the region. Almost one-third of the 4.1 percent of GDP devoted to education spending in Nicaragua is spent at the tertiary level. This translates into an estimated public expenditure of a little more than US\$1,000 per student.³⁶ This per-student transfer represents over 100 percent of per capita GDP, or roughly 10 times the amount spent on each primary student and 8 times the amount spent per secondary student. It is also about 3 times higher in per-capita GDP terms than the amount spent per tertiary student in the rest of Latin America, which averages 36 percent of per capita GDP (World Bank, Edstats).

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35. These preliminary conclusions should also take into account differences in private sector involvement at each level. In Nicaragua, around 15 percent of primary students and 28 percent of secondary students are enrolled in private institutions (World Bank, EDStats). These ratios, however, are fairly close to the average ratios in the other countries of the regional sample.

36. This estimate of per-student spending is based on a sample of universities (UNAN-Managua, UCA and UNA), which account for approximately one-half of the central government transfer to the universities; JUDENIC, "Investigación sobre los Fondos Asignados a las Universidades del Presupuesto General de la República."

Table 3.5: Public Spending on Primary Education in 2005

	Public Expenditure on Primary as % of GDP p.c. (1)	Net Primary Enrolment Rate (%) (2)	Primary Age Population as % of Total Pop. (3)	Adjusted Expenditure Effort = 1*2*3 Index LAC = 100
Argentina	10.9	98.8	10.8	1.2
Bolivia	16.4	95.2	15.5	2.4
Brasil	10.8	92.9	7.5	0.8
Chile	12.9	84.8	11.2	1.2
Colombia	16.7	83.2	10.8	1.5
Costa Rica	17.1	90.4	12.4	1.9
Dominican Republic	5.0	86.0	12.8	0.6
Ecuador	3.2	97.7	13.3	0.4
El Salvador	9.4	92.3	13.7	1.2
Guatemala	4.7	93.0	16.3	0.7
Jamaica	12.6	90.6	12.4	1.4
Mexico	16.0	97.8	13.2	2.1
Nicaragua	9.1	87.9	16.0	1.3
Panama	9.9	98.2	12.2	1.2
Paraguay	12.6	89.3	15.2	1.7
Peru	6.4	97.1	13.5	0.8
Trinidad & Tobago	16.0	92.2	10.9	1.6
Uruguay	6.5	90.4	9.8	0.6
LAC Average	10.9	92.1	12.6	1.3

Source: A. Morduchowicz & L. Duro (2007), CEPAL. Based on figures for 2005 or most recent.

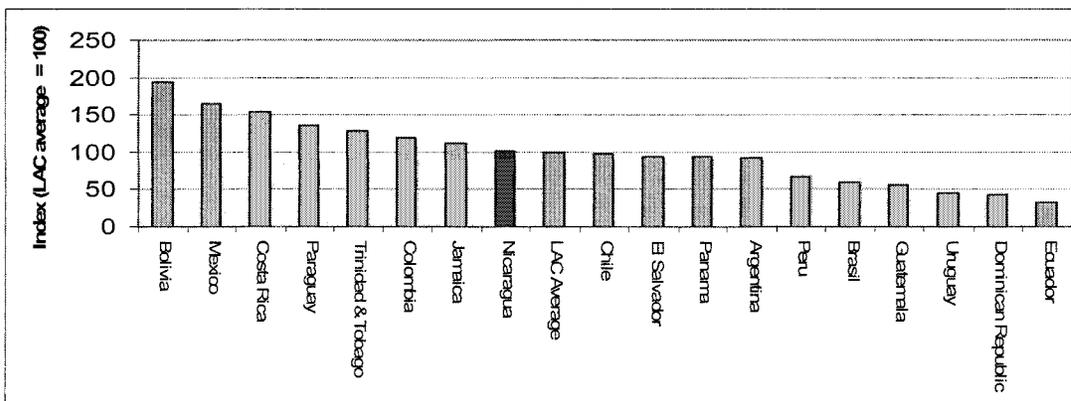
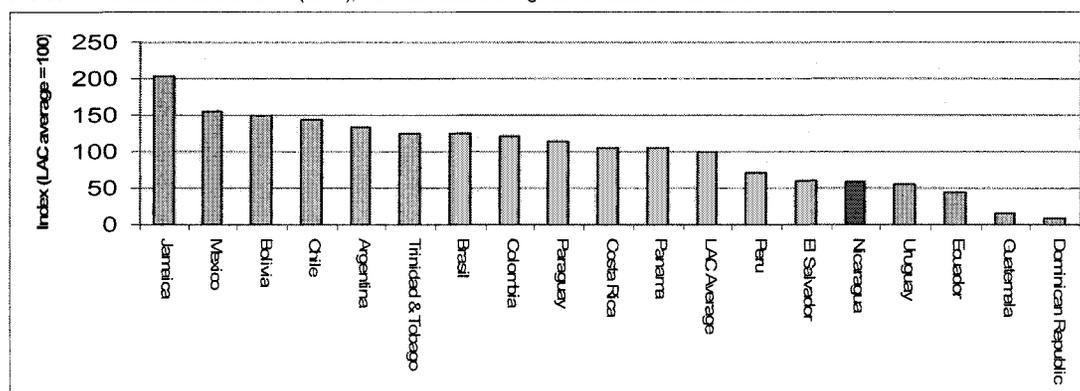


Table 3.6: Public Spending on Secondary Education in 2005

	Public Expenditure on Secondary as % of GDP p.c. (1)	Net Secondary Enrolment Rate (%) (2)	Secondary Age Population as % of Total Pop. (3)	Adjusted Expenditure Effort = 1*2*3 Index LAC = 100
Argentina	14.3	79.1	10.8	1.2
Bolivia	13.0	73.6	14.4	1.4
Brasil	11.2	75.7	13.4	1.1
Chile	14.3	80.8	11.5	1.3
Colombia	16.0	54.9	12.6	1.1
Costa Rica	17.2	52.7	10.7	1.0
Dominican Republic	1.3	49.3	13.3	0.1
Ecuador	6.1	52.2	12.8	0.4
El Salvador	9.0	48.1	13.0	0.6
Guatemala	3.7	33.7	12.2	0.2
Jamaica	21.9	79.2	10.7	1.9
Mexico	17.3	63.8	12.9	1.4
Nicaragua	10.7	40.7	12.3	0.5
Panama	12.6	63.7	11.9	1.0
Paraguay	14.1	51.1	14.4	1.0
Peru	8.7	68.8	10.9	0.7
Trinidad & Tobago	17.2	71.9	9.2	1.1
Uruguay	7.2	73.2	9.6	0.5
LAC Average	12.0	61.8	12.0	0.9

Source: A. Morduchowicz & L. Duro (2007), CEPAL. Based on figures for 2005 or most recent.



Has Nicaragua been spending enough on Health?

3.27 The Central American countries, except for Guatemala, display a uniform pattern in overall health spending, ranging between 7.1 and 8.1 percent of GDP; Table 3.7. The distribution between private and public spending, however, exhibits considerably more variation. Costa Rica and Panama rely primarily on the public sector to provide health services. (These are also the two richest countries in the region, with the most comprehensive social security systems.) The other countries in the region, including Nicaragua, exhibit a more evenly balanced distribution of health spending.³⁷ Nicaragua's total amount of per-capita spending on health

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37. The higher reliance on private health spending among the poorer countries in the region, of course, raises questions about equitable access to health care services.

(US\$208 in 2003) is considerably lower than the regional average (US\$363), but still well above the US\$80 in spending that is considered the minimum necessary to sustain an adequately working health system.³⁸ Based on these findings, it does not appear that Nicaragua's public sector is spending too little on public health.

Table 3.7 Population, GDP, and Health Expenditures in Central America, 2003

	Total health expenditures	Of which,		Average per capita health expenditures (in International US\$, 2003)	Per capita Public Expenditures on health
		Public Spending <i>As percent of GDP</i>	Private Spending		
Costa Rica	7.3	5.8	1.5	616	486
El Salvador	8.1	3.7	4.4	378	174
Guatemala	5.4	2.1	3.3	235	93
Honduras	7.1	4.0	3.1	184	104
Nicaragua	7.7	3.7	4.0	208	101
Panama	7.6	5.0	2.6	555	368
Average	7.2	4.0	3.2	363	221

Source: WHO Core Indicators, 2006. Public health expenditure includes both recurrent and capital spending from government (central and local) budgets, external borrowings and grants (including donations from international agencies and nongovernmental organizations), and social (or compulsory) health insurance funds.

D. The Efficiency of Social Sector Spending

Some Cross-Country Evidence

3.28 A general assessment of the efficiency of social expenditures in Nicaragua can be obtained from recent research at the World Bank on the measurement of efficiency in public spending across countries.³⁹ This work involves the construction of empirically-derived world production possibilities frontiers, relating the amounts of public spending in particular sectors to various outcome indicators in each sector. In this context, efficiency is measured as the distance between a country's actual combination of public spending and sector outcomes in each sector and an efficiency frontier. This distance to the frontier can be measured, alternatively, in terms of the amount of public spending made in generating a particular output, or in terms of the output generated for a particular level of public spending. In both cases, the index measuring efficiency is constructed in a way that countries on the frontier exhibit an index of 1.0 and less efficient countries exhibit an index that is between 0 and 1. See Annex A for details.

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38. A study by Evans et al. (2006) estimated the efficiency of the health system of 191 countries by comparing levels of health outcomes and health inputs (health expenditure per capita and education level). The study finds that it is difficult for systems to be efficient with annual health per capita expenditures lower than US\$80.

39. Herrera, Santiago and Gaobo Pang (2005), "Efficiency of Public Spending in Developing Countries: An Efficiency Frontier Approach", World Bank working paper, May.

Table 3.8: Ranking of Efficiency Scores for Public Spending in Education and Health

Average Efficiency Scores in Education				Average Efficiency Scores in Health			
Input-oriented		Output-oriented		Input-oriented		Output-oriented	
Uruguay	0.97	Uruguay	0.97	Trin. & Tob.	0.89	Chile	0.98
Dominican Rep.	0.80	Argentina	0.75	Chile	0.88	Mexico	0.96
Guatemala	0.70	Barbados	0.72	Mexico	0.79	Trin. & Tob.	0.95
El Salvador	0.66	Panama	0.70	Dominican Rep.	0.78	Panama	0.95
Chile	0.63	Chile	0.67	Guatemala	0.71	Uruguay	0.94
Peru	0.62	Mexico	0.67	Peru	0.71	Barbados	0.94
Trin. & Tob.	0.62	Trin. & Tob.	0.67	Jamaica	0.70	Jamaica	0.94
Argentina	0.61	Peru	0.66	Ecuador	0.69	Costa Rica	0.93
Brasil	0.60	Brasil	0.66	Brasil	0.69	El Salvador	0.93
Mexico	0.57	Jamaica	0.63	Honduras	0.68	Honduras	0.92
	<i>Sample median</i>			Paraguay	0.68	Argentina	0.91
Paraguay	0.52	Paraguay	0.61	Costa Rica	0.67	Peru	0.91
Colombia	0.52	Dominican Rep.	0.61		<i>Sample median</i>		
Panama	0.52	Guyana	0.61	Venezuela	0.66	Nicaragua	0.90
Nicaragua	0.52	Bolivia	0.60	El Salvador	0.66	Brasil	0.90
Guyana	0.51	Colombia	0.58	Nicaragua	0.65	Ecuador	0.88
Bolivia	0.50	Costa Rica	0.56	Haiti	0.65	Guyana	0.87
Honduras	0.50	El Salvador	0.55	Bolivia	0.63	Colombia	0.86
Costa Rica	0.49	Honduras	0.53	Colombia	0.62	Dominican Rep.	0.85
Jamaica	0.44	Nicaragua	0.47	Guyana	0.60	Paraguay	0.84
Barbados	0.36	Guatemala	0.47	Barbados	0.58	Venezuela	0.84
Ecuador	na	Ecuador	na	Panama	0.55	Guatemala	0.81
Venezuela	na	Haiti	na	Uruguay	0.55	Bolivia	0.75
Haiti	na	Venezuela	na	Argentina	0.50	Haiti	0.57

Source: Annex A.

3.29 Table 3.8 compares the average efficiency scores for public spending on education and health in the Latin American region, based on data from 1996-2002. It indicates that the efficiency of public spending in Nicaragua is among the lowest in the region. Nicaragua's efficiency scores fall below the median, both for the input-oriented as well as output-oriented measures, and for education spending as well as for health spending (albeit somewhat less pronounced in the latter case).

3.30 These findings suggest that there is significant room for improving the efficiency of public social spending in Nicaragua. One way to gauge the potential room for achieving greater efficiency is by comparing Nicaragua's efficiency scores to the scores achieved by countries ranked at the 75th percentile of the regional and world-wide distribution of efficiency scores. Such a comparison suggests that Nicaragua could achieve fiscal savings on the order of 13 to 21 percent in education spending, and of around 9 percent in health spending, by adopting the practices of countries that are operating closer to the efficiency frontier. The same analysis, using output oriented measures, suggest that Nicaragua could raise outcome indicators by around 50 percent in education and 5 percent in health by adopting those practices while maintaining overall spending the same.⁴⁰

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40. See Table 3 in Annex A. The comparison with countries at the 75th percentile of the distribution of efficiency scores appears reasonable as a benchmark for most developing countries. While it looks beyond a simple average, it is not as ambitious as seeking a position on the efficiency frontier. If positions on the efficiency frontier were taken

Summary Review of Public Expenditures in Education

3.31 Recent Evolution of Education Expenditures. Since the late 1990s, there has been a marked upward trend in education expenditures, from 3.6 percent of GDP in 2001 to 4.9 percent of GDP in 2005. About two-thirds of the total expenditure on education is allocated to the education ministry for pre-university education, a figure that has been constant for a decade. Excluding transfers to the universities, the bulk of education resources are devoted to primary education (77 percent), followed by secondary education (13 percent) and adult education (5 percent). Overall, per student spending is highest at the primary level (US\$ 128) followed by secondary education (US\$ 48) and pre-school education (US\$ 20). External resources (grants and credits) finance around 30 percent of total education spending. Most of these external funds have been earmarked for primary education and for centrally executed activities and programs. Overall the rate of budget execution in the sector is high, averaging over 90 percent for public resources and grant financing.

3.32 The total teaching force increased by approximately 5,000 positions between 2002 and 2004, or approximately 11 percent. Teacher salaries also increased over the same time frame, although the average teacher salary (2.4 times GDP per capita) remains below the target benchmark of 3.5 times GDP per capita established under the EFA FTI indicative framework. An in-depth study is required to determine a more effective teacher compensation and deployment policy that takes into account teacher performance and promotes greater teacher accountability towards results.

3.33 Key Sector Developments. Among the most noteworthy sector developments since 2001 are the passage of the Education Participation Law (Law 413) and approval of the Education for All – Fast Track Initiative (EFA-FTI). The Ortega administration has embraced the EFA FTI – which disbursed US\$ 7 million for 2004-2005 and is projected to yield another US\$ 10 million for 2006-2007 – but has expressed concerns with aspects of the autonomy program, particularly with the financial transfers provided to the schools. As a result, all financial transfers to the schools were stopped for the academic year beginning in 2007, pending a final decision by the education ministry on how to proceed. Another major development under the Ortega administration has been the abolition of school fees and voluntary contributions. Both are discussed next.

3.34 *Decentralized School Management*. The school autonomy program started as a pilot in 1993, with the participation of 20 large, urban secondary schools on a volunteer basis. In 1995, the model was extended to primary schools with special adaptations in rural areas, and by 1997, a total of 3,950 schools were participating in the autonomy program. The autonomy program was institutionalized with the Education Participation Law passed in 2002, along with internal regulations for its implementation. By 2006, a total of 4,997 primary schools (or 58 percent of the total) and 501 secondary schools (or 40 percent of the total), enrolling almost 1 million students, were operating under the Participation program. A key feature of the autonomous program is the decentralization of decision making and financial resources directly to the schools using a per-capita financing formula.

as benchmarks, the potential fiscal savings would increase to 48 percent in education and 35 percent in health, while potential outcome gains would increase to over 100 percent in education, and 11 percent in health.

3.35 A brief assessment of the autonomy model yields a series of important findings. Positive aspects include the empowerment of parents, students and teachers in planning and decision making and better education indicators when compared to traditional schools, especially in terms of lower repetition rates, fewer unqualified teachers and higher student test results in some subjects. Negative aspects include higher student-teacher ratios. Since 2006, the Ministry has been studying some of the adverse effects caused with the financing formula used to determine the size of the financial transfer to each school. Initial findings indicate that the formula, which is anchored on enrollment, appears to have led to an over-statement of school enrollment levels. In 2006 the Ministry revised the formula, on a transitional basis pending an in-depth assessment of the formula and consultations on options to strengthen it.

3.36 *School fees and voluntary contributions.* The Ortega Administration feels that many potential students were excluded from attending school by the fees and voluntary contributions that had been previously charged. While the decision to abolish these fees is an important step forward in removing possible barriers to school enrollment or continued attendance, it is also important to recognize that concomitant allocations must be forthcoming to offset forgone revenue, which previously served to cover important operational expenses. Similarly, it is also important to recognize that the school fees and contributions only constituted part of the overall costs of schooling. Many other important costs (e.g., related to uniforms, shoes, materials, meals) have not been reduced and have been found to have an equal if not greater incidence on enrollment and retention, particularly among the poor.

3.37 Evolution of Sector Outcomes. While the funds channeled to education have increased since 2001, sector outcomes exhibit a mixed performance. Overall access, internal efficiency and primary drop out indicators show improvements, but secondary drop out rates, teacher quality and student/teacher ratios in public school exhibit little change or deterioration.⁴¹

- *Access.* Net enrollment rates increased in all levels between 2000 and 2005: from 31.8 to 41.7 percent in preschool education, from 84.1 to 91.9 percent in primary education and from 36.8 to 44.3 percent in secondary education. In 2005 the official age at entry in the first grade was also reduced from 7 years to 6 years to promote an earlier entrance into the formal school system. In rural areas, however, only 54 percent were in the appropriate age bracket. In fact, a third of first graders were 9 years or older.
- *Internal Efficiency.* Progress has been steady since 2001, but slow. Repetition rates have remained high and virtually unchanged since 2001. However, the proportion of students that complete primary education in the allotted time for the cycle (6 years), increased from 36 percent in 2001 and 41 percent in 2006; most notably in rural areas, where the proportion rose from 23 percent in 2001 and 31 percent in 2006.⁴²

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41. Unfortunately, there is no time series data available at this point to assess the evolution of student performance. The national student assessment carried out in 2002 showed that most students in the 3rd and 6th grades achieved basic levels of proficiency in Spanish and Mathematics, with students in private schools generally exhibiting a margin of 10 to 12 percentage points above public school students. An analysis of teacher profile factors and their impact on student performance indicated that only about half of the teachers feel well prepared to teach concepts related to mathematics. Results from a national assessment in 2006 are forthcoming.

42. Improvements in the primary completion rate are hampered by school desertion, grade repetition and the fact that many students simply fail to register for the next school year. This last phenomenon is most prominent in the transition from first to second grade.

- *Drop out rates.* Drop out rate at the primary level remain very high, particularly in the early grades of the cycle, but have been declining. The average annual drop out rate in grade 1 for 2000 through 2005 was 17.5 percent compared to 20 percent 1990-2000. Since 2005 there has been a marked improvement in lowering the drop out rates in grade 2 and beyond. The immediate challenge remains in grade 1 which is an exit point for many students. Improvements in reducing drop outs at the secondary level have been negligible or non-existent.⁴³
- *Teacher quality.* At the primary education level, the percentage of unqualified teachers increased slightly, from 25.8 percent⁴⁴ in 2002 to 26.3 percent in 2004. At the secondary level, the increase was fairly substantial, from 37 percent to 51 percent. An in-depth study on the situation of teacher qualification level in the education system in Nicaragua found that the highest proportion of unqualified primary school teachers was registered in State/Municipal, non-autonomous schools (40 percent) while autonomous schools had the lowest proportion (19 percent). At the secondary level, the proportion of unqualified teachers is above 50 percent, irrespective of type of school establishment. The proportion of unqualified teachers remains dangerously high and warrants immediate action.
- *Student/Teacher ratio.* The number of students per teacher exhibits a declining trend for the education system overall, falling from 33.6 students per teacher in 2002 to 31.5 in 2004. However, this decline is due entirely to the fall in student teacher ratios at private institutions. In public institutions, the student-teacher ratio has increased, reaching 36.3 in primary and 39.7 in secondary (versus private school ratios of 24.7 and 23.1).

3.38 Measures to Raise the Impact of Education Spending. Nicaragua will need to continue its efforts to increase access and improve the quality of primary education, particularly in rural areas and among vulnerable population groups to ensure that it achieves the MDG of universal completion of primary education by 2015.⁴⁵ In addition, as the primary education system expands, it is important to increase investments in other levels of the system, most notably early childhood development, pre-school and secondary education. Since substantial additional fiscal resources are not available in the short to medium term (nor are the required expenditures to reach strategic milestones in those levels well defined), it is necessary to rely on efficiency gains in the sector to generate the fiscal savings needed to finance additional spending in early childhood and secondary education.

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43. Findings from recent household surveys point to monetary problems as the most important constraint related to high drop out rates for primary school aged children, especially students living in extremely poor households in rural areas. For the secondary school aged population, the main constraints are financial, work activities and lack of interest in schooling opportunities.

44. Radiografía del empirismo docente, JR Laguna, Diciembre, 2005 – Estadística Escolar 2000-2005, MECD.

45. Of particular importance in this context is the need to eliminate the bottlenecks that inhibit the supply of education services in the Atlantic Coast, where the disparity in indicators is most acute

3.39 *Tracking Sector Expenditures.* To ensure adequate resource flows to the sector, it is important to (i) monitor closely the implementation of poverty focused programs in the context of the Poverty Reduction Strategy, (ii) develop a medium-term cost and financing framework that incorporates the poverty-focused program along with targets for additional spending in early childhood development, preschool and secondary education, (iii) identify potential fiscal savings through intra-sector resource reallocations. One potentially large source of fiscal savings is the transfers provided to the universities. This subsidy is extremely generous, both relative to the transfers received by other students in the education system and to the transfers provided in the other countries in the region. Since most of the beneficiaries of these transfers do not belong to the poorest quintiles in the country (see Table 3.9), a strategy based on greater cost recovery efforts by the universities, coupled with scholarship programs targeted to poor students, could prove viable and would reap significant gains across the sector.

Table 3.9: Distribution of Government Education Subsidies by Household Expenditure Quintile (in %)

Education Level	year	Quintiles (Q1 = poorest)				
		Q1	Q2	Q3	Q4	Q5
Primary	1993	16	21	22	22	19
	1998	23	24	23	19	10
Secondary	1993	4	15	27	23	32
	1998	6	15	24	30	25
University	1993	0	0	5	24	71
	1998	1	2	14	21	62

Source: World Bank, Edstats, based on LSMS 1993 & 1998.

3.40 *Improving Sector Administration and Management.* For the process of decentralization to move forward more effectively, it will be important to evaluate the lessons learned from the accumulated experience with the Education Participation Law, including the autonomy program with a view to strengthening parts that may not be responding to the current context and changing conditions. It is particularly important to review the school financing formula and strengthen monitoring and evaluation mechanisms at the school level to generate timely information with respect to their finances and outcomes.

3.41 *Improving Access and Quality.* To improve access and retention it will be crucial to develop or reinstate a demand-side program aimed at reducing the direct and indirect costs of schooling for children and young people from extremely poor households for whom these schooling costs are a major barrier to enrollment or retention. Moreover, it will also be important to revisit successful and cost-effective early childhood programs that have been implemented as pilots over the years to target children from vulnerable families to improve their nutrition status, cognitive development and school readiness.

3.42 *Improving Personnel Management.* To improve the quality of education it is imperative to develop a human resource strategy with particular emphasis on raising the profile of the teaching profession and improving the quality of teacher education programs. In developing such a strategy, urgent attention needs to be devoted to the transformation of pre-service teacher education programs, the introduction of effective in-service programs to upgrade the existing stock of unqualified teachers within a short period of time, the design of an efficient teaching support system to promote better teacher performance, and a reformed teacher remuneration framework that links wages to performance; see Chapter IV.

Summary Review of Public Expenditures in Health

3.43 Recent Evolution of Health Sector Expenditures. National public health expenditures grew by 22.5 percent in constant terms, from US\$ 315 million in 2001 to US\$ 386 million in 2004; Table 3.10. This represents an increase of 12.5 percent in per capita terms over this period, from US\$63 per person in 2001 to US\$72 in 2004.⁴⁶ As a share of GDP, health spending increased from 6.8 percent of GDP in 2001 to 8 percent in 2004. Households accounted for around 41 percent of total health spending during this period, while the Ministry of Health accounted for 36 percent and INSS for 17 percent. While MOH's per capita spending (net of IHSS affiliates) was US\$ 28, INSS spent US\$ 176 per affiliate and US\$ 135 per beneficiary. INSS has much higher per capita expenditures (3.9 times to 5.8 times) than the MOH

Table 3.10: Nicaragua: Health Expenditures, by Source 2001-2004

Institution	2001	2002	2003	2004	2001	2002	2003	2004
	<i>In constant 2006 US\$ millions</i>				<i>As percent of Grand Total</i>			
Public Sector	169.8	180.2	212.3	213.7	53.9	52.4	56.6	55.3
Central Government	115.0	129.6	155.6	149.9	36.5	37.7	41.5	38.8
Ministry of Health	101.1	119.8	143.3	137.6	32.1	34.8	38.2	35.6
Other Ministries	13.9	9.8	12.3	12.3	4.4	2.9	3.3	3.2
INSS *	54.8	50.6	56.6	63.9	17.4	14.7	15.1	16.5
Private Sector	145.1	163.6	162.7	172.5	46.1	47.6	43.4	44.7
Households	132.6	156.2	144.3	158.9	42.1	45.4	38.5	41.1
Other (incl. insurance & NGOs)	12.5	7.4	18.4	13.6	4.0	2.2	4.9	3.6
GRAND TOTAL	314.9	343.8	375.0	386.3	100	100	100	100

Sources: MOH, DGP, NHA. *INSS expenditure in 2001 include US\$ 1.6 million spent by PEs.

3.44 Composition of Health Spending. Medical inputs and curative services comprise the lion's share of total health expenditures (a combined share of 84 percent in 2002 and 77 percent in 2003), while the combined shares of preventive services, training and research are significantly lower at 10 percent in 2002 and 14.6 percent in 2003; Table 3.11. Personnel costs comprise the majority of MOH recurrent costs, increasing their share from 57 percent in 2004 to 60 percent in 2006. In contrast, the share of Non- Personnel Services declined from 16 percent to 15 percent, with the share of drugs decreasing the most – from 19 percent in 2004 to 15 percent in 2006.

Table 3.11
Shares of Total Health Spending by Function (in %)

Health Function	Average 2002/2003
Curative Services	37.4
Preventive services	7.8
Medical inputs	43.3
Training and Research	4.5
Administration	5.1
Others	2.1
Total	100

Sources: MOH, NHA.

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46. Nicaragua keeps a good system of National Health Accounts (NHA) but the most recently published figures only extend until 2003. This section uses 2004 unpublished NHA data and other sources, updating some of the information up to 2006.

3.45 Evolution of Key Health Outcomes. Since 2001, Nicaragua has made gradual, but steady, progress in a number of key health indicators; Table 3.12. Infant and child mortality rates and chronic malnutrition have declined. Maternal mortality rates based on MOH data also decreased from 2001 to 2005, but these are mainly facility-based data and not from nationally representative surveys. The available data for percentage of attended births by skilled health personnel (a proxy to measure MMR) is from 2000 at 67 percent. As for other maternal health indicators, prenatal coverage increased slightly but more progress was made in terms of institutional births. However, family planning coverage declined significantly. Moreover although BCG coverage increased, the coverage rates for polio, DPT, and MMR vaccinations decreased.

Table 3.12: Health Outcomes and Outputs, 2001 and 2005

Key Performance Indicators	2001	2005
Infant mortality rate (per 1,000 live births)	35 ^a	30 ^b
Under five mortality (per 1,000 live births)	40 ^a	37 ^b
Chronic malnutrition (children < 5 years of age)	20.2 ^a	18.1 ^{c (2004)}
Maternal mortality rate (per 100,000)	107.2 ^d	86.5 ^d
Institutional births (%)	50.6	58
Prenatal care coverage (%)	70.2	71.6
Family planning coverage (%)	24.5	12.9
One year old children who received BCG vaccine	98	102
One year old children who received polio vaccine	92.6	86.7
One year old children who received DPT (Diphtheria, Pertussis, and Tetanus) vaccine	92	86.2
One year old children who received MMR (measles, mumps, rubella) vaccine	101.6	96.3

Sources: ^aENDESA 2001; ^bWDR 2006, ^cSEVIN 2004, ^dMOH statistics (INS 2004-2008 document). Note: the 2000 MOH MMR estimate of 87.6 deaths per 100,000 is much lower than the WHO Core indicator estimate of 230 per 100,000

3.46 The Relative Efficiency of Health Spending. The increase in health spending appears to have resulted in improvements in a number of indicators. However, some indicators such as coverage rates for family planning and immunization coverage rates declined, which may be reflecting the low spending on preventive care. Relative to other countries with similar PPP per capita health expenditures, Nicaragua appears to have a lower child stunting rate (20) than Bolivia (27), Ecuador (26), Honduras (25), and Peru (25), but higher than Venezuela (13). Also, Nicaragua has a higher under-5 mortality rate (38) than Ecuador (26) Peru (29), Honduras (32), and Venezuela (19).

3.47 Nicaragua could achieve efficiency gains in health spending through the following intra-sectoral resource reallocations:

- Increasing the focus on and budget allocated to cost effective preventive health care and health promotion (PHHP) measures especially for poor, disadvantaged segments of the population. The 2004 expenditure share of preventive services of about 7 percent is very low—especially when compared to the regional average of 30 percent. Investment in health promotion/IEC is also essential because 30 percent of the population (LSMS 2005) resort to self-medication, which can pose health risks if done inappropriately.
- Improving the mix and allocation of personnel. Nicaragua has more doctors but fewer nurses compared to its level of development (GDP per capita). Despite having a relatively high number of physicians, about 50 percent of the physicians live and work in Managua (Dussault and Franceschini, 2003). Nicaragua deploys social workers on long-term

assignments based on each region's risks and needs; this strategy could be extended to health care workers (WB 2007)

3.48 To generate the fiscal savings that would permit shifting more resources toward preventive health care and promotion, as well as toward needed human resources such as nurses and auxiliary/PHC workers, the Government could improve operational efficiency through the following measures:

- Revising sector wage policies. The recent legislation to equate sector salaries with those prevailing in the Region poses a major fiscal threat, considering that Nicaragua's per capita income is the lowest in the region. At least the legislation needs to be amended so that it refers to an equalization of wages in terms of per capita GDP, instead of in absolute levels.
- Targeting health subsidies. The intent to establish free health services for all is laudable, but not affordable from a fiscal viewpoint. To render it fiscally viable, it is necessary to target this subsidy to the poor and neediest segments of the population, with the idea of eventually establishing a fixed fee scheme with well specified exemptions.
- Reducing the over-consumption of health services. INSS seems to over-consume services, such as drugs with no epidemiological justification⁴⁷. This presents a need to regulate, audit, and implement quality controls in the prescription of pharmaceuticals in the *Empresas Medicas Previsionales* (EMPS). A strong primary health care and preventive policy is also needed because IHSS benefits currently exclude preventive exams. The Government could establish different capitation payments that account for cost and risk by age and gender, and that include cost- and overuse- containment strategies.
- Improving drug procurement. A study found that the average price of a list of 35 generic medicines in Nicaragua was 10 times higher than the price paid by an IDB project in Argentina (Meerhoff, 2004a). Also, while the public drug and medical supply agency (CIPS) provides subsidized/free drugs, only 45 percent of the population has access to these drugs, and the rest face very high prices for non-generic drugs. The Government could consider establishing a drug-purchasing and distributing agency or look into the Ecuador experience where the MOH negotiates the prices with its providers, while the local health centers decide the amount and kind of medicines they need, and buy directly from the provider of their choice, based on previously agreed prices between the providers and the MOH.

Summary Review of Public Expenditures on Social Protection

3.49 Unlike education or health, social protection is generally not defined as its own sector, but rather as a sub-sector or "strategy" within the various traditional sectors making up an economy. Since it cuts across sectors and is integrated into a wide variety of types of programs and projects, it is often difficult to identify how much of the budget is specific to social protection. Social protection programs and activities are typically undertaken by a myriad of actors, often within their regular operations, which are not included in the sector expenditure totals reported here. For instance, the Ministry of Education might have a program of

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47. Consumption of medication ranges from 9.8 drugs per year per beneficiary for 12 small EMPs (average size of 2,212 members), to 24.3 drugs per year per beneficiary for the two largest EMPs (average size of 34,154 members). Consumption by region also varies significantly.

scholarships for poor, high-achieving students, which could be considered a social protection program. Similarly, many municipalities run programs that are not covered in this analysis.

3.50 Evolution of Public Spending in Social Protection. Table 3.13 presents the budget executed by the core social protection programs since 1991. The main institutions in this sub-sector are the Ministry of the Family (MIFAM) and the Social Emergency Investment Fund (FISE), as well as the now-defunct Social Action Secretariat (SAS) and Social Emergency Fund (FES) managed under the Presidency during the 1990s. The National Social Security Institute (INSS), a co-financier of health and pension benefits for its affiliates, occupied a large share of the sub-sector budget in the early 1990s, but much of its current financing takes place outside of the central government budget.⁴⁸

Table 3.13: Main Social Protection Programs in the Budget (executed budget; % of GDP)

	1991	1995	2000	2001	2002	2003	2004	2005
Presidency (SAS and FES)	0.00%	0.60%	0.27%	n/a	0.04%	0.03%	0.03%	0.04%
Ministry of Labor (w/o INATEC)	0.15%	0.05%	0.09%	0.05%	0.05%	0.05%	0.04%	0.03%
Ministry of the Family	0.00%	0.00%	0.42%	0.22%	0.22%	0.49%	0.58%	0.30%
Social Emergency Invest. Fund (FISE)	0.00%	0.09%	0.13%	0.12%	0.46%	0.95%	1.18%	0.62%
National Social Security Institute (INSS)	0.38%	0.04%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%
TOTAL	0.54%	0.79%	0.91%	0.38%	0.77%	1.52%	1.84%	0.98%

3.51 The sub-sector's share of the budget is low, typically fluctuating around 1 percent of GDP. Expenditures on social protection programs exhibit a rather erratic pattern – with large fluctuations in the total amounts devoted to the various programs and institutions, and large fluctuations in the share of specific programs and institutions in the total. Even from one year to the next, changes can be dramatic – for instance, the sector experienced a reduction by almost 50 percent between 2004 and 2005. These fluctuations are partly linked to emergency relief operations, but, more generally, reflect a lack of planning and budgeting capacity for social protection programs. Similarly, the actual execution of programs can depart significantly from the planned budgets, especially in the case of FISE. Although the variability seems to have decreased over the years, differences still persist with, for instance, FISE executing 1.65 times its planned expenditure in 2004.

3.52 One of the challenges of social protection is that it typically requires counter-cyclical funding – larger resources are needed in times of lower economic growth and/or disasters. At the same time, however, social protection programs typically involve lower fixed costs (e.g. salaries) than other ministries (e.g. health or education) and hence face less resistance to budget cuts. This last aspect makes the sector a prime candidate for large cuts or shifts in times of fiscal consolidation. It is also a sector where governments typically attempt to develop flagship programs that are strongly identified with a particular administration and hence have lower chances of being continued after political transitions.

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⁴⁸ Since 1994, the Nicaraguan Social Security Institute (INSS) has had a surplus and has not been a burden on the budget. This might be related to the efforts in increasing the number of insured workers – from 200,000 in 1993 to 430,000 in 2006. However, the current system has a significant actuarial deficit (estimated at C\$ 271,573 millions). As a result, the Government is studying alternative options for reform. The initial reform proposal presented by the High Commission for the Reform of the Pension system (which adjusted the contribution rate, the age of pension, and the indexation of benefits) still involves a deficit starting in 2040 and reaching up to 6 percent of GDP by 2065. The Inter-institutional Technical Commission is currently studying alternative scenarios

3.53 The notably erratic execution of many programs in the social protection area is partly linked to a high dependency on external sources of funding for these programs. For instance, in the case of the Ministry of the Family, the share of external financing in total capital expenditures averaged 88 percent in 2003-2004. Even though this share was programmed to fall to 75 percent in 2007, it still signals a high dependency on external funding that renders sub-sector spending vulnerable to program disruptions and to high staff turnover, both of which limit their effectiveness and sustainability.

3.54 Evolution of Key Sector Outcome Indicators. Progress in poverty reduction has been disappointing. In spite of steady, though modest, declines in poverty rates during the 1990s, poverty remains high and social indicators weak in Nicaragua (headcount of 46.2 percent for the poor and 14.9 percent for the extremely poor in 2005). Nicaragua has experienced a reduction in inequality (Gini from 50.4 in 1993 to 41.0 in 2005) over the past decade, associated with a reduction in the depth of poverty. However, the number of poor has not declined. Poverty and vulnerability also are reflected in poor nutrition outcomes, where the pace of improvement slowed down and 21.5 percent of children under 5 are chronically malnourished in 2005.

3.55 Poverty is particularly acute in rural areas and the Atlantic coast region. In addition, the poor in Nicaragua exhibit a relatively high vulnerability linked to the frequency of covariate shocks, including natural disasters, commodity price shocks and household-level shocks, in particular health and labor-related shocks.

3.56 Assessment of Efficiency The disappointing human development results described earlier occurred in spite of a growing GDP per capita and substantial public spending on poverty reduction programs broadly defined. This suggests that much of this spending has been inefficient. One of the most critical issues noted in the area of social protection is the low level of allocational efficiency, partly linked to the fragmentation of programs across and within sectors, the duplication of efforts, and the overlap of programs. MINSA and the Ministry of the Family, for example, both manage early childhood development and nutrition programs that are similar in nature and use the same protocols, but are not coordinated. Overlaps and lack of coordination are also common within institutions and agencies. For instance, the operations of the *Red de Protección Social* and of PAININ, both in the Ministry of the Family, were not coordinated and led to duplication in specific areas of implementation.

3.57 Another critical issue is the poor quality of services and outcomes. Most programs are of a “pilot” nature, covering very small groups in the country. This raises two issues in terms of effectiveness of public expenditure – the targeting of these programs could often be improved with larger-scale interventions, and the resulting services provided to different communities vary largely across the country, limiting the horizontal equity of the programs. Even though individual social protection programs are generally well targeted, their fragmentation resulted in overall low coverage. The social protection services also suffer limitations in terms of quality, partly due to erratic financing and uncertainty surrounding their continuity (which prevents the establishment of strong, effective structures with a skilled and stable workforce). In addition, the efficiency of social protection programs depends by nature on complementary investments in health, education, and other sectors, such as rural development, water, or credit.

3.58 The other critical issue for social protection programs in Nicaragua is their limited operational efficiency. This is attributable to fluctuations in financing, variability in the cost/benefits of different programs and large overhead costs of central activities, partly as a result

of program fragmentation (Some efforts have been made to reduce these costs, particularly in the Ministry of the Family, which has reorganized to centralize some of the financial management and procurement activities for all its programs (GON, 2006)), introduce sector-wide monitoring and evaluation mechanisms, and address human resource bottlenecks.

3.59 Greater planning and coordination of social protection programs, and of social programs in general, are key ingredients for raising their impacts. Key actions that could help to improve program coordination and effectiveness are presented below:

- Program Consolidation. Program consolidation could start with a few programs, and gradually integrate projects and programs in a coherent way, avoiding overlaps between agencies and filling gaps, while eliminating interventions with little demonstrated impact. The social cabinet can play a key role in this effort.
- Strengthened analytical foundations. Develop a sector map that includes an inventory of existing programs and services provided in the country (public, private, civil society) and identifies gaps in the supply of services. An analysis of targeting mechanisms, and of the strengths and weaknesses of selected programs, would also be useful.
- Strategic Planning and Monitoring. Strengthened strategic planning mechanisms and M&E systems are needed to improve coordination and program designs, and would contribute toward the development of a sector-wide approach. Unified and integrated mechanisms would provide a better basis for programmatic support by international partners, which, in turn, could help to reduce fragmentation and duplication of programs.
- Regional Coordination. Stronger mechanisms are needed to centrally coordinate the allocation of programs across geographic zones. This would result in improved targeting of resources, and greater synergies between programs.
- Local Coordination. There exist opportunities to consolidate earlier efforts to foster local coordination of projects. This could include developing mechanisms to harmonize eligibility criteria for households/individuals, mechanisms to propose a unique window for social services, and mechanisms to provide accompaniment to families and individuals in accessing services.

E. Summary and Conclusions

3.60 The previous chapter had concluded that the overall size of public spending in Nicaragua does not stand out as particularly large or small in regional and worldwide comparisons with countries at similar levels of development. This chapter found that Nicaragua's total public spending in key areas that are closely linked to growth and social development – namely public infrastructure investment, education and health – also does not appear to be significantly out of line from the averages spent by other countries across the region. Nevertheless, Nicaragua's performance falls short in terms of certain important outcomes, such as per capita GDP growth, the quality of public infrastructure, and various education and health indicators. This suggests that while the total volume of public spending in Nicaragua may be adequate, the intra-sector composition and quality of public spending exhibit deficiencies that manifest themselves in a low efficiency of public spending.

3.61 The preceding review identified various opportunities for improving the quality and efficiency of public expenditures in key sectors. These opportunities, which are summarized

below, mainly involve intra-sector resource shifts, rather than the development of new programs that require new sources of financing.

- In Transport, important efficiency gains could be had by (i) shifting a higher share of sector resources toward road maintenance, preferably through FOMAV, using least-cost public bid contractual approaches, (ii) scaling up existing *adoquinado* programs in the expansion of secondary roads, as a more cost-effective alternative to asphalt or gravel roads, (iii) adapting road designs to less costly standards appropriate to local conditions, and (iv) strengthening the institutional capacities of MTI in the areas of planning and programming, and of FOMAV in the areas of contracting and procurement procedures.
- In Water & Sanitation, important efficiency gains could be had by simultaneously allowing tariffs to adjust to cost recovery levels and improving the operating efficiency of the water utility, while protecting the poor from prices shocks in sector services. This may be achieved by (i) introducing a loss-reduction program in ENACAL, including through a greater de-concentration of operations, (ii) granting greater autonomy to INAA in setting tariffs based on long-run marginal costs, and (iii) revising the existing system of subsidies to target them to the poor. Also, the introduction of a hygiene education program in rural areas could significantly raise the impact of sector infrastructure in reducing water-related diseases.
- In Energy, it is necessary to step up the level of total sector investment. This is best done, however, by creating a more stable policy environment for private investors, especially by (i) defusing the current confrontation with the private distribution company and seeking a common ground for improving service, and (ii) simplifying the electricity pricing structure (while re-considering the existing electricity consumptions subsidy with a view to targeting it more effectively to the poor). Since energy projects have long gestation periods, it will also be important to update existing studies for hydro-electric and geothermal projects (which are more efficient than the thermal plants that currently dominate electricity generation in Nicaragua) to feed into a long-term sector expansion plan, giving priority to the development of new projects within a regional context.
- In Education, sector outcomes could be significantly improved by (i) shifting a higher proportion of sector resources toward early childhood development, pre-primary education and secondary education, (ii) introducing greater cost recovery at the university level, coupled with an expanded scholarship program exclusively targeted to poor students, (iii) improving the school autonomy program by revising its financing formula and strengthening monitoring and evaluation mechanisms, (iv) developing demand-side programs to reduce the direct and indirect costs that have proven to be barriers of access to schooling for poor families, and (v) improving the quality of education through better human resource management.
- In Health, major efficiency gains could be had by (i) increasing the proportion of the sector budget devoted to preventive health care and health promotion, from the current share of 7 percent to the regional average of 30 percent (with INSS adopting a strong preventive health policy, since its current benefits do not include preventive exams), and (ii) improving the skills mix and allocation of personnel, toward a higher proportion of nurses and greater concentration in rural areas, away from Managua. Significant fiscal savings to finance greater spending on preventive health care and health promotion activities could be had by (i) revising the overly generous sector wage policy, (ii) reducing the over-consumption of health services, particularly in INSS, through the implementation of regulation, audit and quality

controls in the prescription of pharmaceuticals and other health services, as well as by adopting different capitation payments for INSS that account for gender and age-related costs and risks, (iii) implementing a system of targeted health subsidies, as an alternative to offering free health services for all, and (iv) introducing more efficient drug procurement procedures.

CHAPTER IV

PUBLIC SECTOR EMPLOYMENT AND REMUNERATION POLICY

4.1 The public sector budget payroll has been increasing as a share of GDP since the mid-1990s, posing a potential threat to macroeconomic stability. That threat became more acute in mid-2006, amidst growing pressures from public sector unions. Meanwhile, the absence of adequate framework legislation on public sector remuneration has undermined the authorities' capacity to ensure that the process of public wage determination takes place in an orderly, transparent and efficient manner. Nicaragua's legislation on public sector employment is fairly recent and only partially implemented. As a result, staffing and remuneration decisions leave ample room for discretion, the public wage structure exhibits a large, unsystematic dispersion that is not reflective of labor market conditions, and employment instability is more the rule than the exception, all of which lead to disruption and inefficiency in government services. In key areas, these weaknesses are compensated by the extensive use of long-term consultants occupying civil service positions. Often these consultants are paid directly by foreign donors, and their compensation can be quite high compared to domestically-financed employees, further eroding staff morale and conspiring against institution-building efforts.

4.2 A lack of systematic data collection on public employment and remuneration has contributed to discretionary decision-making, raising an additional obstacle to rational policy formulation. The three principal official sources of data – the Directorate of Public Employment (DGFP), the Directorate of the Budget (DGP) and the National Social Security Institute (INSS) – have differing coverage and different data for the same public institutions for any given year.⁴⁹ The budget payroll includes only about 40 percent of public sector employees. Further, remuneration is hidden in numerous budget categories so that, depending on the definition used, the level can be up to 40 percent higher than the budget line corresponding to salaries alone.

4.3 This chapter seeks to develop a better understanding of the overall size and composition of public employment, and on the structure of remuneration, pointing out important shortcomings and their implications for the fiscal budget and public sector management. It discusses recent reforms to restructure and professionalize the civil service in Nicaragua and concludes by outlining the elements of an efficient, transparent and equitable remuneration policy framework that could help to ensure a more orderly public wage determination process and reduce the threat of fiscal indiscipline.

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49. The data used in this report corresponds to the years up to 2006 and does not include the recent changes to government structure introduced by the Government of President Ortega in early 2007. The data are mostly taken from the data base of the National Directorate of Public Function and the computerized SIGFA system and cited in Nogales (2006). The data differs from that cited IMF, 2006, which was taken from INSS records.

A. The Legal Framework

4.4 The legal framework governing public employment and remuneration in Nicaragua is given by the following pieces of legislation:

- Labor Code (Codigo del Trabajo) – Law No. 185 of October 30, 1996.
- Civil Service Law (Ley del Servicio Civil y Carrera Administrativa) Law No. 476 of December 11, 2003
- Civil Service Regulations (Reglamento de la Ley del Servicio Civil) - Decree No. 87-2004 of August 6, 2004
- Law of Acquired Rights (Ley de Derechos Laborales Adquiridos) – Law No. 516 of January 17, 2005.
- Law on Hiring Professional and Technical Services (Ley que Regula la Contratacion de Servicios Profesionales y tecnicos Nicaraguenses) – Law No. 505 of January 26, 2005.
- Law on Leveling Salaries of Doctors (Ley de Equiparacion de Salarios a Nivel Centroamericano de los Medicos y Odontologos que laboran para el sector Publico de Nicaragua) - Law No. 608 of February 7, 2007

4.5 The Labor Code is the principal legislation governing labor relations in Nicaragua and is applicable to public sector employees. Some of the precepts of this Code would be highly desirable if indeed they were followed, such as those that guarantee employment stability subject to performance and equal promotion opportunities, as well as those mandating equal salary for equal work, without discrimination on grounds of political or religious affiliation, gender, race or other human characteristics (see section C). Some of its other precepts, however, threaten to raise fiscal costs, most notably those related to social benefits.

4.6 The Civil Service Law is the principal piece of legislation governing the relations of the State as an employer and public employees. It is the newest legislation of its kind in the region⁵⁰ and, although its regulations were approved only a year after the Law was passed, its implementation only started in 2006 and is incipient (section B). The potential fiscal cost of full implementation of the Law has been raised as a reason for its slow implementation. However, legally there is no direct fiscal cost of implementing the Law.

4.7 The Law of Acquired Rights has potentially important fiscal consequences. Although the law did not initially aim to cover consultants, it has been interpreted to apply to consultant contracts as well in terms of extending the social benefits afforded by the Labor Code and other legislation to short-term consultants. Legal recourse to this law has been taken by several consultants whose contracts expired, and all rulings have been in favor of the consultants. This is so even though Article 6 of Law 505 – which was published afterwards – explicitly indicates that consultant contracts do not generate a legal labor relationship. To achieve clarity in this matter, it would be useful to have an estimate of the potential fiscal cost of this Law and a legal opinion from the Attorney General about the Law’s applicability to consultant contracts financed with domestic or foreign resources.

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50. The oldest is El Salvador’s, which dates back to 1961 and the second most recent is Panama’s, which dates back to 1994 (see Iacoviello, 2006).

4.8 Law 505 is applicable to consultant contracts financed with foreign aid. It establishes that Nicaraguan nationals are to be given preference over foreigners at the same level of qualification. This law is little known and scarcely implemented.

4.9 The Law mandating a leveling of the salaries of public sector doctors to the Central American average emerged from a six-month doctors' strike in early 2006. It establishes that all public sector doctors and dentists must have their salaries raised to the Central American average level over five years. The fiscal cost of implementing this law has been estimated at C\$550 million (about US\$ 30 million) per year. Furthermore, its implementation would send a very negative message to the rest of the public sector, which could also demand a similar treatment.

4.10 Finally, early in its government mandate, the Administration of Daniel Ortega has passed a new law to cap the salaries of the highest-ranking government officials. This law is based on a similar law that was passed in 2005, but later declared unconstitutional by the Supreme Court on the grounds that the law only applied to a subset of Nicaraguan citizens rather than to everybody in Nicaragua.⁵¹ Given that the appeal to the Supreme Court was brought by employees of autonomous agencies, the new law limits its coverage to the central government and decentralized agencies. The law limits the salary of the President of the Republic to US\$ 3,200 per month and establishes that no public sector employee covered by the Law can earn more than this limit. Its implementation would represent savings of around C\$ 11 million (about US\$ 600,000) per year to the Nicaraguan treasury. While in principle the measure is desirable from the viewpoint of reducing the dispersion of wages (see section C), it would have been advisable to include it as part of more general legislation on public sector wage policies; which is currently lacking.

B. Public Sector Employment

Size, Growth and Composition of Public Sector Employment

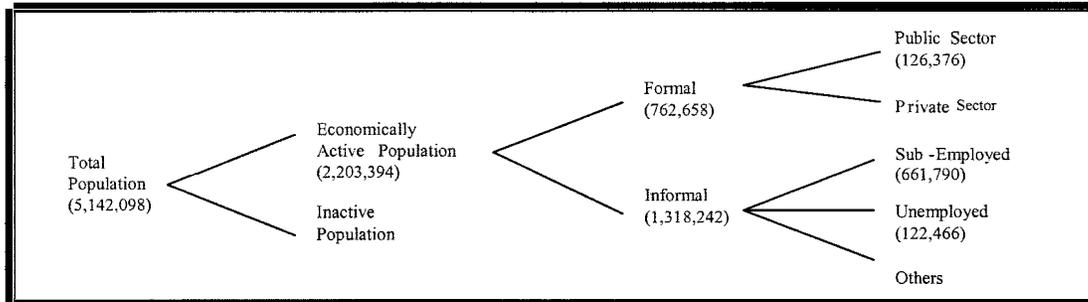
4.11 The public sector in Nicaragua is not a particularly large employer. In 2005, the Nicaraguan public sector employed around 126,000 people, which represented less than 2.5 of the total population, 5.7 percent of the economically active population and 16.6 percent of total formal sector employment; Figure 4.1. Central government employment, in turn, represents 1.9 percent of the total population in Nicaragua, which is below the LAC average of 2.5 percent.

4.12 The current number of public sector employees is about the same as it was in 1991, following the huge contraction of the public sector that took place at that time; Figure 4.2. Since the early 2000's, however, the number of public sector employees has grown steadily by 2.4 percent per year, which is faster than the general population growth of 1.7 percent.

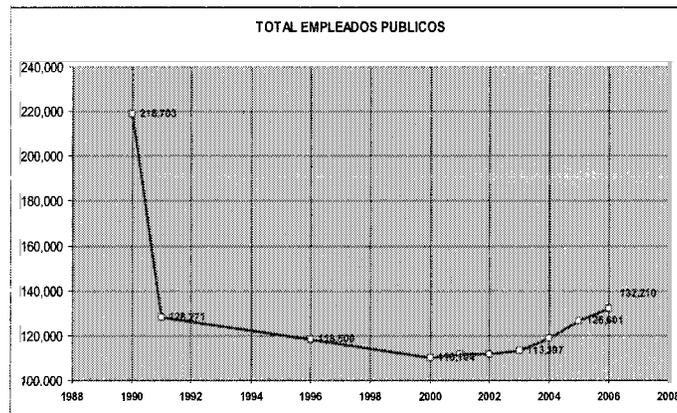
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51. The approval of this Law (No. 505) was part of the political breakdown between the Executive and the Legislative in 2005. The National Assembly passed it, but the presidency refused to send it for publication, so its publication was ordered by the President of the National Assembly, a legal but highly unusual procedure. Its declaration of unconstitutionality had probably more to do with the political pact that broke the deadlock than the actual motivation stated in the Supreme Court sentence.

Figure 4.1
Nicaragua's Economically Active and Inactive Population



Source: INEC, 2005



Source: Nogales, 2006.

4.13 Public employment growth has been largest in the decentralized institutions (4.6 percent) and local governments (10.5 percent).⁵² This means that monitoring the decentralized institutions, especially universities, and local governments is becoming increasingly important for understanding the fiscal pressures associated with public employment growth. It also focuses attention on the need to develop a centralized data base on the number of employees and their remuneration. The rapid growth in employment at the local government level, moreover, draws attention to the process of decentralization, and especially on the need to devolve expenditure responsibilities – including employment – from the center to local government, to avoid overlaps and an excessive fiscal burden.

4.14 Of the total number of public sector employees in 2006, about 77 percent work in the central government.⁵³ Of that amount, 95 percent work in five sectors: education (which accounts for 44.4 percent), health (24 percent), defense (12.2 percent), police (11.3 percent) and

52. It has also been relatively large at public financial institutions, but this is mostly due to hiring of survey personnel at the Central Bank and these institutions have a relatively low weight in the total, so this is less of a concern.

53. These include the legislative, judicial and electoral powers, the Comptrollers Office, the Attorney General's Office and 12 ministries.

justice (3.3 percent); Statistical Annex Table B.1. These five institutions also comprise 87.5 percent of the central government wage bill. This means that (i) by and large, the Nicaraguan government deploys its human and financial resources in core government services, rather than in activities that compete with the private sector, and that (ii) any concerns about fiscal pressure arising from the growth in the public sector wage bill will need to pay special attention to the education and health sectors, which together account for more than two-thirds of central government employment.

Table 4.1

NICARAGUA: PUBLIC SECTOR EMPLOYEES								
	2000	2001	2002	2003	2004	2005	2006	2000-2006
TOTAL PUBLIC SECTOR	110,104	111,649	108,904	110,285	117,013	119,356	126,376	2.3%
CENTRAL GOVERNMENT	91,158	91,749	88,114	88,177	93,584	93,622	96,854	1.0%
STATE POWERS			3,584	3,976	4,060	4,473	4,683	6.9%
MINISTRIES			84,530	83,815	89,153	88,838	91,821	2.1%
DECENTRALIZED INSTITUTIONS	9,409	9,853	10,148	10,619	11,116	12,103	12,294	4.6%
o/w UNIVERSITIES					3,993	4,053	4,551	6.8%
PUBLIC FINANCIAL INSTITUTIONS	859	979	986	1,021	970	988	1,468	9.3%
MUNICIPAL AND LOCAL GOVERNMENTS	8,678	9,068	9,656	10,468	11,343	12,643	15,760	10.5%

Gender Equity

4.15 There are no official records of gender decomposition of public sector employment and the only survey information is fairly outdated. A study commissioned by the Vice-Presidency and the MHCP in 2003 covering 12 public sector institutions and covering 24,260 positions, found that two-thirds of employees were women.⁵⁴ This proportion varied according to the level of the positions. Women accounted for 49 percent at the highest level (“*servicio directivo*”), 74 percent at the middle level (“*servicio ejecutivo*”), and 64 percent at the lowest level (“*servicio operativo*”). Based on the 2001 household survey, the Economic Commission for Latin America (ECLAC) calculates that 9.8 percent of all male wage-earners in urban areas work in the public sector, which is lower than the overall share of urban wage-earners working in the public sector (11.9 percent). Conversely, the equivalent percentage for females is 14.7 percent. This would point towards a bias in favor of females in public sector employment.

Human Resources Management Policies

4.16 Policy attention to human resources management is weak and needs to be strengthened. The most important piece of legislation on the subject – the Civil Service Law – is very new and its implementation has been slow. Although the Law is applicable to the entire public sector (with few exceptions), and covers the large majority of public sector employees,⁵⁵ its main operational implication so far has been the incorporation of employees into the administrative career. The Law is potentially applicable to 45 public sector institutions, but those that have their

54. Lopez Hislop, Javier, 2003.

55. Exempt from the Law are employees of public enterprises, public universities, armed forces personnel and high authorities, which include: officials elected directly or indirectly, and officials legally named either by Congress’ ruling directive, by the President, by the Supreme Court or by the Supreme Electoral Council.

own career streams approved by law (interior, defense, foreign service and education) are exempt from the Law's provisions regarding the administrative career. Potentially around 59,000 public sector employees,⁵⁶ or about 47 percent of the total 126,000 public sector employees are subject to incorporation into the administrative career. The process of incorporation requires the description of job positions in each public institution, including a categorization into one of three groups (operational, executive, director), and the definition of requisites to occupy each post. Once this process is completed, each public employee occupying a position is checked against the requisites and, if he/she fulfills them, is "accredited" to occupy the position.⁵⁷ Newly hired employees must fulfill the requisites for each post. As of end 2006, only 4,307 employees had been incorporated to the administrative career. The incorporation process has been limited mostly to non-professional positions. This further weakens the possibility of attaining the objectives of the Civil Service Law, which is to guarantee a core cadre of public servants with adequate professional qualifications that is competitively paid and remains stable across political transitions.

4.17 One reason for the slow implementation of the Law has been the concerns about its fiscal cost. However, the implementation of the Civil Service Law *per se* has no perceptible fiscal cost. A common misperception is to confuse the implementation of the Civil Service Law with the application of the Reference Salary Table (RST, see section C), which is not even mentioned in the Law or its regulations. Because public sector employees are subject to the provisions of the Labor Code and because the Code establishes that workers' salaries cannot be reduced, the implementation of the reference table only permits upwards adjustments. However, the fiscal cost of applying the RST as it currently stands has not been calculated, so the magnitude of the potential fiscal impact is unknown. The second source of concern is that many professional positions are occupied by consultants (see section E), whose remunerations are above the Reference Salary Table. The fiscal cost of incorporating these consultants into the administrative career path and adjusting their salaries to the RST (as suggested by article 119 of Law 476), has not been calculated either.

4.18 In spite of these concerns, there is much room for implementing the basic principles of the Civil Service Law more aggressively, but some amendments are also needed. To begin, the Law contains many desirable provisions that are not related to salaries and hence have no fiscal implications. This could be achieved by differentiating the duties and obligations of belonging to an administrative career and those of being a civil servant. Currently the only distinction in the law between the two is that civil servants include temporary workers (less than 12 months), project personnel and "trusted" collaborators of the current government. The Law makes no distinction between the guarantee to job stability afforded to civil servants and to administrative career personnel.⁵⁸ This is a major drawback of the Law, which needs to be modified in order to

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56. This is taken from Statistical Annex Table B.1, by subtracting from the total number of public sector employees, those that work in the four sectors that have their own administrative careers, except administrative employment in those sectors, and university employees. The actual number would be lower, since elected officials should also be subtracted, but this information is not available..

57. There are 3 ways to be "accredited": i) direct, when the person fulfills all requirements for the position, ii) by equivalency, when the person can compensate an inferior academic level with more years of job experience, and iii) by labor experience, applicable only to operational and executive posts, and when the person compensates lack of academic background with at least 10 years' experience in similar posts.

58. According to article 37 of the Law, the only difference in rights of civil servants and of administrative career personnel is that the later are entitled to training opportunities and can participate in promotion processes.

provide appropriate motivations to public servants. Only those employees that have been accredited or recruited into a position according to Law 476 and its regulations, and hence fulfill the position's requirements, should have guaranteed job stability and training opportunities. This could go a long way towards avoiding discretionary and politically-motivated human resource decisions, with no fiscal implication whatsoever.

4.19 There is also a large loophole in the law, as Article 77 exempts those sectors that have their own career laws from the administrative career path. Since the procedures for competitive hiring following a definition of duties and requirements for each post are applicable only to the administrative career, the most important results aimed for by the law –namely the professionalization of public employment and the shielding of civil servants from the political process – are lost. In fact, an easy way to escape the discipline intended by the law is to have a sector-specific career, as the health sector and the association of municipalities are trying to do. While it seems reasonable for each sector to have a different employment structure and corresponding salary scale adapted to sector-specific tasks, the provisions of the Civil Service Law regarding the principles for hiring and promoting personnel should be applicable to all public sector employees.

C. Public Sector Remuneration

Size and evolution of public sector wage bill

4.20 According to the IMF Government Finance Statistics, total employment compensation during 2002-04 averaged around 30 percent of total public expenditures in Nicaragua, which is about the same as the LAC average of 29.6 percent. This overall wage bill represents 6.1 percent of GDP in Nicaragua, versus an average of 6.6 percent in the rest of LAC.⁵⁹ However, the accuracy and comparability of these figures are questionable. One reason is that the coverage of the budget payroll is incomplete: of the 126,000 persons working in the public sector in 2005, only 51,500 (or about 40 percent) are included in the budget payroll. The budget payroll excludes non-central government institutions (see paragraph 4.14), and also excludes about 9,091 members of the armed forces, about 32,970 teachers working in autonomous schools, 8,000 policemen and the diplomatic corps. Employment compensation in decentralized institutions, local governments and public financial institutions is captured within the budget line corresponding to “transfers.” IMF Staff have calculated that Nicaragua's overall public sector wage bill could be as high as 7 percent of GDP when all these items are taken into consideration.⁶⁰

4.21 The growth of the wage and non-wage bill is an issue of concern for several reasons. As shown in Table 4.2, the wage bill has been increasing as a share of GDP in recent years. This upward trend has been compounded by recent union activity pressuring for wage increases, especially in the two largest sectors – education and health. A strike by the health workers crippled the health system at the beginning of 2006, resulting in an unbudgeted increase in medical staff salaries. Later in the year, the National Assembly passed an Education Law that –

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59. The LAC average is based on a sample of 17 countries, using figures from the IMF, Government Finance Statistics on “compensation of employees as % of expense” as reported in the World Bank, WDI database, 2006.

60. IMF (2006), “Staff Report for the Eleventh Review Under the PRGF Program”.

until it was amended – had threatened to raise total spending teacher salaries in an unsustainable manner. Early in 2007 a law on salaries of public sector health professionals was approved, mandating that salaries of these staff be equated to the Central American average within five years. The fiscal cost of this law has been estimated by the Ministry of Finance and Public Credit (MHCP) to be around US\$ 30 million (CS 550 million). Further, this law sets a precedent for similar demands from other sectors and poses a clear threat to fiscal stability. The largest source of employment growth has been the decentralized institutions and local governments, which are applying further pressure on the budget and may be more difficult to bring under control.

Table 4.2: The Central Government Wage Bill

	2002	2003	2004	2005	2006
WAGE BILL (C\$ millions, current)	2,510	2,697	3,177	3,907	4,583
GDP (C\$ millions, current)	57,376	61,959	71,661	82,162	94,318
Wage as % of GDP	4.4%	4.4%	4.4%	4.8%	4.9%
Total EXPENDITURES	12,967	14,003	16,195	18,979	23,108
Wage as % of total expenditures	19.4%	19.3%	19.6%	20.6%	19.8%

Source: Wage bill (Statistical Annex Tables based on data from DGFP); GDP and Expenditures (IMF, 2006 Article IV Consultation report, based on data from MHCP and BCN)

Table 4.3 Salary Distribution in the Public Sector

No. of workers	Wage Bill (C\$ per month)	Average Wage (C\$ per month)	% of workers	% of wage bill
98,548	305,775,820	3,103	99.35%	88.19%
695	40,942,133	58,910	0.065%	11.81%
Total	346,697,953		100%	100%

Source: Table 4.3 cited in Reine (2006).

4.22 There is a large disparity in the distribution of the overall salary bill across employment categories. In 2003, a minuscule proportion of central government employees (0.065 percent) captured 11.81 percent of the total wage bill; Table 4.3.

4.23 Another source of concern is the extensive reliance on non-wage compensation, which generates serious inequities and additional fiscal pressures. For example, the wage and non-wage bills in the 2006 central government budget add up to a total of C\$ 6,052 million,⁶¹ or 6.4 percent of GDP. In some cases, such as the health sector, the total remuneration bill can be up to 260 percent higher than the salary bill. These non-salary benefits are mostly the result of political bargaining by labor unions, resulting in collective agreements that provide various types of compensation, like bonuses, meals, eye glasses, more overtime, and larger trip allowances. While these non-wage benefits may reduce the dispersion of total compensation within a public institution, they increase inequities between institutions and create perverse incentives both to individuals and to transparent human resources management.

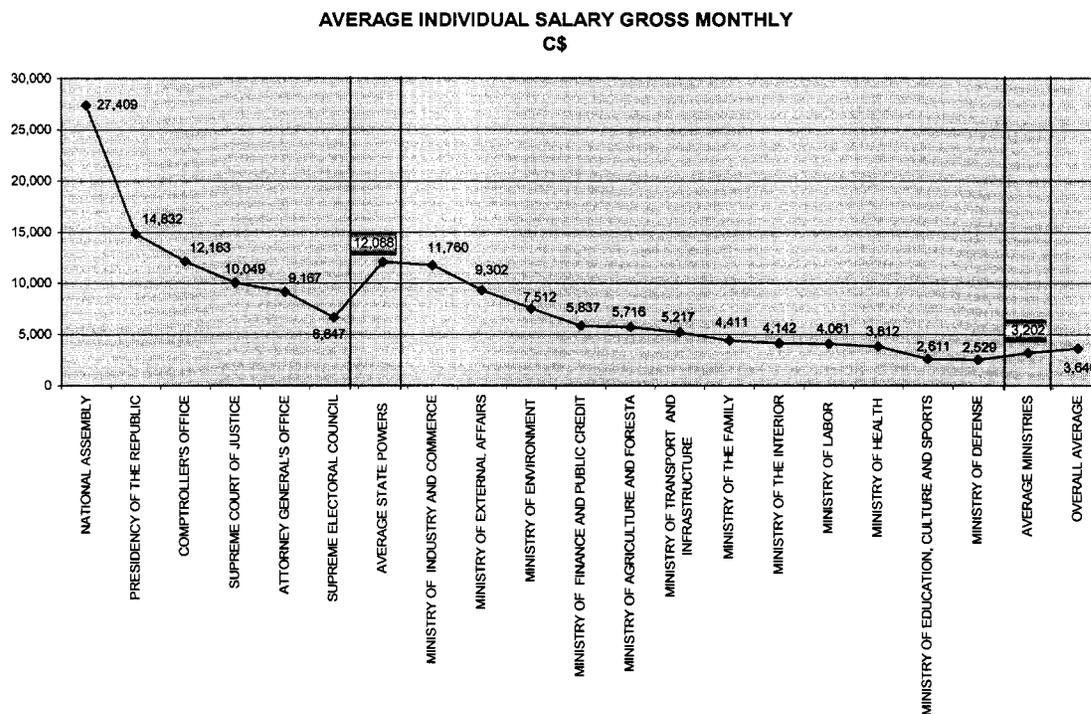
4.24 The preceding findings allow us to conclude that, i) the rapid growth of overall labor compensation is a source of fiscal concern, ii) there is a need to have a centralized data base of public sector remuneration, including all forms of compensation, in order to make informed

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61. See Nogales (2006), p. 53.

policy decisions,⁶² iii) there is a need to simplify the remuneration concepts to make policy decisions that are equitable for all public sector employees, and iv) the principles of equity and professionalization included in Law No. 476 point towards individualized salary increases based on merit and the avoidance of across-the-board salary increases through collective union agreements.

Figure 4.3



Source: Nogales (2006)

Public sector salaries

Salary dispersion between public sector institutions

4.25 Public sector salaries exhibit large disparities across public institutions; Figure 4.3. For example, in June 2006, the average salary in the four State Powers, plus the Comptroller's and Attorney General's Office, is C\$ 12,088 per month, or almost four times larger than the average salary in the 12 line ministries, which is C\$ 3,202 per month. Also, the average salary paid in the National Assembly is 857 percent of the average salary over all ministries, in the Comptroller's Office it is 379 percent, and in the Supreme Court it is 313 percent. If we take the highest paid public institution (the National Assembly) in relation to the lowest (Ministry of Defense), the relation of average salaries was more than 10 to 1. A similar ratio is found with

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62. The SISEC (Sistema de Información del Servicio Civil), created by article 32 could be a starting point, but it would need to be complemented with data of public servants not covered by the Civil Service Law.

respect to the average salary in the Ministry of Education.⁶³ Of course, these simple ratios can be misleading, since the proportion of skilled to unskilled public officials differs from one institution to another, but they are still indicative of wide disparities. The differences between ministries can also be quite large. For instance, in 2006, the average salary at the Ministry of Industry and Commerce was 4.5 times larger than the average salary of the Ministry of Defense or of the Ministry of Education. As Nogales (2006) states, the incentive is not to be trained, gain experience and be promoted, but rather to have the political connections necessary to be employed at a high-paying public institution.

Salary dispersion within public sector institutions

4.26 Salary dispersion within institutions can also be quite large. While the lack of a centralized data base prevents the analysis of all institutions from this dimension, we have information on two ministries – Finance and Education – shown in Figures 8.4 and 8.5 respectively. Figure 4.4 exposes several distortions in the MHCP. First, the relative difference between the lowest and the highest salary within categories varies widely from one category to the next. For instance, in category 13, the maximum salary is 7.5 larger than the lowest, while in category 16 the difference is only 1.6 times. Second, the average salary barely changes in the first nine categories, while it follows an exponential trend in the last eight categories. Third, the average salary in a lower category can be higher than the average salary in a higher category, e.g. the average salary in category 13 is higher than in categories 14 and 15 and equal to the average salary in category 16. In general, there is no reasonable pattern either in the minimum-maximum ranges within categories, nor in the minimum, maximum and average salaries between categories.

4.27 In the Education Ministry the distortions are similar: little variation in average salaries up to category ten and exponential growth thereafter, wide differences between minimum and maximum salaries across categories, and average salaries higher for lower categories. These distortions are of great concern in this ministry, given that it employs over 44 percent of all central government employees.

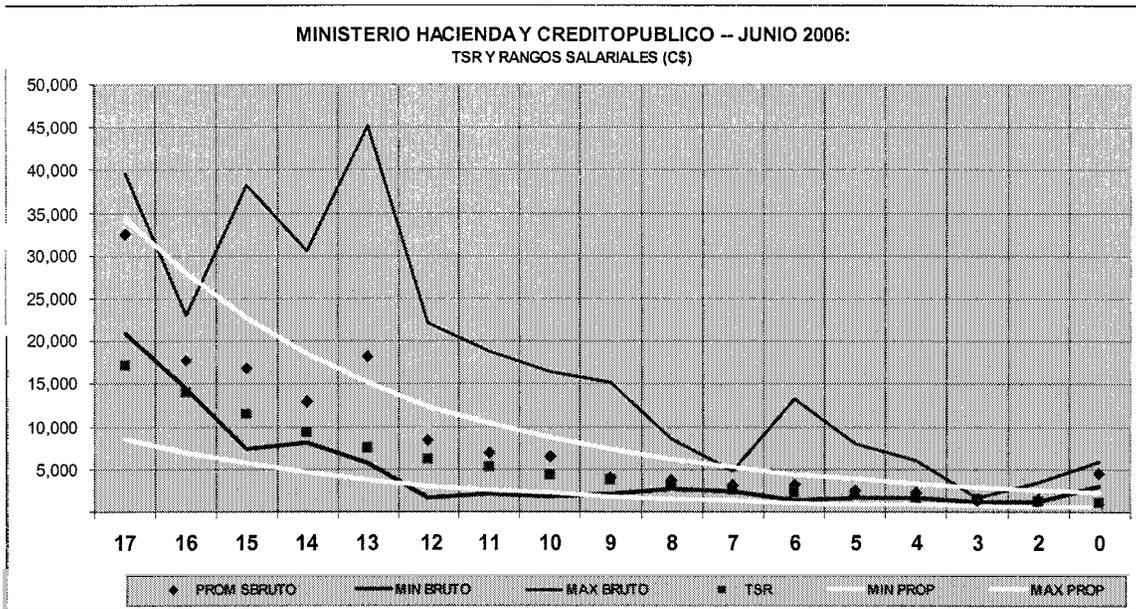
4.28 A final issue to be considered in assessing individual salaries is the number of hours worked. Until recently, the normal work schedule in the public sector was from 7 am to 2 pm. In some cases, such as the education sector, employees may work only four hours a day.⁶⁴ Hence, the above levels of remuneration may be considerably larger if assessed on a per-hour basis. For this reason, it is recommended that the data base of public sector employment and remuneration include this information.

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63. The comparison with education is probably more relevant, since the military and the police receive in-kind remuneration in the form of food, uniforms and housing.

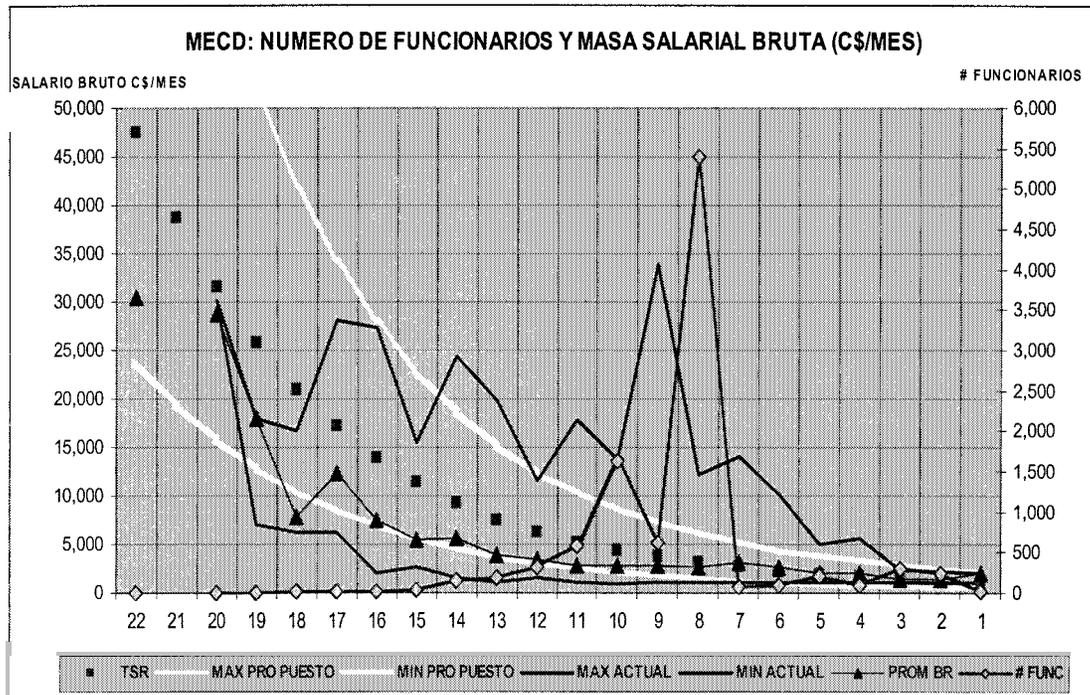
64. During the 2006 health strike the press reported that most public sector doctors complemented their regular salaries with private practice for a fee and that often these private consultations took place in government premises and used public sector assets.

Figure 4.4



Source: Nogales (2006)

Figure 4.5



The Reference Salary Table

4.29 In 2005, the Government adopted a Reference Salary Table (RST) with the objective of imposing greater discipline and order in the structure of public sector salaries.⁶⁵ It is the implementation of this table that has fiscal implications and not, as is often claimed, the implementation of the Civil Service Law. In fact, the Civil Service Law has only a few articles referring to public sector remuneration,⁶⁶ and the regulations to the law do not add significant guidance.

4.30 The implementation of the RST is desirable because it would impose discipline and apply the principles for public sector remuneration adopted in Law 476. But its legal grounding is weak, which has led most public sector institutions to resist its implementation. Moreover, because of its fragile legal underpinnings, the universe of institutions that are potentially subject to the RST remains unclear.

Comparisons with the private sector

4.31 The application of the principle of competitiveness adopted by Law 476 requires information on private sector remuneration for positions similar to those in the private sector. Yet, the public authorities responsible for determining public sector remuneration do not collect this information systematically. Table 4.4 shows average salaries for the period 2001-2005. This data, taken from INSS, show that average salaries in the public sector have recently surpassed those in the private sector, showing higher rates of increase.

Table 4.4 Public versus Private Sector Pay

	PUBLIC SECTOR (C\$ per month)	PRIVATE SECTOR (C\$ per month)	CPI	RATE OF GROWTH PUBLIC SECTOR	RATE OF GROWTH PRIVATE SECTOR	PUBLIC SECTOR AS % OF PRIVATE SECTOR
AVERAGE 2001	2,570.6	2,927.8	203.6			87.8%)
AVERAGE 2002	2,775.6	3,150.7	211.3	4.1%	3.7%	88.1%)
AVERAGE 2003	3,079.6	3,320.1	222.5	5.4%	0.1%	92.8%)
AVERAGE 2004	3,344.5	3,481.0	241.3	0.1%	-3.3%	96.1%)
AVERAGE 2005	3,857.6	3,735.0	264.5	5.2%	-2.1%	103.3%)

4.32 These data must be used with caution, however, given the incentives of the private sector to understate the wages reported to the INSS. Nevertheless, other sources of data reveal a similar pattern. PriceWaterhouseCoopers, which conducts an annual salary survey in the private sector, found the simple average salary in the private sector in 2005 to be C\$ 3,584 per month,⁶⁷ while data published by the Central Bank of Nicaragua reveal that the average public sector salary in August 2005 was C\$ 3,776.⁶⁸ These data show orders of magnitude similar to those in Table 4.4 and also point to a lower average salary in the private sector. Other sources of data⁶⁹ show

65. See Table 4.19.

66. Article 30, which indicates that remuneration should be based on principles of equality, equity and competitiveness; Articles 100 to 103 on the types of remuneration; and Articles 117 and 118 on considerations regarding the implementation of remuneration policy

67. PriceWaterhouseCoopers, 2006.

68. Banco Central de Nicaragua, 2005

69. By contrast, IMF (2006), paragraph 10 cites much larger public sector wage levels.

significantly different orders of magnitudes for average public sector wages, indicating still larger public-private wage differentials. In any case, average wage comparisons must take into account the education and skills required for different positions. It can be argued that the private sector occupies a significantly larger proportion of low skill workers. All this points to the need to undertake a rigorous data collection effort, identifying clearly the number of hours worked, skill requirements and specification of the remuneration concepts included in each indicator (base salary, 13th month, compensation in kind, and the like). The RST needs to be adjusted, taking into account this information, as well as the overall fiscal envelope.

Gender equity

4.33 As in the case of employment levels, there are no official records of gender decomposition of average remuneration. But some information regarding average income of the economically active population, by gender, can shed some light. Based on the 2001 household survey, the Economic Commission for Latin America (ECLAC) calculates that the mean income of public sector workers in urban areas was 4.5 times the per capita poverty line. For male public urban workers the mean income was 5.8 times the per capita poverty line, while for females it was 3.3 times the per capital poverty line. Assuming that the main source of income for wage-earners is wage earnings, this would point towards a bias in favor of males in public sector remuneration. This conclusion is also supported by the study by Lopez (2003) on twelve public sector institutions, which finds that the average remuneration for males is higher than for females at all levels, with the differences becoming up to 30 percent higher in favor of males at the highest levels (Table 4.5).

Table 4.5 Average Annual Remuneration, by gender, 2002 (C\$)

Level	Males	Females
Operational	18,008	17,286
Executive	31,216	22,824
Directive	61,230	48,774

Source: Lopez (2003).

Need for Public Sector Remuneration Framework Legislation

4.34 The above findings point to a clear need for adopting an official policy on remuneration in the public sector, grounded in a national law, and implementing its enforcement mechanisms. Such legislation is best based on the concepts already approved in the Civil Service Law, and expanded with provisions pertaining to (i) institutional coverage of the policy, which should be as wide as possible, (ii) rules for initial pay upon hire and pay increases, with the later based solely on merit, (iii) limits on the dispersion of wages between and within public sector institutions, (iv) non-salary remuneration, which should be kept to a minimum, (v) consultants' remuneration (see section D), and (vi) reporting obligations.

Remuneration in the Education Sector

4.35 The education sector is the largest employer in the public sector. It comprised about 43,000 employees in mid-2006 (about 44 percent of total central government employment) and accounted for 32 percent of the central government wage bill. Tables 4.6, 4.7, and 4.8, show the average monthly wages by type of education employees and school modality. Several conclusions can be drawn from these tables:

- The average wage for primary teachers is about the same in autonomous and centralized schools, but much lower in decentralized municipalities
- The average wage for secondary school teachers is highest in centralized schools and lowest in decentralized municipalities
- Among teaching positions, teachers' training attracts the highest salary
- The average growth rate of average salaries has been highest in autonomous schools (22 percent), followed by centralized schools (13 percent) and decentralized municipalities (9 percent)

Table 4.6. Monthly Salaries in Education, by level and school modality (C\$ per month)

Budget Payroll	2000	2001	2002	2003	2004	2005	2006
Kindergarten	1,056.93	1,241.70	1,507.16	1,562.61	1,861.20	2,418.18	2,611.82
Primary	1,072.42	1,241.59	1,521.57	1,561.03	1,832.70	2,405.57	2,653.19
Secondary	1,108.62	1,209.50	1,543.60	1,588.85	1,865.10	2,370.30	2,773.05
Special Education	1,059.94	1,270.47	1,536.37	1,529.37	1,880.82	2,390.54	2,605.14
Adult Education	1,071.54	1,236.07	1,538.49	1,571.31	1,835.15	2,342.58	2,549.17
Directors	1,486.19	1,532.07	1,813.61	1,858.73	2,178.32	2,946.25	3,012.01
Sub Directors	1,438.99	1,500.69	1,771.23	1,821.29	2,147.50	2,840.26	3,134.46
Teachers' Training	2,214.09	2,408.29	2,609.60	2,631.18	3,064.36	3,569.14	3,791.16
Administrators	2,239.41	2,437.39	2,436.54	2,436.54	2,869.61	3,773.31	2,937.28
Simple Average	1,416.24	1,551.45	1,808.78	1,847.10	2,170.53	2,784.01	2,896.37
Growth Rate		9.55%	16.59%	2.12%	17.51%	28.26%	4.04%

SOURCE: OFFICE OF THE DIRECTOR OF HUMAN RESOURCES, MECD

Table 4.7

AUTONOMOUS CENTERS	2000	2001	2002	2003	2004	2005
Kindergarten	1,100	1,247	1,264	1,783	2,348	2,603
Primary	1,042	1,264	1,261	2,059	2,407	2,669
Secondary	1,028	1,236	1,218	1,540	2,234	2,432
Special Education	-	-	1,536	-	-	1,797
Adult Education	983	1,143	1,171	1,636	2,279	2,523
Directors	1,475	1,712	1,716	2,492	2,884	3,142
Sub Directors	1,326	1,549	1,547	2,016	1,372	2,946
Teachers' Training	-	-	1,547	-	-	-
Administrators	851	1,018	1,043	1,337	1,856	2,308
Simple Average	867	1,019	1,024	1,429	1,709	2,269
Growth Rate		17.53%	0.49%	39.55%	19.59%	32.77%

SOURCE: OFFICE OF THE DIRECTOR OF HUMAN RESOURCES, MECD

Table 4.8

Decentralized Municipalities	2003	2004	2005	2006
Kindergarten	1,056.93	1,241.70	1,507.16	1,562.61
Primary	1,072.42	1,241.59	1,521.57	1,561.03
Secondary	1,108.62	1,209.50	1,543.60	1,588.85
Special Education	1,059.94	1,270.47	1,536.37	1,529.37
Adult Education	1,071.54	1,236.07	1,538.49	1,571.31
Directors	1,486.19	1,532.07	1,813.61	1,858.73
Sub Directors	1,438.99	1,500.69	1,771.23	1,821.29
Teachers' Training	2,214.09	2,408.29	2,609.60	2,631.18
Administrators	2,239.41	2,437.39	2,436.54	2,436.54
Simple Average	1,416.24	1,551.45	1,808.78	1,847.10
Growth Rate		9.55%	16.59%	2.12%

SOURCE: OFFICE OF THE DIRECTOR OF HUMAN RESOURCES, MECD

4.36 Simple comparisons of monthly salaries for teachers and non-teachers can be very misleading, among other because teachers tend to work fewer hours than non-teachers (and so often have more than one job) and generally have longer vacations. A recent study by CEPAL⁷⁰ indicates that, on average, Nicaraguan teachers earn about the same monthly salary (expressed in purchasing power parity terms) as their LAC counterparts; Table 4.9.⁷¹ Since Nicaragua is a substantially poorer country than the average Latin American country, however, Nicaraguan teacher monthly salaries are substantially higher in terms of per capita GDP than the Latin and Central American regional averages. (That is, the average annual teacher salary in Nicaragua is equivalent to 324 percent of per capita GDP, compared to regional averages of 240 and 255 percent.) By this criterion, Nicaraguan teachers appear to be paid quite well.

Table 4.9: Monthly Teacher Salaries in Central America

	Monthly Average Teacher Salary 2000 US\$ PPP	2005 per capita GDP	Average annual salary as % of per capita GDP*	Teacher monthly salary as % of the average monthly salary of:		
				All Workers	Professionals & Technicians	Salaried Professionals
Costa Rica	1,268	8697	175%	147%	87%	85%
El Salvador	885	4629	229%	182%	93%	92%
Guatemala	752	4034	224%	137%	73%	80%
Honduras	936	2998	375%	270%	82%	81%
Nicaragua	865	3208	324%	133%	71%	93%
<i>Regional Averages</i>						
Central America	941	4,713	240%	174%	81%	86%
Latin America	858	4,044	255%	126%	64%	74%

Source: A. Morduchowicz & L. Duro (2007), CEPAL (page 21) and World Bank, World Development Indicators. Notes: The wage figures for Costa Rica refer to 2005, for El Salvador and Guatemala to 2004, for Honduras to 2003, and for Nicaragua to 2001. Average annual wages are calculated as the average monthly wage times 12 and do not take into account non-wage remuneration.

4.37 Nicaraguan teachers also tend to work substantially longer hours than teachers in most other LAC countries, however, which partly explains their comparatively high salaries; Table 4.10. Whereas the average teacher in Latin America works only 32.3 hours per week, Nicaraguan teachers average 41 hours of work. This translates into a correspondingly lower hourly wage rate, with Nicaraguan teachers earning an hourly wage of 4.9 Dollars (in constant 2000 PPP terms), while the other teachers in the region average over 6 Dollars. By this criterion, Nicaraguan workers appear to be paid relatively poorly. However, this comparison is also misleading because it does not take into account differences in productivity and skill levels. To the extent that cross-country differences in per-capita GDP reflect differences in labor productivity, the shortfall in Nicaraguan teacher wages (\$4.9 vs. \$6.2) is approximately equal to the shortfall in per capita GDP (\$3,208 vs \$4,044). That is, after adjusting for differences in national productivity levels, Nicaragua's teachers appear to be paid a comparable wage rate to what other teachers in the region receive.⁷²

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70. Morduchowitz, Alejandro and Luisa Duro (2007), "La inversion educativa en America Latina y el Caribe: Demandas de financiamiento y asignación de recursos (Buenos Aires, CEPAL),

71. See also Hermani-Limarino, Werner, (2006), "Are Teachers Well Paid Latin America and the Caribbean?: Relative Wage Structure of Returns of Teachers", in Emilianita Vegas, ed. (2006), Incentives to Improve Teaching, (Washington, D.C; World Bank), Figures 3.1 and 3.2.

72. Public sector teachers and health workers in Nicaragua like to compare their salaries with those paid in Honduras. Indeed, the average monthly salary of school teachers in Honduras is significantly higher. This is not an

4.38 Arguably, a more appropriate way of assessing the adequacy of teacher remuneration is through intra-country comparisons with other workers and professions. Table 4.9 indicates that the average Nicaraguan teacher salary is 33 percent higher than the average salary received by all workers in Nicaragua, but only represents 71 percent of the average salary received by private sector professionals and technical staff and 93 percent of the average remuneration of salaried professionals in the private sector. It turns out, however, that teachers in Nicaragua (as almost everywhere else in LAC) tend to put in less time than the overall average hours worked in the private sector (41.0 hours per week vs. 48.8 hours), but marginally more hours than other salaried professionals in the private sector; Table 4.10. On an hourly basis, Nicaraguan teachers earn proportionately more than all private sector workers (59 percent more according to Table 4.10), but they earn 26 percent less than other professionals and technicians, and 10 percent less when compared to all other salaried professionals in Nicaragua.⁷³

Table 4.10. Hourly Wage Rates in Central America

	Average Hours worked per month*		Monthly hours worked by Teachers versus all non-Teachers	Average hourly teacher wage rate (2000 US\$ PPP)	Teacher wage rate as % of the average wage rate of:		
	Teachers	all non-Teachers			All Workers	Professionals & Technicians	Salaried Professionals
Costa Rica	40.3	46.5	87%	7.3	170%	104%	95%
El Salvador	32.7	45.1	73%	6.3	251%	120%	109%
Guatemala	31.3	46.2	68%	5.6	202%	101%	94%
Honduras	34.5	49.2	70%	6.3	385%	110%	106%
Nicaragua	41.0	48.8	84%	4.9	159%	74%	90%
<i>Regional Averages</i>							
Central America	36.0	47.2	76%	6.1	228%	101%	98%
Latin America	32.3	44.7	72%	6.2	174%	86%	96%

Source: A. Morduchowicz & L. Duro (2007), CEPAL (page 21-23) and World Bank, World Development Indicators. Notes: the average hours worked per month does not take into account differences in vacation time, which tends to be longer for teachers.

4.39 The differences in average wage rates paid to Nicaraguan teachers vis-à-vis professionals in the private sector are conceivably due to differences in productive endowments or of other socio-economic factors. Such differences are taken into account in the study by Hermani-Limarino (2006), who estimates conditional wage differentials by regressing hourly pay on productive endowments (education, years of experience), socioeconomic factors (sex, age, place of residence) and a teacher's dummy. The study concludes that after these differences are taken into account, teachers in most of the countries in the region receive higher wage rates than non-teachers. Nicaragua is an exception, with teachers receiving a lower average wage than non-teachers. The magnitude of this conditional wage difference, however, is very sensitive to the

appropriate comparison, considering that Honduras represents a statistical outlier, with one of the highest average hourly teacher wage rates in LAC – and the absolute highest when expressed as a share of per capita GDP.

73. These result are broadly consistent with the findings of Hermani-Limarino (2006, Table 3.5), who reported that the hourly earnings of Nicaraguan teachers are, on average, 44 percent higher than those of all other workers, but 66 percent lower than those of workers who have at least a secondary education and 68 percent lower than those of workers in office, technical or professional occupations, regardless of educational level.

choice of the comparison group.⁷⁴ Finally, these results may also be biased by the presence of unobserved heterogeneity.⁷⁵

4.40 In any case, the preceding findings as they pertain to Nicaragua are based on the wage structure that prevailed in 2001. Between 2001 and 2006, the average wage of teachers has been growing by an average of 13.3 percent per annum, while the average national wage has only been growing by 10.7 percent. This difference in wage growth rates has reduced the average wage differential by around 12 percent below what it may have been five years ago.

4.41 So, are Nicaragua’s teachers being adequately paid? Much rests on the answer to this question, considering that the quality of education is strongly influenced by the quality of teachers, and the quality of teachers, in turn, is largely determined by the persons attracted to and retained in the teaching profession, and the performance incentives that they face. As indicated by Hermani-Limarino (2006), relative wage rates play an important role in teacher recruitment, performance and retention. The preceding review suggests that Nicaraguan teachers may be receiving an average wage rate that is somewhat less than that received by similarly qualified private sector employees. This observation in itself does not suffice to make a compelling case for raising teacher remuneration levels. It does, however, suggest the need to maintain an open mind toward possible wage adjustments if warranted by overall labor market conditions.⁷⁶ In the event that such adjustments are warranted, it is important to consider teachers’ remuneration as a whole, and look beyond the wage alone. The reluctance to contemplate wage adjustments has frequently led to strikes that are eventually resolved through adjustments in non-wage benefits. Such non-wage benefits have an equally negative fiscal impact, but are not conducive to increased efficiency because they do not reward individual effort.⁷⁷

Table 4.11

Health Sector Remuneration and Wages (C\$)						
	2002	2003	2004	2005	2006	2007
Employment Remuneration	826,393,475	899,318,126	937,226,977	1,243,456,865	1,411,673,011	1,703,700,000
Wage Bill	612,736,254	667,744,987	708,552,884	971,148,074	1,151,626,713	
Growth Remuneration		9%	4%	33%	14%	21%
Growth Wage Bill		9%	6%	37%	19%	

Source: Morales et. al (2006) for total remuneration, Nogaes (2006) for wage bill.

Remuneration in the Health Sector

4.42 In 2006, the health ministry employed 23,241 people, or 24 percent of total central government employment, making it the second largest public sector employer after education. The social security institute, INSS, employed an additional 1,214 people. More than two-thirds of the sector’s employees are female. In 2006 the wage bill of the sector amounted to C\$ 1,152 million (US\$ 65 million) or 25.3 percent of the total wage bill of the central government, while total sector employment remuneration was C\$ 1,412 million (US\$ 82 million) in 2006.

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74. Hermani-Limarino (2006, table 3.6)

75. That is to say that teachers may not be a random simple of workers whose decisions to teach are mainly based on wage differentials. If teachers constitute a special group that is attracted to the profession by non-monetary rewards, the labor market would be effectively segmented into two markets (one for teachers and the other for non-teachers), which do not necessarily clear at the same wage rate.

76. Some important indicators of overall labor market conditions that are most relevant in this context are the skill set of individuals applying for teaching positions and the rates of labor turnover among teaching staff.

77. According to Nogaes (2006) the 2006 teachers’ strike has cost C\$ 41 million in bonuses.

4.43 Wage and total compensation have grown considerably in the past two years (Table 4.11), with the health sector wage bill almost doubling since 2002. However, the share of the gross wage bill assigned to health services is only 63 percent, with the remainder going to various types of managerial, administrative and service jobs (Table 4.12).

Type of Service	Share (%)
Health Services	63%
Management	15%
Administration	3%
Technical	6%
General Services	12%
Production	1%
Training	0%

4.44 The salary structure of the Health Ministry (MINSA) does not exhibit a clear, rational pattern; Table 4.20:

- Of the 22 salary levels in the MINSA, the structure of the first 14 levels is basically flat.
- Subsequently, the salary dispersion becomes very large: the basic salary in the highest level (level 22) is 43 times higher than the basic salary in level 1.
- Within the 22 salary levels there are 12 sub-classifications, and these sub-classifications within a salary level imply a higher salary than the basic salary of several levels above.
- This salary table is not very meaningful because the gross salary is composed of fixed and variable salaries (with variable salaries comprising 45 percent of the total wage bill in 2006). Only 187 employees out of the total 21,365 did not earn a variable salary.

Table 4.13
Health Sector Professional Wages, by Occupation
GROSS WAGES AVERAGE PER MONTH US\$

OCCUPATION	DIC	DIC	DIC	DIC	DIC	DIC	DIC
	2000	2001	2002	2003	2004	2005	2006
Nephrologist	337.67	363.08	355.23	380.05	387.07	584.51	723.66
Endocrinologist	421.90	446.52	422.49	433.89	402.24	634.27	785.27
Surgeon General	403.84	413.81	398.87	409.59	390.57	569.43	704.90
Internist	371.23	389.75	371.11	376.78	359.30	537.89	666.94
Oncologist	338.03	327.56	326.67	331.04	329.49	495.79	613.82
Pediatrician	366.45	372.70	349.79	365.23	343.15	507.37	628.16
Urologist	358.18	358.51	323.30	352.74	345.20	511.25	632.96
Pneumologist	310.83	322.25	305.01	317.21	314.25	448.94	555.82
Otorhinolaryngologist	342.48	346.84	320.16	340.54	323.09	486.44	602.25
Gynecologist	351.62	356.17	335.91	350.11	330.14	486.31	602.08
Cardiologist	353.03	344.60	334.91	351.33	343.92	473.24	585.91
Ophthalmologist	332.62	310.96	292.25	326.20	331.24	520.53	644.45
Gastroenterologist	347.16	381.47	336.54	324.78	306.02	448.60	555.40
General Practitioner	269.52	275.37	260.88	269.99	254.41	379.14	469.41
Dermatologist	261.77	243.46	233.89	261.64	260.46	365.43	452.43
General Dentist	204.65	209.09	200.28	206.73	196.03	294.79	364.97
General Nursing Supervisor	149.45	155.92	147.49	161.47	156.65	210.09	260.11
Nurse Specialist	146.06	153.27	145.84	157.03	151.35	196.54	243.33
General Nurse	107.40	119.14	114.32	138.86	133.29	176.41	218.41
Physical Therapist	88.61	103.97	102.05	131.47	127.05	168.92	209.13
Psicométrist	69.38	81.81	84.88	121.28	122.14	159.09	171.90
Orthoprotesist	69.07	120.30	95.33	195.42	110.99	121.63	126.28
Weighted Average	199.49	208.76	198.89	216.17	203.70	290.41	353.62
Growth		5%	-5%	9%	-6%	43%	22%

Source: Nogales (2006)

4.45 Within the expenditures for health service professionals there is also a lot of variation, reflecting the high variety of skills required in health services. Table 4.13 shows the evolution of average salaries for doctors and nurses of different specializations. It indicates that sector salaries have grown by an even larger margin than either the wage bill or total compensation at the overall ministerial level.

4.46 Table 4.14 shows that Nicaraguan doctors working in the public sector indeed earn less in absolute terms than their Central American counterparts. As noted earlier, however, this is not an appropriate comparison, given that the overall income and productivity levels across these countries are very different.

Table 4.14 Average doctors' salaries in Central America (US\$ per month)

	Nicaragua	El Salvador	Honduras	Costa Rica	Guatemala	Panamá
General Doctor	408	969	1,203	740	472	1,025
Specialist	584	1,211	1,404	762	828	1,338
Resident	241	969	338	740	789	1,025

Source: Morales et. al. (2006) from data from ECLAC and WHO.

4.47 If the comparison is made relative to GDP, Nicaraguan physicians are found to earn roughly the same in relation to per capita GDP as other Central American countries, except Honduras, whose indicator is well outside the regional norm (Table 4.15). In other words, there is no economic or social justification for seeking to mandate the equalization of sector salaries to the regional averages.

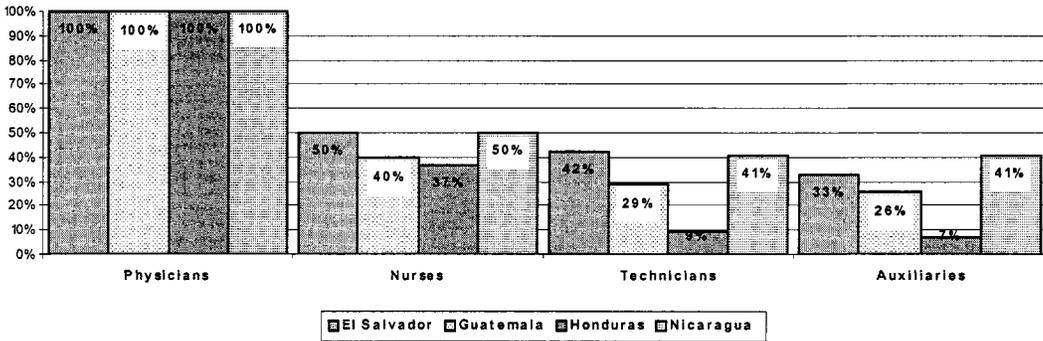
**Table 4.15:
Physician's Base Salaries Relative to
per Capita GDP**

Nicaragua	489%
El Salvador	477%
Guatemala	455%
Honduras	1,638%

Source: World Bank (2007), "Key Issues.", Figure 1.44

4.48 There is a large variation in doctors and nurses wages, according to degree of specialization, as shown in Table 4.13. This is a positive finding, suggesting that the system is seeking to reward merit and provide incentives to acquire further skills. A similar finding arises from comparing the average pay of doctors vis-à-vis other health care providers. As Figure 4.6 shows, non-doctor health care providers in Nicaragua are the best paid relative to doctors in the Central American region.

Figure 4.6 Base Salaries of Health Care Providers Relative to Physicians' Salary



Source: World Bank (2007), Key Issues in Central America Health Reforms.

4.49 Aside from levels and differences in base salaries, in the health sector it is particularly important to look at (i) variable wages and (ii) non-wage benefits. The issue of variable salaries in the sector deserves careful analysis and revision. Variable salaries include bonuses for abnormal working conditions, salary complements, double turns, night shifts, recognition for years of experience or academic record, and others. Some of these items (like wage premiums for years of experience or academic record) can be reflected in the basic salary structure, together with the criteria for receiving the premiums. The more important problem is the large number of

employees that are eligible for these benefits. It is unclear, for example, why 16,670 employees (or 71 percent of the total) are reportedly working under abnormal conditions, what justifies giving salary supplements to 5,079 employees, and why 5,560 employees are doing double shifts.

4.50 Health employees also receive non-wage compensation from collective agreements. The latest such agreement was signed in 2006, following the health employees strike. The fiscal cost of implementing it in 2007 has been estimated at C\$ 150 million.⁷⁸ Almost 40 percent of that cost is related to clothing, footwear and protective equipment (which does not really qualify as employment compensation). A small percentage is assigned to scholarships for employees' children, and 60 percent is merely "other benefits" whose composition is not known. Moreover, the procedures for assigning those benefits to individual workers are also not known.

4.51 Regarding comparability with wages in the private sector, there is virtually no information. The only available data comes from the PriceWaterhouseCooper's survey of private sector pay, which includes only two health positions ("health project supervisor" and "health promoter"). It finds that the total remuneration levels for these positions in 2006 were C\$ 36,000 (US\$ 2,081) and C\$ 28,133 (US\$ 1,596) per month, respectively. These figures are not comparable with those in Tables 4.13 and 4.14, because they include overall compensation and not just wages. As in the case of education, the DGFP needs to conduct an in-depth survey of salary levels in the Nicaraguan private health care market, without which the principle of competitiveness approved in Law 476 would carry little weight.

4.52 Unlike the education sector, there is no data on the number of hours worked that would permit ascertaining the hourly wage rate. Nogales (2006) indicates that specialized doctors work an average of four hours a day. Numerous press reports during the last health strike have pointed out that public sector doctors generally work less than full time, and that they also attend private clients during that time – for private gain - using the assets of the public sector. This is an issue that needs further research and appropriate regulation.

4.53 There is some information linking overall public health expenditures to efficiency,⁷⁹ but little that links remuneration in the Nicaraguan public health system with efficiency. Previous analyses, however, have drawn two conclusions that are nevertheless important for human resources management in the sector: (i) the need to assign more human resources to preventive care vis-à-vis curative care and (ii) the need to assign human resources geographically according to need and risk areas; see para. 3.47.

Consultants

4.54 *Number and Cost of Consultants.* The use of individual consultants in the Nicaraguan public sector is extensive, mirroring the country's dependence on foreign aid. While many of these consultants are assigned tasks of a temporary nature that require a specialized expertise proper of consultants, many others perform tasks of a more permanent nature that should normally be assigned to civil servants. Many consultants are financed through external grants and credits, and their earnings undermine any attempts to impose discipline and provide adequate incentives to public sector employees.

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78. See Morales et. al. (2006), table 17.

79. See World Bank (2007, section 2.D) and Chapter III.

4.55 Since there is no centralized registry and the budget does not provide precise information, the exact number of consultants is unknown. An estimate by the DGFP calculated the total number of consultants financed by six international agencies (up to May 2005) to be 771, with a yearly expenditure of about US\$15 million (Table 4.16).⁸⁰

Table 4.16

CONSULTANTS' COMPENSATION BY FINANCING SOURCE (18 INSTITUTIONS)							
FINANCE	No. CONS.	%	SALARY/MONTH	%	MIN	MAX	AVERAGE
SPANISH COOPERATION	21	3%	10,573	1%	95,81	6,131,33	503.48
WORLD BANK	498	65%	883,628	71%	101,56	10,000,00	1,774.35
CABEI	14	2%	10,830	1%	200,00	1,500,00	773.56
IDB	154	20%	228,653	18%	150,00	6,000,00	1,484.76
EUROPEAN UNION	20	3%	33,977	3%	74,85	4,839,26	1,698.84
OTHER	64	8%	72,720	6%	100,00	4,251,50	1,136.24

7 DGFF presentation donor community, 4 2006.

4.56 Taking information from the Budget, which includes both domestic and foreign sources of financing, Nogales (2006) calculates that about 30 million dollars is spent on consultants. However, this calculation includes temporaries, which are not the main source of public pay distortions. A similar calculation, based on individual consultants included in the public investment program (Table 4.17), shows that about US\$ 28 million were spent on consultants in 2006,⁸¹ but this Figure 4. does not discriminate between short and long term consultants.

Table 4.17

BUDGETARY LINES UTILIZED IN THE CONTRACTING OF CONSULTANTS (US\$)

DESCRIPTION	2004	2005	2006
Contracted Personnel for Advisory / Consultations	8,123,402	16,197,555	28,189,628
Studies, research and factibility of the projects	1,909,503	10,337,765	17,782,175
Technical advisory and refunds for studies	14,885,085	11,971,639	19,308,837

4.57 Based on the above, it is roughly estimated that the Nicaraguan government spends between US\$ 20 and 30 million annually on individual consultants that perform permanent jobs. This represents 10 percent of the public sector wage bill. Based on the average salaries paid by the six donors included in Table 4.16, the total number of consultants working in the Nicaraguan public sector is between 1,350 and 2,000.

Remuneration

4.58 Consultants' salaries are generally larger than the average public sector salary, and roughly similar to the remuneration of high-level government employees. They also exhibit wide dispersion. Using budget figures, Nogales (2006) compared average consultants' remuneration to

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80. This is roughly of the same order of magnitude as calculations done by the World Bank in the context of the 2004 CPPR, which found that around 10 million dollars were spent annually in Bank-financed individual consultants.

81. But this figure could be considerably higher if one assumes that the code lines "Studies research and feasibility projects" (PIP code 241) or "Studies and Technical assistance" (PIP code 243) also include some individual consultants performing permanent jobs.

average public sector wages, and found the former to be about six times larger. Considering that consultants' generally possess higher qualifications than the average public sector employee and are more comparable to top government officials, their average remuneration does not seem exaggerated (although they may be in some isolated cases).

4.59 To introduce greater discipline in the employment and remuneration of consultants, the MHCP issued two directives, in 2005 and early 2006.⁸² The first of these introduced a remuneration table to be applied to all consultants performing "line positions" (Table 4.18). The second clarified some of the concepts that remained vague in the first.

4.60 This effort needs to be pursued in several directions. First, some concepts included in these directives must be clarified; notably what is a "line position." This is easily resolved by resorting to concepts already included in the Civil Service Law. Second, the requirement to inform the DGFP about all consultants' contracts and contract extensions needs to be enforced

Table 4.18

REFERENCE TABLE WAGE CONSULTANT WAGES			
COMPLEXITY	DENOMINATIONS	FEES	
		MINIMUM	MAXIMUM
DIRECTIVES	DIRECTOR	3,600	5,000
	PRINCIPAL TECHNICAL ADVISER	2,800	4,250
	COORDINATOR A	2,350	3,600
	COORDINATOR B	1,900	2,950
EXECUTIVES	OFFICIAL A	1,450	2,300
	OFFICIAL B	1,100	1,750
	ANALYST	750	1,200
OPERATIVES	SUPPORT A	400	650
	SUPPORT B	350	450

D. Main Findings and Policy Options

4.61 There is no complete, comprehensive and up-to-date data base on public sector employment and remuneration levels. Furthermore, the budget payroll does not accurately reflect the fiscal risks associated with employment remuneration, because of (i) the large amount of non-wage employment compensation, linked mostly to collective agreements, (ii) employment compensation in public institutions inside and outside the central government that is not included in the budget payroll (but is embedded instead in budget lines related to transfers), and (iii) employment compensation in public institutions registered in the capital budget. These shortcomings render it extremely difficult to monitor adequately the evolution of public employment and remuneration, as needed for maintaining fiscal control.

4.62 The size of public sector employment as a proportion of Nicaragua's total population is somewhat below the average observed in other countries in Latin America and the Caribbean. One concern, however, pertains to the growth of the public sector wage bill in recent years, which is attributable, both, to increases in employment and in public wages. Most of the public

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82. Memorandum MHCP-DM-E-23196a-11-05 of November 29, 2005 and MHCP-DM-I-23196b-02-06 of February 10, 2006.

employment growth has come from decentralized institutions (particularly universities) and local governments. At the same time, public sector salaries have been growing faster than private sector salaries, posing risks to fiscal sustainability.

4.63 The two largest public sector employers – the education and health sectors – raise the most concerns from a fiscal viewpoint. Salaries in both sectors have increased rapidly in the past few years, exceeding the average growth of salaries at the national level. While some of the indicators discussed earlier (paras. 4.36-4.41) suggest that the wage rates paid in the education sector may be on the low side, others suggest that teachers are paid quite well under prevailing market conditions and considering their average skill levels. Moreover, it appears that the average skill level of the current teacher corps in Nicaragua is very low, especially since so many of them are untrained (“*empiricos*”).⁸³ Under these circumstances, the fundamental challenge for human resource management in the sector is not to identify the appropriate (or market) wage for the current, relatively untrained set of teachers (except in a short-run context, when new wage contracts are being negotiated with the teachers union), but rather to identify the wage rate that would be required to attract and retain a set of teachers with the desired teaching skills. It is probably safe to say that the wages currently paid to teachers in Nicaragua are far below the level that would be required to attract the type of teachers that the country needs in order to provide an education of significantly higher quality. The challenge facing the Nicaraguan authorities, then, is getting from the current status quo of low-paid and low-skilled teachers to the desired position of better-paid, higher-skilled teachers.

4.64 Meeting this challenge will require implementing a carefully designed human resource strategy for the sector that encompasses, among other, a new wage policy, a better teacher training system and curriculum reforms. Even though the current wage rates paid in the sector may be inadequate from the viewpoint of providing proper staff recruitment, performance and retention incentives, however, adjustments must be considered carefully within a medium term cost and financing framework for the education sector, while being mindful of the overall government budget constraint. In particular, it would not be fiscally prudent to apply a wage policy based on the wages paid in other countries with vastly different per capita income and labor productivity levels, and operating under different labor market conditions.

4.65 Average salaries in central government institutions are extremely dispersed both between and within institutions. This also applies to consultants’ salaries, which account for around 10 percent of the total public sector wage bill. Their average salaries are high compared to the overall average public sector salary, but similar to those paid in the higher echelons of public employment. In both cases, the structure of salaries often does not exhibit a rational pattern, either in terms of merit, skills endowment or proper work incentives.

4.66 The recent evolution and structure of public wages in large part reflect the absence of adequate public wage framework legislation. Furthermore, recent efforts to regulate consultant salaries have been undermined by lack of enforcement. As a consequence, public sector remuneration levels follow ad-hoc decision-making, are not transparent, and result in inequities that ultimately hamper the process of civil service professionalization.

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⁸³ See World Bank, 2007, Poverty Assessment, paragraph 2.37. In 2005, the proportion of Nicaraguan teachers considered untrained (“*empiricos*”) was 24 percent at the primary level and around 50 percent at the secondary level. This proportions were found to be higher than in other developing countries, even after accounting for differences in per capita income levels.

4.67 In order to ensure an orderly, transparent and efficient determination of wages in the public sector, adequate framework legislation is urgently needed. A good framework legislation is characterized by the following key elements:

- Broad coverage – the framework legislation covers all public sector agencies; the same as the Civil Service Law.
- Transparency – the level of remuneration is built around a base salary, where bonuses are only applied in exceptional circumstances and in-kind compensation is eliminated.
- Merit-based pay – the remuneration policy rewards good individual and team performance, subject to the prevailing fiscal constraints.
- Non-discrimination – the pay policy does not discriminate across gender, ethnic or religious lines.
- Market-responsiveness – the structure of salaries reflects the relative market demand and supply for the different skills required in the public sector labor force, thereby ensuring that the public sector is neither over-paying its employees, nor allowing the quality of its workforce to deteriorate. The adequacy of the pay structure can be gauged by the frequency of labor turnover and quality of applicants for different positions, as well as by carrying out periodic market surveys. In contrast, basing the pay structure on the wage rates paid in other countries (as was recently done for health sector employees), or indexing it to particular commodities (such as the *canasta básica*), would not be consistent with the principle of market responsiveness. The implementation of framework legislation containing these principles is best achieved with the introduction of a uniform Reference Salary Table throughout the entire public sector. The pace of introduction may need to be gradual, however, depending on fiscal limitations. Also, the RST would need to be periodically revised and adapted to changing labor market conditions and relative scarcities of different skills.

4.68 An efficient implementation of the propose framework legislation also will depend on several prior actions by the DGFP:

- Creation of a centralized data base on public employment and remuneration, covering the entire public sector. Article 8 of the Civil Service Law provides a sufficient legal basis for requiring all public sector agencies to submit such information to the Ministry of Finance. By enforcing this article, the Ministry of Finance should be able to compile a reasonably comprehensive data base within a period of six months.
- After collecting the data on individual salaries throughout the public sector (including consultants) and on the pay structure for comparable positions in the private sectors, it is necessary to estimate the fiscal impact of alternative salary structures, to ensure that the implementation of a particular RST does not lead to fiscal distress and, therefore becomes inoperable.
- With particular reference to consultants, it is important to enforce directives on information sharing of consultant's contracts, amending and complementing the directives, as needed, to clarify coverage and concepts, raise its legal status and implement enforcement mechanisms. In this context, it is crucial to calculate the fiscal implications of applying the law of acquired rights to all consultants that are currently occupying permanent positions. It may be necessary to revise the legal and regulatory framework governing wages to permit the application of the RST to consultants in a fiscally viable manner.

4.69 With particular regard to the education sector, there is a need to undertake a teacher census to determine with greater precision the geographic distribution of teachers and the prevalence of “ghost” teachers. This would serve as an instrument to inform decisions on the deployment of teachers (within urban areas and across rural/urban areas). In the longer term, there is a need to devise a better compensation policy that includes more incentives to encourage the upgrading of unqualified teachers (“*empricos*”) and reward good teaching performance. (Ideally, a teacher licensing and program certification system that is linked to results is something to strive for, but may be premature for Nicaragua at this point.) In seeking to link teacher compensation to teaching performance and results, it will be important to analyze the recent student assessment data (from 2006) with the objective of identifying the main factors (such as education profile, experience, wage rate) associated with good teacher performance and results. (The last student assessment carried out in 2002 had revealed, for example, that half of the teachers felt ill-prepared to teach mathematics.)

4.70 Finally, the adoption of a time-bound action plan for the incorporation of all public sector employees into the administrative career, as envisaged by the Civil Service Law, would greatly enhance the process of professionalizing the public labor force.

Table 4.19 Reference Salary Table (“Tabla Salarial de Referencia”, TSR); 2006

SERVICIO CIVIL	Grupos Funcionales	Nivel	2006	VARIACION %
	DIRECTIVO	XXII	47,535	23
		XXI	38,760	23
		XX	31,604	23
		XIX	25,770	23
		XVIII	21,013	23
		XVII	17,133	23
		XVI	13,969	23
		XV	11,391	23
		XIV	9,287	23
		XIII	7,572	23
	EJECUTIVO	XII	6,174	19
		XI	5,203	19
		X	4,384	19
		IX	3,695	19
		VIII	3,114	19
		VII	2,625	19
	OPERATIVO	VI	2,211	15
		V	1,928	15
		IV	1,682	15
		III	1,467	15
II		1,279	15	
I		1,013		

Table 4.20 Basic Salary Table for the Ministry of Health

Nivel y sub clasificaciones	Salario según escala salarial. MINSA	Cantidad de salarios diferentes por nivel de complejidad	Número de trabajadores por escala	Mediana en cada escala	Moda en cada escala	Número de trabajadores con salario Moda
01	1,489.06	7	85	1,666.34	1,489.06	76
02	1,489.06	15	2,002	1,578.47	1,489.06	1,874
03	1,515.93	6	822	1,564.95	1,515.93	785
04	1,548.04	17	562	1,666.34	1,548.05	510
05	1,581.84	24	1,198	1,794.44	1,581.84	1,084
06	1,615.64	26	1,599	1,829.43	1,615.65	1,390
07	1,666.34	38	5,012	1,770.59	1,666.34	4,847
08	1,700.14	53	1,354	1,983.38	1,700.14	1,236
09	1,742.39	10	152	1,809.15	1,742.39	141
10	1,793.09	25	507	2,135.23	1,793.09	457
10.1	1,901.25	31	2,202	2,104.05	1,901.25	2,089
10.2	1,968.85	6	209	1,847.17	1,968.85	199
11	1,935.05	4	62	2,186.02	1,935.05	59
12	1,968.85	9	67	2,104.05	1,968.85	49
12.1	2,019.55	17	814	2,352.48	2,019.55	755
13	2,019.55	7	120	2,136.16	2,019.55	100
14	2,104.05	42	374	3,312.62	2,104.05	207
14.1	3,415.36	31	1,442	3,727.54	3,415.36	1,323
15	2,136.16	25	324	2,389.92	2,136.16	283
15.1	2,629.12	39	320	3,490.14	4,444.96	220
15.2	4,650.88	15	602	5,168.80	4,858.88	282
16	2,267.98	44	561	2,585.71	2,267.98	451
16.1	5,168.80	28	214	3,902.92	5,168.80	145
16.2	4,444.96	3	7	4,858.88	4,858.88	5
17	2,352.48	11	60	3,134.54	2,352.48	37
17.1	4,444.96	11	18	4,834.47	4,444.96	6
18	2,518.10	27	130	3,415.36	2,518.10	97
18.1	4,444.96	13	34	4,858.10	2,535.01	14
19	2,636.40	37	275	7,150.00	7,800.00	127
19.1	4,444.96	24	66	4,682.60	2,636.40	31
20	2,754.70	26	31	3,682.19	No existe	0
20	7,800.00	3	3	7,800.00	No existe	-
21	2,873.00	62	113	8,937.50	4,901.01	12
22	9,661.16	10	18	9,714.45	9,600.00	8
22	40,210.00	5	6	20,500.00	40,210.00	2
TOTALES		751	21,365			18,901

Source: Morales et. al. (2006) from fiscal payroll data.

CHAPTER V FISCAL DECENTRALIZATION IN NICARAGUA

5.1 The Nicaraguan state traditionally has been highly centralized. That tradition continues to hold sway today. Yet, over the last 20 years the country has moved, in fits and starts, against that structural legacy and toward a more decentralized political model, enabling locally-elected municipal governments to play a larger role in setting priorities and delivering services in selected policy arenas. This can be a good thing, insofar as it permits choices about public resources to become better aligned with locally defined preferences – the classic justification for greater decentralization. It can also lead to problems in terms of fiscal imbalances or gaps in the provision of critical public services in the event that municipalities lack adequate institutional capacity.

5.2 The 1987 Constitution marked a key point of departure, enshrining for the first time the principle of “municipal autonomy” in Nicaragua. Since that time, and particularly since 1995, the government has undertaken a number of legislative and regulatory measures to expand the authority and capacity of municipal governments. Generally, however, those government actions have been *ad hoc* and piecemeal. They have not been part of a well-articulated strategy providing a road map for the decentralization process.

5.3 Presently, the country faces several challenges – financial, political and administrative – concerning the respective roles and capacities of the central government and municipalities. To move the decentralization process forward, there is rough agreement among many government officials and external observers that an authoritative decentralization strategy document is needed, with entry points, a sequence of action steps, and responsible actors plainly specified, all consistent with a clear description of the aims of the decentralization process in Nicaragua. Several issues will have to be balanced in devising and implementing such a program. These include the need for a common set of rules versus recognition of sharply divergent municipal conditions, the need for capacity building vs. the ability to realize it, and the appropriate balance between central government directives and municipal autonomy. Most importantly, steps must be taken to maintain the nation’s overall fiscal balance in the face of growing budget allocations to municipalities.

5.4 This Chapter seeks to contribute to that broader discussion by identifying specific problems, explaining them, and then arguing that the solutions lie in certain directions. It does not pretend to offer single, first-best technical solutions, as effective solutions in this area demand a modicum of political consensus, and until the nature of that consensus becomes clear, various alternative approaches are viable.

5.5 The chapter is organized in six sections: the first recounts key steps in the decentralization process since 1987, particularly as those relate to the assignment of roles and resources. Next, the budget transfer rules from central to municipal governments are discussed in detail, followed by an analysis of municipal expenditures. Then, the accountability mechanisms for municipal expenditures are scrutinized. Having described Nicaragua’s decentralization arrangements, the next section highlights key fiscal imbalances that undermine

the present system, and current efforts underway to remedy those shortcomings. The chapter concludes with recommendations and potential areas of World Bank support.

A. Municipal Government Roles & Assigned Revenues (1987-2006)

Municipal Roles

5.6 Nicaragua’s 1987 Constitution declared the importance of municipal autonomy and founded municipal governments elected via universal suffrage.⁸⁴ Regarding their competencies, Article 177 set out the broad principle that municipal governments are responsible (“*tienen competencia*”) for matters relating to the socio-economic development of their territory. The following year the National Assembly attempted to give legal effect to that provision by defining municipal government responsibilities in a Municipalities Law (Law N° 40).

5.7 Gomez Sabaini and Geffner (2006) observe that the roles named in the Municipalities Law, including revisions in 1997 (Law N° 261), can usefully be arranged in three categories: service provision, regulatory functions, and promotion activities (see Table 5.1).⁸⁵ In addition, municipal competencies are one of three types: exclusive to municipal government (“*competencias propias*”), concurrent with the national government (“*concurrentes*”), or delegated roles (“*delegados*”) which the national government transfers to municipalities, along with resources for their execution.

Table 5.1 Areas of Municipal Responsibility

Service provision	Regulatory functions	Promotional activities
Garbage collection and solid waste disposal	Hygiene and sanitation	Construction and maintenance of health centers
Water, sewage and electricity	Public transportation, transport terminals	Emergency response committees
Drainage	Cattle brands, transport routes	Hygiene and preventive health campaigns
Markets, public washing facilities	Cemeteries	Culture, sports and recreation
Public ornamentation and displays	Land use, urban and rural development planning, compliance with construction regulations	Tourism
Construct and maintain streets, sidewalks, parks and plazas	Environment and natural resources	Human rights
Municipal roads and bridges	River ports	
Street signs and signals	Civil registry	

Note: This Table includes the most prominent responsibilities, but is not exhaustive.

Source: Sabaini and Geffner (2006), from Municipalities Law N° 40/261.

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84. The 1987 Ley de Autonomía de las Regiones de la Costa Atlántica established the Autonomous Regions of the Atlantic North (RAAN) and Atlantic South (RAAS) as an intermediate level of government. (For administrative purposes, the national territory is divided into 15 departments.) The first local government elections took place in 1996.

85. Law N° 261 (1997), “Reformas e Incorporaciones a la Ley 40 de Municipios,” in Art. 7 lists a series of competencias. See also Decree N° 52–97 and Decree N° 34–2000.

5.8 Unfortunately, Law N° 40 and its revisions do not provide a plain, unambiguous statement of the roles and related expenditure responsibilities of different levels of government. Rather, they leave ample room for differing interpretations regarding what the discharge of each “competency” entails. (What does it mean for municipal governments to “promote” health centers?) In addition, there are several sectors where the responsibilities of municipal governments, line ministries and autonomous agencies overlap in confusing ways. In the roads sector, for instance, the tasks assigned to municipal governments readily overlap with national projects and/or the activities of foreign donor agencies. Verkooijen (2006) refers to conversations with officials of the Nicaraguan Institute for Municipal Development (*Instituto Nicaragüense de Fomento Municipal* – INIFOM) in which these officials themselves expressed a sense of confusion regarding exactly what each municipality is meant to do. At times those ambiguities have led to inaction, while at other times they produce an inefficient duplication of efforts as municipal officials press claims for resources to fulfill the same responsibilities that other public sector actors are engaged in.⁸⁶

5.9 As government officials and other interested parties in Nicaragua consider reassigning roles between levels of government, there are certain decentralization principles that need to be taken into account. “Assignment of public services to local or regional governments can be based on considerations such as economies of scale, economies of scope (appropriate bundling of public services to improve efficiency through information and coordination economies and enhanced accountability through voter participation and cost recovery), cost-benefit spillovers, proximity to beneficiaries, consumer preferences, and flexibility in budgetary choices on composition of public spending.”⁸⁷ More broadly, the principle of subsidiarity provides a common standard: roles should be assigned to the lowest level of government consistent with the geographic area that internalizes the benefits and costs of decision making for a particular public service.⁸⁸

Municipal Revenues

5.10 The 1995 constitutional reforms built on the principle of local government autonomy, mandating that the central government assign sufficient national budget resources for Nicaragua’s municipalities to develop their competencies. Also, in recognition of the inherent differences in resource endowments across municipalities, Nicaragua’s poorer municipalities are to receive a disproportionate share of the overall budget transfer. The constitutional changes did not specify, however, an amount or share of the budget that should be transferred.

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86. Shared and sometimes overlapping roles between organizations or levels of government are commonplace throughout the world. Yet, where resources are desperately scarce, as in Nicaragua, there is a greater need to minimize these overlaps – and the potential confusion they provoke. The analyses of Verkooijen (2006) and Sabaini Geffner (2006) each highlight the inefficiencies and confusion between government actors that the existing legislation enables in Nicaragua.

87. Jennie Litvack and Jessica Seddon, eds., “Decentralization Briefing Notes.” WBI Working Papers. World Bank Institute, p. 20.

88. For further discussion of factors that should be weighed in considering the appropriate assignment of public functions, see http://www1.worldbank.org/wbiop/decentralization/module1/topic01_printer.htm.

5.11 “Municipal autonomy” in Nicaragua does not include authority to enact local taxes or set rates. These are solely determined by the central government.⁸⁹ On the heels of the 1995 constitutional reform, the central government assigned to municipalities the right to collect (and retain) the property tax (*Impuesto de Bienes Inmuebles – IBI*).⁹⁰ Two years later, the Aleman Administration (1996-2001) expanded the tax base for the Municipal Income Tax (*Impuesto Municipal sobre Ingresos – IMI*), but the IMI tax rate was reduced from 2.0 percent to 1.5 percent as of January 1998, and to 1.0 percent from January 2000.⁹¹

5.12 The IBI and IMI – as well as lesser revenues from municipal services and licensing fees – provide a basis for municipalities to generate their own revenues. However, neither the original Municipalities Law nor its 1997 version assigned resources to municipalities. Only in the aftermath of Hurricane Mitch in 1998 were funds totaling just less than 1 percent of the national budget transferred to municipalities for reconstruction works. The 1995 promise of a budget transfer – sufficient for municipal governments to exercise their assigned faculties – remained unrealized.

5.13 The watershed moment for municipal finances in Nicaragua occurred in 2003 when the National Assembly approved (and President Bolaños signed) the Budget Transfers to Municipalities Law (BTML).⁹² Beginning in 2004, 4 percent of the central government revenue anticipated in the annual budget law would be transferred to municipalities. The Law further stipulated that the share of tax revenues to be transferred would increase by at least 0.5 percent per annum (provided GDP increased by at least 1%), and reach 10 percent of revenues in 2010. For the first time, Nicaragua’s municipalities were assigned a sizeable and relatively stable flow of resources. (Notably, however, municipal governments themselves are not responsible for generating these resources locally.)

5.14 For the central government the fiscal implications of the BTML were alarming from the start. The Bolaños Administration (2002-2006) agreed with the World Bank and IMF to “neutralize” the fiscal effect of the transfers by making equivalent cuts in spending elsewhere in the national budget. However, in October 2004, the National Assembly revised the timetable and amounts set forth in the BTML: the transfer was to be 6 percent of national revenues in 2005 and 2006, and then rise directly to 10 percent from 2007 onward.⁹³

5.15 In November 2005, President Bolaños proposed legislation to freeze transfers at 6 percent of national tax revenues, arguing that the responsibilities residing with municipal governments did not justify additional resources. The ensuing political contest between the President and the legislature resulted in the transfer rule in effect today: transfers are to increase by 1 percent per annum until reaching 10 percent in 2010.⁹⁴

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89. Articles 115 and 138 of the Constitution declare that the creation of taxes (“tributos”) and approval of user fees (contained in the Planes de Arbitrio) is an exclusive authority of the legislative branch. Likewise, Law N° 376 (article 11) prohibits under any circumstances the creation of new municipal tax.

90. Decreto 3-95, La Gaceta N° 21 del 31 Enero 1995. The IBI is 1% of the property tax base, which is 80% of the market value or the value in the property registry.

91. Law N° 257

92. Ley de Transferencias Presupuestarias a los Municipios de Nicaragua (N° 466), La Gaceta N° 157, Agosto 2003.

93. Law N° 504 (2004)

94. Law N° 571 repealed Law N° 504 and reformed Law N° 466 (Art. 5).

B. The Budget Transfer Formula and Municipal Own-Revenues

5.16 The BTML defines the rules for the distribution of national revenues among Nicaragua's municipalities. Of the total resources for distribution, the Municipality of Managua is a case apart, receiving a fixed 2.5 percent of the total. For the remaining 97.5 percent, the allocation is determined by four factors. Two of these factors refer to the condition of the municipality (population and fiscal equity). The remaining two are measures of municipal government performance (efficiency in tax collection, and budget execution of the transfer from the previous year).⁹⁵ The four criteria are described in greater detail below. Each receives an equal weight in calculating the overall transfer award.

- **Population** (25 percent). A per capita amount is transferred to each municipality in accord with its population, as determined by the National Statistics and Census Institute (INEC).
- **Fiscal Equity** (25 percent). The potential tax income of each municipality is estimated. Next, that per-capita potential is compared to the national per capita average. Municipalities below the national average are to be awarded an amount to bring them up to the national average, thereby "leveling the playing field" between municipalities. (In practice, the transfer exceeds what is required simply for equalization because of the 25 percent weighting.)⁹⁶
- **Tax collection efficiency** (25 percent). This performance measure compares the amount that each municipality collects in property tax (IBI) against its potential IBI, as suggested by the municipal tax base. (For municipalities in the Atlantic Regions a complement of taxes is assessed rather than the IBI, given that large land holdings by communal Indian groups severely limit the revenue-generating potential of the IBI in these regions.)
- **Execution of transfers** (25 percent). This indicator is measured as the share of the previous year's transfer that was executed (spent) on budget-approved projects or activities.

5.17 Transfers to municipalities in 2003 (prior to the BTML) totaled C\$156 million. The estimate for 2007 is C\$1,278 million, an increase of 719 percent since 2003. Two factors explain this growth. First, the revenue share allocated to municipalities has increased from 4 percent to 7 percent in accordance with the schedule approved in the BTML. Second, central government tax revenues have grown over this period (see Table 5.2). Tax revenues as a share of GDP increased in Nicaragua by more than 3.5 percentage points from 2001 to 2004, reaching 16.9 percent of GDP.⁹⁷

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95. If actual central government revenues exceed (or fail to meet) projections, then the Ministry of Finance (Ministerio de Hacienda y Crédito Público – MHCP) must increase (or reduce) the transfer amount assigned to each municipality in the course of budget execution.

96. Lacayo (2006) calculates that in 2006 the amount of money required to bring all municipalities to the national average was equal to 11 percent of the total amount for distribution in transfers under Law N° 466. However, the distribution formula assigns 25 percent of the total to this criterion. This result appears to disadvantage municipalities that are only slightly above the national average.

97. International Monetary Fund (2006)

Table 5.2 Evolution of Central Government Transfers to Municipalities, 2003-2007

Year	Central Government Income (millions of Córdoba)	Increase in Income relative to 2003 (%)	Share of Income Transferred to Munic. (%)	Total Munic. Transfers (millions of Córdoba)	Total Transfers if Income were 2003 (millions of Córdoba)	Transfers attributable to increase in share of Income Transferred (millions of Córdoba)
2003	9,378.30	--	1.7	156.00	156.00	0.00
2004	11,206.30	19.5	4.0	448.25	375.13	73.12
2005	13,505.00	44.0	6.0	810.30	562.70	247.60
2006 ^a	16,020.70	70.8	6.0	961.20	562.70	398.50
2007 ^b	18,257.10	94.7	7.0	1,278.00	656.48	621.52

Note: a/ Budgeted; b/ Projected

Source: Moncada (2006), compiled with data from PGR and INIFOM.

5.18 How important is the budget transfer as a source of municipal government revenues? In addition to this transfer, municipal current revenues include the IMI, IBI, and municipal service fees and licensing fees.⁹⁸ In 2005, the transfers mandated by the BTML accounted for only 12 percent of total municipal current revenues (see Table 5.3). Have the growing budget transfers curbed own-revenue collection by municipal governments? This does not appear to be the case.⁹⁹ Since 2004 when the BTML came into effect, municipal own-revenue collection has increased each year. The cumulative increase in own current revenues from 2004 to 2006 was 90 percent.¹⁰⁰

Table 5.3 Composition of Total Municipal Current Revenues, 2005

Category	Percent of total
Municipal income tax (IMI) (sales and services)	46%
Property tax (IBI)	13%
Transfers Law	12%
Municipal service fees	11%
Licenses and school fees	9%
Other	9%
Total	100%

Source: Compiled by author from data presented in Moncada (2006); calculated from INIFOM and MHCP data.

5.19 These aggregate statistics mask important differences, however, between the dozen largest municipalities in Nicaragua and the rest. The Municipality of Managua alone accounts for more than half of total own-source municipal revenues. Thus, while transfers represented only 12 percent of total municipal revenues in 2005, for 30 municipalities the transfers that year accounted for more than 50 percent of revenues.¹⁰¹ Once Managua is excluded, overall statistics

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98. Examples of service fees include registration of cattle brands, building permits, market rents, civil registration fees, garbage collection and street cleaning.

99. The existing evidence is insufficient to support a firm conclusion, as it would be necessary to estimate the counterfactual: How much own-revenue would municipal governments have collected in the absence of the budget transfers from central government?

100. Moncada (2006), calculated with data from INIFOM and MHCP.

101. INIFOM (2004)

reveal a growing municipal financial dependence on central government budget transfers. As Table 5.4 shows, these transfers as a share of municipal current revenues (excluding Managua) grew from 32 percent in 2003 to 108 percent (projected for 2007).

Table 5.4 Municipal Current Revenue and Budget Transfers, 2003-2007 (excluding Managua)

Year	Municipal Current Revenue, excluding Managua (millions of Córdoba)	Budget Transfers, excluding Managua (millions of Córdoba)	B/A
	A	B	
2003	490.1	156.0	32
2004	575.5	387.7	67
2005	717.9	770.3	107
2006 ^a	1,063.7	913.8	86
2007 ^b	1,127.5	1,214.9	108

Note: a/ Budget; b/ Projection

Source: Moncada (2006), compiled with data from PGR and INIFOM.

C. Municipal Expenditures

5.20 The share of total public expenditure budgeted and executed by subnational government is one important measure of decentralization. By that metric, as Table 5.5 shows, decentralization clearly has advanced in Nicaragua: the share of total public expenditure by municipalities has grown from 8 percent in 2003 to 14 percent in 2006. As a share of capital expenditure, the increase has been even more dramatic: from 13 percent to 22 percent over the same period.

5.21 The allocation of municipal revenues between recurrent and capital expenditures is controlled by the central government. The Municipal Budget Law¹⁰²

Table 5.5 Share of Municipal Expenditure in Total Public Expenditure, 2003-2006

Expenditure	2003	2004	2005	2006
Recurrent	5	7	8	8
Capital	13	14	15	22
Total	8	10	11	14

Source: Moncada (2006), from INIFOM and MHCP.

establishes eight separate municipal categories (A-H) in accordance with their annual own current revenue. The greater a municipality's own revenue, the greater the share of its budget transfer that must be assigned to investment expenditure (see Table 5.6).

5.22 Municipalities can use capital transfers as counterpart funding for investment projects or for training public sector personnel. However, capital transfers cannot be allocated to recurrent expenditures. Nor can annual transfers be used as a contractual guarantee for payment or for financial investments. Overall, the share of transfers devoted to capital expenditure (according to approved municipal budgets) grew from 72 percent in 2004 to 75 percent in 2006 (see Table 5.7).

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102. Law N° 376 (2001), modified by Law N° 444 (2002).

Table 5.6 Current Revenues, Municipal Categories & Budget Allocation Rules

Category	Criteria: Current Annual Revenue (in córdobas)	Assignment of transfer funds		Min. investment as % of total revenue
		Investment (min.)	Recurrent (max.)	
A	≥ 50,000,000 (Municipality of Managua)	90	10	40
B	> 10,000,000 & ≤ 50,000,000	80	20	30
C	> 6,000,000 & ≤ 10,000,000	80	20	20
D	> 2,500,000 & ≤ 6,000,000	80	20	20
E	> 1,000,000 & ≤ 2,500,000	70	30	10
F	> 750,000 & ≤ 1,000,000	70	30	10
G	> 400,000 & ≤ 750,000	60	40	10
H	≤ 400,000	60	40	10

Source: Ley del Régimen Presupuestario Municipal.

Table 5.7 Allocation of Transfers according to Municipal Approved Budgets

	2004		2005		2006	
	millions US\$	%	millions US\$	%	millions US\$	%
Capital	18.45	71.9	38.64	75.1	40.58	74.8
Recurrent	7.20	28.1	12.82	24.9	13.68	25.2
Total	25.65	100.0	51.46	100.0	54.26	100.0

Source: Verkooijen (2006); based on TRANSMUNI data.

Table 5.8 Utilization of Budget Transfer According to Municipal Approved Capital Budgets, 2004-2006

	2004		2005		2006		Rank in 2004 & (2006)*
	millions of C\$	% of total transfer	millions of C\$	% of total transfer	millions of C\$	% of total transfer	
Streets, bridges, pedestrian lanes, rural roads & highways	177.09	60.4%	331.31	51.8%	380.19	54.1%	1 (1)
Sports, comm./cultural ctrs	32.64	11.1%	50.35	7.9%	63.41	9.0%	2 (2)
Markets	7.19	2.5%	18.45	2.9%	52.09	7.4%	9 (3)
Water and sanitation	8.17	2.8%	28.31	4.4%	33.37	4.8%	7 (4)
Rural Electrification & Lighting	6.43	2.2%	11.37	1.8%	33.01	4.7%	10 (5)
Housing	8.49	2.9%	31.13	4.9%	24.06	3.4%	6 (6)
Municipal Strengthening	9.42	3.2%	37.52	5.9%	17.31	2.5%	5 (7)
Drainage	4.32	1.5%	7.19	1.1%	15.88	2.3%	11 (8)
Municipal Offices	10.06	3.4%	16.18	2.5%	13.25	1.9%	4 (9)
Machinery and equipment	1.20	0.4%	55.15	8.6%	11.60	1.7%	14 (10)
Latrines	11.45	3.9%	8.80	1.4%	9.74	1.4%	13 (11)
Security	0.11	0.0%	0.51	0.1%	9.39	1.3%	16 (12)
Health posts and centers	0.18	0.1%	2.86	0.5%	4.51	0.6%	17 (13)
Education	3.98	1.4%	17.59	2.8%	3.90	0.6%	13 (14)
Cemeteries	7.48	2.6%	4.86	0.8%	0.78	0.1%	8 (15)
Telecommunications	0.61	0.2%	0.81	0.1%	0.38	0.1%	15 (16)
Environment and agriculture	3.11	1.1%	4.59	0.7%	0.36	0.1%	12 (17)
Other	1.23	0.4%	2.21	0.4%	6.86	1.0%	n/a
Insufficient Information	0.16	0.1%	9.37	1.5%	22.08	3.1%	n/a
Total	293.32	100%	638.56	100%	702.17	100%	

Note: * Rankings added by the author.

Source: Verkooijen (2006); based on TRANSMUNI data.

5.23 Article 12 of the Budget Transfers Law states that transfers “preferentially” should be used to fulfill the municipal competencies listed in Article 7 of the Municipalities Law (see Table 5.1 above). That instruction affords considerable latitude to municipal governments. In practice, as Table 5.8 shows, building and/or maintenance of roads, highways, and related infrastructure consistently absorb over half of the capital transfer. This expenditure category is five times larger than any other. Meanwhile, water and sanitation expenditure – a typical local government responsibility – accounts for less than 5 percent of the transfer.

5.24 As for recurrent expenditures, the largest cost item, as anticipated, is personnel. According to data from the Nicaraguan Institute for Municipal Development (*Instituto Nicaragüense de Fomento Municipal – INIFOM*), in 2004 wages and salaries accounted for approximately 60 percent of recurrent expenditures (see Table 5.9). Meanwhile, Moncada (2006) calculates that for 2004-2006 the wage bill as a share of recurrent expenditure was roughly 70 percent. There is worrisome evidence that local government employment may have increased by more than a third between 2000 and 2005.¹⁰³ However, the fiscal impact is not entirely clear. Wages and salaries as a share of recurrent transfers evidently have not increased from 2004-2006.¹⁰⁴

Table 5.9 Municipal Expenditures by Category, 2004

	A	B	C	D	E	F	G	H	Total
	(millions of córdobas)								
Total expenditure	821.4	629.7	171.0	284.1	415.8	112.7	85.2	71.2	2,591.1
Current expenditure	338.1	244.7	85.0	107.0	118.6	33.3	28.8	23.2	978.8
Wages & salaries	176.2	160.7	53.9	61.0	70.9	19.6	16.1	14.9	573.3
Products & services	106.2	60.5	18.9	29.9	29.9	9.3	7.1	5.4	267.3
Transfers & donatn.	55.7	3.9	1.3	3.3	2.7	0.6	0.8	0.4	68.7
Other	0.0	19.6	11.0	12.9	15.1	3.7	4.8	2.5	69.5
Capital Expenditure	43.3	385.0	86.0	177.0	297.1	79.4	56.4	48.0	1,612.3
Physical investment	329.0	353.9	79.8	166.0	268.6	73.3	53.5	40.0	1,364.1
Social investments	0.0	30.1	6.0	10.2	18.3	6.0	2.5	3.1	76.3
Other	154.3	1.0	0.1	0.9	10.2	0.0	0.4	4.9	171.9

Source: Sabaini and Geffner (2006), based on INIFOM data.

D. Accountability for Public Expenditure

5.25 A number of reporting requirements are embedded in the nationally-defined rules for municipal transfers and budget formulation and execution. Mayors and municipal councils are obliged by the BTML, as well as the Municipal Budget Law, to report on their annual budget execution to the Ministry of Finance and Public Credit (*Ministerio de Hacienda y Crédito Público – MHCP*) and the *Contraloría General de la República (CGR)*, as well as to INIFOM. Submission of these reports is a precondition for a municipality to receive a budget transfer for the subsequent year. Article 10 of the BTML stipulates that by February 15 of each year municipal governments must send the following documents to the MHCP:

- a) Municipal budget, approved by the Municipal Council
- b) Execution of the previous year’s budget

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103. Gil-Díaz (2006), section IV.

104. Moncada (2006)

- c) Physical and financial execution of the PIM
- d) Plan for use of the coming year's financial transfer
- e) Documentation of special bank account that will be used to administer the transfer
- f) Verification from the Municipal Council that the projects to be financed by the transfers are part of the PIM, delivered to the National System of Public Investment (*Sistema Nacional de Inversión Pública – SNIP*), and duly approved and included in the Municipal Budget.

5.26 Recurrent transfers are transmitted to municipalities in monthly installments. Following the first two transfers, municipal governments must report on their budget execution of the previous trimester, demonstrating execution of at least 65 percent of those transfers.

5.27 Capital expenditure transfers are allocated in three annual installments (40 percent, 40 percent and 20 percent) at the end of March, June and September, respectively. Each transfer is contingent, however, on the municipal government submitting to the MHCP a physical-financial report concerning the projects executed during the previous term.

5.28 From this analysis, it is evident that shortcomings in financial accountability result not from a dearth of reporting requirements, but rather from weak data systems and accounting practices. The vast majority of municipalities maintain only cash flow accounting. Most use a schedule of accounts (*plan de cuentas*) different from that of the central government. Frequently the categorization of expenditure is undisciplined – often with recurrent expenditures classified as capital outlays.¹⁰⁵ And external audits are not regularly conducted. Plus, there are a myriad of financial management data systems in use at the municipal level in Nicaragua. A USAID study identified at least nine.¹⁰⁶

5.29 At present there is no detailed accounting of municipal debt. Yet analysis of a sample of municipalities conducted in 2006 revealed that these debts are significant. In 2006 the municipal debt owed to the Nicaragua Social Security Institute (*Instituto Nacional de Seguridad Social – INSS*) alone was equal to roughly 16 percent of the total transfers under the Budget Transfers Law (see Table 5.10).¹⁰⁷ A proper accounting of municipal debt should also include arrears to

Table 5.10 Municipal Debt with the INSS, By Department, as of March 31, 2006

Department	Córdobas
Boaco	355,303
Carazo	1,002,145
Chinandega	2,387,551
Chontales	200,265
Estelí	430,003
Granada	3,484,086
Jinotega	150,688
León	602,308
Madriz	171,544
Managua	138,201,456
Masaya	30,095
Matagalpa	4,973,280
Nueva Segovia	1,673,401
RAAN	1,128,947
RAAS	3,307,359
Río San Juan	293,171
Rivas	311,169
Total	158,702,771

Source: INSS

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105. Moncada (2006), analyzing 2005 accounts information from the Office of Municipal Finances and the MHCP, describes as commonplace the use of the wrong codes and missing documentation, numbers that should match and do not.

106. Casals & Associates, USAID 2004, “Módulo de Asistencia Técnica (TAM) Sistemas Integrados de Administración financiera (SIAF's) en 17 Municipios de Centroamérica.”

107. Municipalities are required by law to retain 6.25 percent from the salary of their employees and send 15 percent of their wage bill to the INSS. Many municipalities have been late in making these payments, accruing debts

suppliers and other public entities, including utilities. After estimating overall municipal debt Gil-Díaz (2006) concludes that a significant number of municipalities – though it was impossible to specify with precision, as consolidated debt is not registered by all municipalities – are effectively bankrupt.¹⁰⁸

5.30 The Fiscal Decentralization Unit, created in 2005, and the MHCP are stimulating improvements in municipal accounting and improving the tracking and transparency of municipal expenditures of budget transfers. The System of Municipal Transfers (*Sistema de Transferencias Municipales* – TRANSMUNI) registers online the use of municipal transfers in a database managed by MHCP.¹⁰⁹ The next phase, TRANSMUNI II, is presently under implementation. It is intended to incorporate full municipal budgets, consolidate accounts and link them with SIGFA to produce overall accounts on public sector expenditure. Unfortunately, tracking the quality of municipal expenditure is still a more remote goal.

E. Redressing Imbalances: Current and Proposed Reform Actions

The Struggle for Fiscal Neutrality

5.31 When expenditure responsibilities are devolved to lower levels of government, experience suggests that maintaining fiscal responsibility can be a difficult challenge. Where the costs of taxation to finance transfers are largely borne by citizens outside the municipality receiving the transfer – as in Nicaragua – the common impulse for municipal officials is to press for larger transfers, not for fiscal restraint. The MHCP, however, must be concerned with the country's overall fiscal balance.

5.32 The budget transfers mandated by the BTML obviously represent a large additional outlay for the national treasury. To avoid a dramatic fiscal shortfall, the central government has sought to reduce other budget expenditures to “neutralize” the adverse fiscal effect of the transfers. The MHCP calculates that the government has reached 97 percent of the target agreed with the World Bank and IMF for neutralizing the municipal transfers. The percentage of government taxes assigned to municipal transfers has increased since 2004 in accordance with the BTML schedule (6 percent in 2005 and 2006, and 7 percent in 2007). Meanwhile, according to the PRGF-supported program agreed with the IMF, the share of transfers that must be neutralized has grown over time (33 percent in 2005; 66 percent in 2006; and 100 percent in 2007 and succeeding years). To calculate compliance, the MHCP position is that the higher percentages for neutralizing transfers apply only to the marginal increase in the overall transfer amount from one year to the next. The lower percentages continue to apply to the transfer amounts in those respective years (see Table 5.11).

with the INSS. Gil-Díaz (2006) identifies 90 municipalities with debts owed to the INSS. However, due to data limitations the study could not identify the age of the debt.

108. The Municipal Budget Regime Law (N° 376) establishes that municipalities can contract medium and long-term debt only with their total debt service payments are less than 20 percent of their annual current revenues (Art. 21).

109. Municipalities can submit their reports either electronically through the TRANSMUNI website or they can submit a physical report that is received by the MHCP in Managua.

Table 5.11 Budget Cuts to “Neutralize” Transfers, 2004-2007

Year	Share of Income Transferred to Munic. (%)	Total Munic. Transfers (millions of córdobas)	Percent of transfer to be “neutralized” in accordance with IMF agreement (%)	MHCP interpretation of budget cuts required to “neutralize” transfers (millions of córdobas) A	Maximum interpretation of budget cuts required under IMF agreement (millions of Córdobas) B	B-A
2004	4.0	448.25	0	0.00	0.00	0.00
2005	6.0	810.30	33	267.40	267.40	0.00
2006 ^a	6.0	961.20	66	366.99	634.39	267.40
2007 ^b	7.0	1,278.00	100	683.79	1,278.00	594.21

Note: a/ Budgeted; b/ Projected

Source: Data from Table 5.2 and calculated by the author.

5.33 Where has the MHCP identified these cuts? Ideally, financial transfers to municipalities would be neutralized by transferring equivalent service responsibilities from the central government to municipalities, and then reducing the central government budget accordingly. Indeed, if the allocative efficiency of local government expenditure is truly superior to that of the central government, then entrusting local government with these expenditures will produce a higher social return. To date, however, the statutory responsibilities of municipal governments have not increased commensurately with the fiscal transfers of the BTML.¹¹⁰

5.34 From 2004 to 2006, the MHCP was roughly able to “neutralize” budget transfers to municipalities by making budget cuts to capital expenditure in those areas that most closely overlap with municipal activity. For instance, in 2005, the largest share of funds in municipal capital budgets (44 percent) arrived via transfers from other central government institutions – particularly the Emergency Social Investment Fund (*Fondo de Inversión Social de Emergencia* – FISE), INIFOM, the Rural Development Institute (*Instituto de Desarrollo Rural* – IDR), the Ministry of Environment and Natural Resources (*Ministerio Ambiental y Recursos Naturales* – MARENA), and the Ministry of Transport and Infrastructure (*Ministerio de Transportes y Infraestructura* – MTI).¹¹¹ National budget funding for these institutions has been cut significantly, and will have to be reduced still further in the years ahead as the size of the budget transfer to municipalities reaches 10 percent in 2010. Both FISE and IDR now require a degree of co-financing of investment projects with local governments, and increased municipal co-financing could reduce central government outlays while maintaining overall public investment levels – provided these projects are highly demanded by municipal governments. However, these options for reducing expenditure cannot fully neutralize the growing fiscal cost of the BTML.

5.35 MHCP officials concede that for 2008 it will be necessary to reduce expenditure at the national level through a clear definition of municipal (and national) roles. One step in this direction is the draft legislation to reform the Municipalities Law (Law N° 40). The proposed

110. The position defended by AMUNIC today is that when transfers to municipalities reach 10 percent of central government revenues that will merely be sufficient for municipal governments to satisfy the roles assigned to them in the Municipalities Law, as revised in 1997 (Law N° 40/261). There are significant ambiguities regarding the assignment of responsibilities in the Municipalities Law. However, in 2002 (the year before the Transfers Law was approved) the budget demand by municipalities for 2003 was for 4 percent of central government revenues.

111. Meanwhile, the Budget Transfer Law accounted for 41 percent of municipal capital budgets. See Moncada (2006).

revisions include sharper definitions for “exclusive,” “concurrent”, and “delegated” competencies. In addition, functional responsibilities are defined with greater precision, and are explicitly assigned to one of the three competency categories. As an illustration, the revised text covering municipal responsibility for electricity provision, in the section on “*competencias propias*,” would read:

Design and construct electrical distribution grids, provided the cost of construction, repair, or extension is not greater than four years of projected budget transfers to the municipality.¹¹²

As of June 2007, this legislation has not yet been presented to the National Assembly for consideration.

5.36 A more powerful step to achieve fiscal neutrality would be to balance (growing) budget transfers with new municipal responsibilities for public service provision. However, the present draft legislation to reform the Municipal Law does not include a new assignment of responsibilities to municipal governments. The political and legislative hurdles to do so present a daunting challenge, as the Budget Transfers Law itself provides that assigning new functions to municipalities should be accompanied by an additional assignment of resources.

Simplification and Improvement of the Budget Transfers Law

5.37 The formula to calculate each municipality’s share of the overall budget transfer has four elements: population, fiscal equity, tax collection efficiency, and municipal execution of transfer funds (described in section B above). Do these factors optimize the incentives for municipal governments to deliver services effectively, with a focus on poverty reduction? Are these factors, and the means for measuring them, perceived as legitimate by local government officials? The answer to both questions appears to be a qualified “no.”

5.38 The BTML seeks to provide each municipality with sufficient resources to promote the socio-economic development of its territory. Distributing part of the transfer according to municipal population is uncontroversial, in principle. However, municipal officials have raised serious questions about the reliability of the 2005 INEC census data. Among a group of 30 mayors surveyed by INIFOM, nearly half took issue with the population data.¹¹³

5.39 Municipalities with less income potential receive a disproportionate share of the national transfer; but the distribution formula does not include a measure of poverty. In practice, the “fiscal equity” criterion is a partial proxy for poverty. Yet it is very difficult to measure. INIFOM contracted with the Boston Institute of Developing Economies to develop a Model for Determining the Municipal Tax Potential (*Modelo de Determinación del Potencial Tributario Municipal* – MDPTM). The resulting MDPTM includes socio-economic, labor, and fiscal modules, demanding detailed data on changes in population, labor force, labor migration, as well as municipal revenues and expenditures. However, consultants quickly encountered data

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112. Diseñar y construir redes de distribución de energía eléctrica, siempre y cuando el costo de la construcción, reparación o ampliación de estas no sea mayor al monto proyectado equivalente a cuatro años de transferencias presupuestarias que percibe el Municipio.

113. INIFOM. Informe Final sobre Experiencia y Aplicación de la Ley 466 de Transferencias Municipales en el 2004, preparado por CINASE: Centro de Investigación y Asesoría Socioeconómica, Bajo contrato UNCDF-GTZ, versión Junio 2005.

limitations when attempting to apply this methodology, and thus a simplified methodology has been applied to date.¹¹⁴ Still, the complexity of measuring Municipal Tax Potential is nearly impenetrable to all but those who apply the formula, leading a perception among some mayors that the “fiscal equity” criterion is unjust.¹¹⁵

5.40 In contrast, the budget execution criterion is simple to measure. However, the incentive this factor creates is troublesome from a poverty-reduction perspective. The measure captures only whether or not money is spent. Neither this indicator nor any other in the distribution formula addresses *what the money buys* or the *quality* of that expenditure. It is often difficult (and relatively expensive) to measure the *quality* of expenditure. However, it is important to avoid creating an incentive that prompts municipalities to spend badly in the interest of spending quickly – thereby ensuring the maximum possible transfer in the following year for “budget execution.”¹¹⁶

5.41 In practice, almost all municipalities are receiving roughly the same amount for “budget execution,” whether they have greater resource endowments and capacity (i.e., municipalities in categories B & C) or are among the least developed in the country (i.e., categories G & H). In 2007, the standard deviation of the monetary award for “budget execution” to Nicaragua’s 152 municipalities (excluding Managua) is 0.20, by far the smallest standard deviation of the four factors in the distribution formula (see Annex A).

5.42 Like the budget execution measure, tax collection efficiency is a criterion included in the distribution formula to spur improved government performance. In 2005, IBI collections were 13 percent of total municipal revenues (see Table 5.3 above). Yet the potential revenues from this tax are much higher, comparable to the revenues earned from the IMI (46 percent of current revenues in 2005). During field visits conducted in 2005 for a donor-financed study on the effectiveness of General Budget Support to Nicaragua, municipal leaders freely admitted that there was a gross under-registration of landholdings (Gasparini, et. al. 2006). Several municipalities visited by the research team did not collect any rural property tax.

5.43 Given this broad-based underperformance in collecting local taxes, encouraging improved IBI collection is certainly a worthwhile objective. Additionally, increasing the weight of a tax collection indicator within the distribution formula could demonstrate to local citizens how their payment of taxes draws additional resources to the municipality. There are, however, important concerns about the specific design and consequences of this indicator that need to be addressed. In 2005, nearly half of the 30 mayors surveyed by INIFOM

Table 5.12 Allocations for “Tax Collection Efficiency,” 2007

Municipality Group	Group Average (millions of córdobas)
B	2.18
C	2.93
D	2.62
E	2.16
F	1.89
G	1.16
H	0.91

Source: Own calculations using 2007 budget proposal data; Annex XX.

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114. Jirón Z. (2005).

115. INIFOM. Informe Final sobre Experiencia y Aplicación de la Ley 466 de Transferencias Municipales en el 2004, preparado por CINASE: Centro de Investigación y Asesoría Socioeconómica, Bajo contrato UNCDF-GTZ, versión Junio 2005.

116. The budget execution indicator may disadvantage those municipalities with the least capacity to execute expenditures well, which is to say the poorest municipalities.

criticized the measure of tax collection efficiency, criticizing the quality of the data in the taxable property registry.¹¹⁷ Moreover, as applied in 2007, this distribution factor rewards relatively well-off municipalities more than it does Nicaragua's poorer ones. In descending order from municipal category C through H, municipal governments receive progressively less, on average, for "tax collection efficiency" (see Table 5.12). What accounts for this outcome? Is it the (lesser) capacity of the smaller municipal governments? How can the tax registries be improved? Further analysis is needed to determine steps appropriate to redress this outcome.

5.44 The BTML established an institutional mechanism to consider improvements to the allocation formula. Article 14 states that a Budget Transfers Commission (*Comisión de Transferencias Municipales* – CTM) should revisit the formula every two years. The CTM is composed of five voting members:

- 1) President of INIFOM
- 2) President of the Association of Municipalities of Nicaragua (*Asociación de Municipios de Nicaragua* – AMUNIC)
- 3) President of the Municipal Association of the Caribbean Coast (*Asociación de Municipios de la Costa Caribe* – AMURACAN)
- 4) SNIP Director
- 5) President of the National Assembly's Municipal Affairs Commission.

In addition to these voting members, a CGR delegate sits on the CTM, and all meetings of the Commission must be attended by a delegate of the MHCP.

Addressing Institutional Capacity

5.45 The growing share of municipal government expenditure within the public sector (see Table 5.5 above) raises the stakes for improving the capacity of municipal institutions, particularly in accounting and audit. The Nicaraguan Institute for Municipal Development (INIFOM) was established in the early 1990s to provide technical assistance support to municipalities, including for accounting systems.¹¹⁸ However, INIFOM was charged with a diverse mandate, including support for citizen participation, harmonizing actions by other state institutions and coordinating development projects with external cooperation. INIFOM also got involved in project financing. Moving forward, it may be important for INIFOM to refocus its limited resources on a more narrow set of priorities. Budget and tax administration would be good candidates for intensive support to municipalities.

5.46 Nicaragua's Fiscal Decentralization Unit plays an important and growing role in tracking municipal expenditures and supporting municipal governments to improve their accounting practices. With the MHCP, the Fiscal Decentralization Unit has implemented TRANSMUNI, an internet-based database that represents an important advance in accounting for municipal expenditures with national government transfers. TRANSMUNI II represents an additional

117. INIFOM. Informe Final sobre Experiencia y Aplicación de la Ley 466 de Transferencias Municipales en el 2004, preparado por CINASE: Centro de Investigación y Asesoría Socioeconómica, Bajo contrato UNCDF-GTZ, versión Junio 2005.

118. Ley 347; Instituto Nicaragüense de Fomento Municipal.

advance to organize comprehensive data on municipal budgets, and allow for national consolidation of accounts. To institutionalize and strengthen the role of the Fiscal Decentralization Unit it would be worthwhile to consider linking this Unit organically to the MHCP as a Directorate.

Municipal debt

5.47 Additional analysis is needed to quantify municipal debts and diagnose their sources. To contain any increase in debt obligations the proposed reform to the Municipalities Law is a useful step, as the changes would also assert greater control over municipal debt. For example, Article 82 of the revised law would read:

- All public credit operations of short, medium, and long term that the Municipal Government wishes to undertake shall comply with the norms, procedures and requirements established in Law N° 477 ... and its regulations... Accordingly, in general, the procedures for contracting debt shall be the following:
 - Short-term debt shall be approved by the Municipal Council and may only finance expenditures included in the Municipal Budget of the year in which the debt is contracted.
 - Medium- and long-term debt, as well as bond issues, shall be approved by the Ministry of Finance and Public Credit and the Central Bank, in conformity with Articles 20 and 21 of the Municipal Budget Regime Law, and **shall only finance the provision of public goods that correspond to exclusive municipal functions (“competencias propias”).**¹¹⁹ (Emphasis added)

F. Concluding Considerations

5.48 Over the last ten years the polemics surrounding decentralization in Nicaragua have focused primarily on the share of national income to be transferred to municipalities. Less attention has been devoted to the appropriate roles of each level of government, or to an analysis of the local government capacity required to carry out given tasks. These issues ought to be at the forefront in designing a full-fledged decentralization strategy in Nicaragua.

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119. Toda operación de crédito público de corto, mediano y largo plazo que desee tramitar el Gobierno Municipal deberá sujetarse a las normas, procedimientos y requisitos establecidos en la Ley N° 477 “Ley General de Deuda Pública” y su Reglamento, publicados en La Gaceta, Diario Oficial N° 236 y N° 21 del 12 de diciembre de 2003 y 30 de enero de 2004, respectivamente. Por lo tanto, en lo general, los trámites para la contratación de deuda serán los siguientes:

- a. Las deudas de corto plazo serán aprobadas por el Concejo Municipal y solamente podrán financiar gastos cuyo pago esté previsto en el Presupuesto Municipal del año correspondiente al que se contratan.
- b. Las deudas de mediano y largo plazo, así como la emisión de títulos valores, de conformidad con lo preceptuado en los artículos 20 y 21 de la Ley de Régimen Presupuestario Municipal, serán aprobadas por el Ministerio de Hacienda y Crédito Público y el Banco Central y solamente podrán financiar la provisión de bienes públicos municipales de las competencias propias.

5.49 In its 2005 National Development Plan (NDP), the government pledged to design a “national strategy for decentralization linked to the broader process of institutional reform and modernization.” A year later, following a period of consultations, the government partially fulfilled that commitment by publishing “Decentralization in Action: National Decentralization Strategy for Local Development.”¹²⁰ However, that document is limited to providing a set of guiding principles and goals. It is **not** a strategic document enumerating the specific services subject to decentralization, the processes to be followed, with a timetable, detailed financing, and action steps for specific actors – including line ministries, autonomous agencies, non-governmental organizations, and municipal bodies. For the decentralization process to advance in Nicaragua, producing a strategy with all of these characteristics should be the first order of business.

5.50 Fiscal issues must be a central topic of concern in the new strategy. International experience demonstrates that without macroeconomic balance, central governments tend to cut back their transfers to municipalities, in spite of any statutory share of national income promised for distribution, though sometimes not before encountering major fiscal distress. Transfers to municipal government are increasing sharply in Nicaragua. Yet the responsibilities presently assigned to municipal government date from 1997. The fundamental challenge is to balance the accepted responsibilities of municipal governments with the funding they receive, and thereby relieve the fiscal strain on the central government treasury. The recent NDP accepts that it is necessary to review the Municipalities Law to make the transfers fiscally sustainable, assigning responsibilities for municipal expenditure equivalent to the resources transferred, thereby permitting a reduction in the National Budget for central government spending on matters that are the clear competence of municipalities.¹²¹

5.51 As Nicaraguans consider which activities should most appropriately be carried out by local government, it is critical to quantify their costs, as well as the administrative demands those roles place on central and local governments. For instance, in many decentralized government systems maintenance of physical infrastructure in education and primary health care falls to local government; but that is not presently the case in Nicaragua. How much do those activities cost? How would (revised) municipal roles fit within the sector-specific service delivery models in Nicaragua? And how complex are the administrative demands (e.g., contracting, personnel management, oversight, accounting, etc.) for carrying out any of these new mandates effectively?

5.52 Assigning roles to municipalities in Nicaragua is made more challenging by the country’s tremendous territorial diversity. Managua accounts for nearly 20 percent of the country’s population, with a population density of almost 4,000 hab/ km². Meanwhile, municipalities in Category F average fewer than 15 hab/ km². These statistics underscore the dramatically diverse demands for public services across Nicaragua’s municipalities, and their sharply different capacities. Naturally, this diversity has important implications for the technical assistance and training required to support weaker municipalities to develop their administrative, technical, and financial capacities. In addition, this diversity suggests flexible arrangements for service delivery should be considered. That flexibility is already reflected in the Municipalities

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120. “Descentralización en Acción: Estrategia Nacional de Descentralización para el Desarrollo Local (ENDDL)” and Decreto No. 45-2006: “Política Nacional de Descentralización Orientada al Desarrollo Local” (julio 2006).

121. The Joint Financing Arrangement of the donor-supported Partnership for General Budget Support also requires the executive to ensure fiscal neutrality by transferring new expenditure responsibilities to local government in line with the increase in the volume of fiscal transfers to municipalities.

Law, but is underutilized. Law N° 40 (Art. 9) provides that Municipal governments may contract with other government actors to provide services assigned to municipalities; and they may celebrate contracts or sign concessions to carry out services, while continuing their normative and oversight rolls.¹²²

5.53 A commonly-accepted argument for decentralization is that by shifting the locus for government decision making closer to citizens, choices about the use of public resources will be better aligned with locally-defined preferences. In moving the decentralization agenda forward, a process of consultation and dialogue with mayors, AMUNIC, and civil society organizations will be critical to encourage a consensus around a vision for municipal governments as key protagonists in Nicaragua's development. Decentralization can encourage citizen-centered development that includes concerted efforts to ameliorate poverty.¹²³

5.54 There are several areas where the World Bank and bi-lateral donors may be able to provide support for Nicaragua's ongoing decentralization process, should the government consider that support opportune. These areas include: (i) sharing international experience as the Ortega administration considers a detailed decentralization program, and comparative advantage of each level of government; (ii) carrying out costing exercises for specific competencies; (iii) benchmarking of municipal capacities; and (iv) supporting programs to enhance the capability of municipal governments to record, control and evaluate their expenditures.

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122. Law N° 40 (Article 9): En el ejercicio de su competencia, los Municipios podrán:

- a) Contratar con otras instituciones del Estado la prestación de servicios que por su naturaleza puedan ser realizados por ellas de una mejor forma, observando su correcta ejecución;
- b) Celebrar contratos u otorgar concesiones previa licitación con personas naturales o jurídicas, de carácter privado, para la ejecución de funciones o administración de establecimientos o bienes que posea a cualquier título, sin menoscabo de ejercer sus facultades normativas y de control. En ambos casos, los contratos y concesiones deberán ser otorgados de conformidad con la Ley de Contrataciones del Estado, Municipalidades y Entes Descentralizados, ser ratificados por el Concejo Municipal y asegurar la calidad y equidad en la prestación del servicio.

123. Gasparini et. al. (2006) found there was no strong desire among the municipal officials they interviewed to assume new responsibilities in key sectors – such as basic education and primary health care – that can have the greatest impact on poverty reduction.

CHAPTER VI IMPROVING GOVERNANCE THROUGH PUBLIC EXPENDITURE MANAGEMENT REFORM

6.1 This chapter assesses the overall performance of public financial management (PFM) institutions and systems in Nicaragua, based on an international framework of reference. It begins with an overview of the legal and institutional framework for public financial management in Nicaragua, and concludes with a review of the progress made since 2004 in modernizing the PFM systems and discussion of the most important shortcomings that remain.

A. The Legal and Institutional Framework of Public Financial Management

6.2 The legal instruments of public financial management are set forth primarily in the laws and regulations listed in Box 6.1. The legal framework was strengthened in a significant manner when the Financial Management and Budget Regime Law (Law 550 of August of 2005, as amended) came into effect. Law 550 governs the PFM system and procedures related to the formulation, approval, implementation, control, evaluation and execution of the PGR and of the budgets of the public sector entities.

Box 6.1 Main Laws and Regulations of Public Financial Management

The Political Constitution of 1987 (amended in 1995 and in 2000), in its Articles 112-115, sets forth the responsibilities of the executive and legislative powers regarding the budget process and the creation of taxes. In its Articles 154-157 establishes the Office of the Controller General of the Republic as the entity that governs the control system of public administration.

- The Financial Management and Budget Regime Management Law (Law 550 of 2005, as amended by Law 565 of 2005), governs the public financial management system and national budgets.
- Each annual Law of the General Budget for the Republic (PGR) specifies the revenue and expenditure budgets (and the precise modifications that the National Assembly has included in the bill submitted by the executive power), the financing of the deficit, and some specific rules that apply to the year in question.
- The Ministry of Finance and Public Credit (MHCP) issued every year Rules and Procedures of Budget Implementation and Control, with detailed instructions for the implementing entities.
- The State's Public Contracting Law (Law 323 of 2000, as amended by Law 349 of 2000) sets forth the system of procurement and public contracts.
- The Public Debt General Law (Law 477 of 2003) regulates public indebtedness and guarantees.
- The Organic Law of the Office of the Controller General of the Republic and the Government Control System (Decree 625 of 1980, as amended by Law 361 of 2000) governs governmental audit and internal controls. The CGR issued Technical Internal Control Norms (NTCI) in 2004.
- The Law on Organization, Competencies and Procedures of the Executive Power (Law 290 of 1998) governs the organizational framework of the executive power.
- The Law on Budget Transfers to Municipalities (Law 466 of 2003) sets forth the levels and the formula of transfers from the PGR to the local governments.
- The Law on the Municipal Budget System (Law 376 of 2001) contains the budget rules for the municipalities.

6.3 Institutional framework. Pursuant to the Constitution, the President of the Republic formulates the Annual Bill of Law of the PGR, which must be submitted to the National Assembly to be discussed and approved. The Assembly can modify the Bill of Law, but cannot create any extraordinary expenditure if not by law and by means of creating and fixing the resources to finance them.¹²⁴ The Assembly must be informed of the execution of the Annual Law of the PGR.

6.4 Under the same Constitution, the budgets of autonomous and government entities and State-owned enterprises are included in the Annual Law of the PGR for information purposes. The budgets of entities decentralized by function, enterprises and financial institutions of the State, and other autonomous entities, are formulated, approved and executed according to their own laws. However, Law 550 introduced information requirements to the mentioned entities on their budgets, modifications and execution, with compliance linked to the receipt of transfers financed by the PGR.

6.5 Municipalities (the country's political administrative division basic units) enjoy political, administrative and financial autonomy. Their financial management is governed mainly by the Law on the Municipal Budget System (Law 376 of 2001), which establishes that the Mayor is responsible for drafting the Municipal Budget, and the approval thereof is entrusted to the Municipal Council. On the other hand, Law 550 sets forth information requirements similar to the other entities that do not form direct part of the PGR (see preceding paragraph).

6.6 The governing body of the country's public financial management system is the Ministry of Finance and Public Credit (MHCP), and to this end, it has four normative directorates for each of the subsystems: budget, treasury, public credit and government accounting. As such, the MHCP is in charge of implementing the financial management system in public sector institutions, formulating the budget policy and the annual laws of the PGR, preparing rules and procedures to execute and control the budget, and issuing execution reports of the PGR, amongst other responsibilities. Likewise, the MHCP governs the public procurement system.

6.7 According to Law 550, the MHCP is in charge of coordinating the annual budget formulation and the medium-term programming of public investments, with the cooperation of public sector entities and of the National Public Investment System (SNIP). The SNIP encompasses the entities, rules and procedures for the formulation, implementation and evaluation of the public investment program (PIP) and maintenance of the investment project portfolio. According to Presidential Decree 61 of 2001, the Office of the Technical Secretary to the Presidency (SETEC) is the agency in charge of management, communication and coordination of the SNIP, and to this end, it has the support of the Public Investment Unit (UIP) and an inter-institutional Investment Technical Committee (CTI).¹²⁵ SETEC is in charge of

124. As with other laws, the President has the power to veto, partially or totally, the Annual Law of the PGR approved by the Assembly, but the Assembly can reject the veto with the minimum vote of half plus one of the deputies.

125. The CTI is formed by representatives of SETEC, the Central Bank of Nicaragua (BCN), MHCP and the Secretariat of Economic Affairs and Cooperation of the Ministry of Foreign Affairs (MINREX). It has the following responsibilities: (i) to assess the consistency of projects proposed to the Budget by public institutions, against the projections on revenues and expenditures, and the anticipated availability of external resources; (ii) to ratify and/or modify the technical recommendation issued by the specialists of the UIP and submit to the consideration of SETEC the proposal of the annual and multi-annual Public Investment Program; (iii) to review reports of physical and financial monitoring of projects under implementation; and (iv) to recommend intermediate and ex post evaluations for selected groups of projects and report them to SETEC.

submitting the annual PIP to the economic cabinet and to the MHCP (to be incorporated into the PGR).

6.8 In accordance with the Constitution, the Office of the Controller General of the Republic (CGR) is the autonomous agency that governs the system to control public management and to scrutinize (*fiscalizar*) the goods and resources of the State.¹²⁶ Its scope of operation comprises all the public sector. Some of its functions are the performance of external audits (financial, compliance, operational, integral and special audits); evaluation of internal audits; establishing rules of internal control; setting liabilities (*responsabilidades*) of an administrative (due to breaches to the legal provisions) and civil (due to economic loss) nature, as well as criminal allegations; approving exceptions to mechanisms of the Public Contracting Law; and the reception and verification of asset declarations under the Integrity Law (Law 438 of 2002).

6.9 The “National System of Participation and Agreement” provides mechanisms for government, civil society, private sector and the international community dialogue to define goals and priorities of public policies, laws and strategic development plans. This system is structured in three territorial levels (municipal, departmental and national) and in four areas of governance (political-administrative, technical-executive, participation and agreement, and coordination of cooperation).¹²⁷ In connection to the subject-matter of this report, the Economic and Social Planning Council (CONPES) has particular significance within the system.

6.10 The CONPES is a consultative forum foreseen by the Constitution to support the President of the Republic in the drafting of economic and social plans. The President himself presides over the Council, which in turn is formed by representatives of civil, labor, entrepreneurial, guild, community and municipal organizations.¹²⁸ Amongst its functions, the CONPES makes recommendations on the bill of the Annual Law of the PGR, the investment process and public expenditure. It should be mentioned that the time span for the CONPES to review the budget before it is submitted to the Assembly has been very limited and, when it has made recommendations, these recommendations in general have not been implemented by the executive power or by the National Assembly.¹²⁹ The executive, in turn, has questioned the feasibility of implementing said recommendations. Even so, the existing institutional mechanism that allows for the described communications is a positive attribute of the system of participation.

6.11 *Financial Management System.* The Nicaraguan system is based on normative centralization and operational decentralization, with integration of the system components. The subsystems regulated under Law 550 are those on budget, treasury, public credit and government accounting. The “correlated systems” linked to the financial management system are those regarding contract management, civil service and administrative career, administration of goods, and the SNIP.

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126. The CGR is managed by a Superior Council of five members, elected by the National Assembly for a term of 5 years.

127. Government of the Republic of Nicaragua (2005).

128. In January of 2006, approximately 75 representatives formed the CONPES.

129. CISAS (2005).

6.12 For the purposes described, the main facilitating instrument has been the Financial Management and Auditing Integrated System (SIGFA)¹³⁰ which constitutes the information system for processing transactions of the budget cycle and all correlated factors (rules, processes, training, technological platform, reports, etc.). SIGFA enhances budget management at different levels: (i) it contributes to fiscal discipline by providing timely information on the implementation of the budget, and establishing limits to the level of expenditures, according to budget and cash programming; (ii) it increases operational efficiency by streamlining and standardizing processes; (iii) it supports internal and external controls through safeguard processes and audit trails; and (iv) it contributes to transparency by allowing the timely publication of budget execution and other fiscal reports.

6.13 However, the potential of the benefits mentioned above depends upon the coverage of the system or its linkages with other systems in place. To this effect, SIGFA permits recording of all revenues and expenditures of the PGR, but at the level of individual transactions it basically covers the central administration. The transfers from the PGR to other entities of the public sector are made mostly through other systems of execution, treasury and accounting. And the coverage of correlated systems (procurement, civil service and others) is even smaller. As it is normal in the implementation of information systems, the extension of the coverage (both in technical modules and institutions) is supposed to happen gradually, and the MHCP is moving in that direction.

6.14 *National Development Plan.* In 2005, the Government of Nicaragua presented the National Development Plan 2006-2010,¹³¹ as a second generation Poverty Reduction Strategy Paper (PRSP). The PND is based on the PRSP, but highlights economic activities and the increase of employment, whereas the PRSP focused more in the measures to improve social indicators.

6.15 The PND focuses on four strategic areas: (i) economic growth to reduce poverty; (ii) development of human capital and social protection; (iii) productive, social and public infrastructure; and (iv) governance and State reform. The PND is formulated within a medium-term macro framework where sensible economic policies, including fiscal discipline, would aid in supporting an improvement of the key indicators: growth would reach an annual average of 4.3 percent in the period 2005-09, whereas inflation would gradually decrease approximately 3 percent per year. The PND is the product of an extensive consultation at local and sector levels, described by the Government as a participatory formulation process.

6.16 The donors have expressed their support to the PND, and have made important gains in harmonizing external assistance. This progress includes the signature with the Government of Nicaragua in May of 2005, of the Joint Financing Arrangement (JFA) to Support the General Budget,¹³² which includes a Performance Assessment Matrix (PAM) with detailed commitments made by the Government in connection to policies and indicators consistent with the PND.

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130. The SIGFA integrates budget formulation units (SIGFAFOR), of budget expenditures implementation (SIEP), of fiscal payroll (SNF), of revenues budget implementation (SIER), of accounting (SICO) and of treasury (SITE). The automatic links with other systems are still being developed: procurement and state contracting (SICCE), civil service (SISEC), properties of the public sector (SIBE), public debt (SIGADE) and public investment (SNIP).

131. Government of the Republic of Nicaragua (2005).

132. The Budget Support Group (BSG) that subscribed the JFA is formed by Germany, Finland, Norway, The Netherlands, DFID, Sweden, Switzerland, the European Commission and the World Bank.

6.17 Under the area of governance and State reform, the PND foresees the continuation of improvements in public financial management (PFM), including mechanisms to implement and monitor poverty reduction expenditure. The specific strengthening areas were classified under: (i) financial management; (ii) formulation, implementation and monitoring of fiscal policies; (iii) technical management of the Government; and (iv) planning and participatory monitoring of public policies (see Box 6.2).

6.18 The incoming authorities have indicated that they are determined to take ownership of the reform and development agenda, and would like to see a more focused and feasible policy/actions matrix agreed upon for performance monitoring. In this context, they are planning to review and revise the longer term development strategies identified in the National Development Plan in order to better reflect the new administration's development priorities. These revisions will be reflected in the next PRSP Progress Report.

Box 6.2 National Development Plan

Herein are the main reforms contained in the National Development Plan for the period 2006-2010 that relate directly to public sector financial management.

To strengthen financial management: i) to consolidate and extend the integrated financial management system throughout all levels of the Government, including universities, autonomous entities, decentralized entities and State-owned enterprises; ii) to channel and register all funds from donors to public sector entities in the Single Treasury Account (CUT), in coordination with the signatory agencies of the Government of Nicaragua and providers of external assistance; and iii) the standard procurement and contracting documents will be used by all agencies of the central Government, 42 municipalities, 16 autonomous agencies and other institutions.

To strengthen the formulation, implementation and monitoring of fiscal policies: i) to review pension reform to reduce fiscal impact; ii) to reform the legal framework for parametric aspects of the social security system; iii) to approve and keep in effect (a) a Tax Code providing for a system of fines and penalties, and specific powers to obtain and manage third-party information and (b) a Customs Law consistent with the Tax Code and the Central American Customs Code (UAC); iv) to approve and regulate the Administrative Career Law of the revenue and customs directorates (DGI and DGA) consistent with the Civil Service Law, and to set forth a new customs technological system, including outsourcing, equipment and communications; v) to approve the Financial Management Law according to good international practices; vi) to enact legal framework to prevent excessive fiscal deficits, the adoption of stable fiscal policies and the international accounting standards of the public sector through this law and related laws; and vii) gradual formulation of the medium-term budget framework.

To improve the productivity of the technical executive management of the Government: i) to implement the Civil Service, incorporating 5,000 employees in 2007 to the Administrative Career based on transparent procedures; ii) to update Law 290 in order to provide the Executive Branch a more expeditious and functional organization, according to the PND.

To strengthen the planning and participatory monitoring of public policies with the following actions: i) improving the coordination amongst providers of external assistance; ii) strengthening the National Public Investment System; iii) strengthening and disseminating the system to evaluate and monitor public policies; iv) strengthening coordination capacities on communication and civic participation; and v) strengthening Departmental and Territorial Cabinets, increasing their decision-making powers.

Source: Government of the Republic of Nicaragua (2005).

6.19 *Allocation of resources.* Nicaragua has made progress in the implementation of its poverty reduction strategy (PRSP).¹³³ Since adoption of the PRSP in 2001, central government expenditure in poverty reduction increased from 10.4 percent of GDP in 2002 to 12.3 percent of

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133. IMF and World Bank (2006).

GDP in 2004 and 2005. Even though progress has been made, it seems that budget programming needs to get in line with the goals of the PND. Recent efforts to establish a medium-term expenditure framework and to improve the harmonization of external assistance go in that direction. Future refinement of the medium-term fiscal policy framework should help to improve the connections between budget programming and PND goals. However, these efforts are limited due to significant earmarked budget allocations (see Section B), which, if not reduced, could limit the scope for improvements in the targeting of programs to relief poverty.

B. Performance of Systems, Processes and Institutions

6.20 This section assesses the essential elements of the public financial management (PFM) system, based on an international framework of reference that addresses seven dimensions: (i) credibility of the budget; (ii) comprehensiveness and transparency; (iii) budget planning; (iv) predictability and control in budget execution; (v) accounting, recording and reporting; (vi) external scrutiny and audit; and (vii) donor practices that affect PFM.¹³⁴

Credibility of the Budget

6.21 Some parameters may indicate whether the budget is realistic enough and implemented as planned. To that effect, this section focuses on four indicators: (i) aggregate expenditure out-turn, (ii) composition of expenditure out-turn, (iii) aggregate revenue out-turn, and (iv) stock of payment arrears.

6.22 *Expenditures.* The capacity to implement the budgeted expenditures within the total amounts originally anticipated is a key factor in the capacity of the government to maintain fiscal discipline. As shown in Table 6.1, recent performance in this regard has been reasonable: of the three years reviewed, only in 2005 did the primary expenditure (not including projects with external financing) exceed the initial budget over 10 percent. In terms of total expenditures, the deviations are generally greater, which is explained by the over-execution of revenues derived from taxes (as explained herein below) and from loans and grants.¹³⁵

Table 6.1: Deviation in Expenditure Budget Execution and Variance in Composition of Primary Expenditure (percentage of the expenditure originally budgeted)

	2003	2004	2005
Total expenditure deviation	9.2	1.9	16.2
Deviation in primary expenditure, net of projects (a)	4.1	5.2	10.2
Absolute variance in composition (b)	5.0	6.4	10.4
<i>Difference (b)-(a)</i>	<i>0.9</i>	<i>1.2</i>	<i>0.2</i>

Source: Own estimates, based on MHCP.

6.23 *Composition of expenditures.* Credibility of the budget can also be assessed by the extent to which the entities receive the resources initially planned. As shown in Table 6.1, in none of

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134. This assessment is based primarily on PFM performance measurement analytics undertaken through a partnership of the Government of Nicaragua with the British Department for International Development (DFID), the European Commission (EC), the Inter-American Development Bank, and the World Bank. The performance measurement framework was developed by the Public Expenditure and Financial Accountability (PEFA) partnership.

135. In 2004, the deviation in total expenditure was smaller than the deviation in primary expenditure (net of projects) due to the significant reduction in interest spending when the HIPC completion point was reached.

the three years reviewed did the variance in composition of primary expenditure¹³⁶ exceed a total deviation of over 2 percent. This basically means that, setting aside the effect of deviations from the total expenditure that affects all entities, the latter do not show significant changes in execution of their expenditures with respect to the amounts originally allocated.

6.24 *Revenues.* The comparison between budgeted and executed receipts may give a general indication on the quality of revenue planning. As can be seen in Table 6.2, recent performance has been good in terms of availability of funding: in none of the three years reviewed did actual internal collections fall below the budgeted amounts. On the other hand, it is clear that the forecasts have been consistently conservative, which may point at weaknesses in the preparation of the projections reflected in the revenue budget.¹³⁷

Table 6.2 Aggregate Internal Revenue Execution
(percentage of the revenue originally budgeted)

	2003	2004	2005
Tax revenues	105.8	109.9	110.9
Non-tax revenues	120.7	168.5	98.6
Total	106.8	113.2	109.9

Source: Own estimates, based on MHCP.

6.25 *Payment arrears.* The identification and control of payment arrears has great importance, because they can constitute a form of non-transparent financing that would affect credibility in budget information -and the cost of doing businesses with the government-. As shown in Table 6.3, the levels of floating debt recorded at the closing of three recent fiscal years are minimal (less than 1 percent of total expenditures),¹³⁸ and it is inferred that payment arrears would be even less. However, it must be noted that: (i) no subsidiary records of accounts payable with age profiles are produced; and (ii) transfers and subsidies of the PGR to other entities of the public sector are recorded simultaneously as accrued and paid when the transfers are made (as opposed to when the expenditures financed by the transfers are actually incurred).

Table 6.3 Recorded Floating Debt
(percentage of accrued expenditure)

	2003	2004	2005
Accrued disbursements not paid at the closing of the fiscal year	0.1	0.3	0.3

Source: MHCP.

6.26 *Conclusions.* *In order for the budget to be a tool for policy implementation, it is necessary that it is realistic and implemented as passed.*

6.27 From 2003-2005, expenditure execution usually exceeded the amounts budgeted, posing a fiscal discipline risk. However, this risk did not materialize because the over-execution of

136. The variance in composition of primary expenditure (net of projects) is calculated as the absolute weighted average deviation between the executed and original budgets, as percentage of the latter, on the basis of the administrative classification (20 budget entities).

137. Anecdotal reference points to the perverse incentive created by the high level of earmarked funds estimated as percentage of the budget (see Chapter I).

138. Also, Law 550 imposes a maximum limit to floating debt, equivalent to 5 percent of current revenues from January to November of the fiscal year.

expenditures corresponded mainly to domestic revenues, grants and concessional loans that also exceeded budget forecasts. Even when in both cases budget credibility was affected, it should be noted that their effects were distributed in a relatively uniform manner among the different implementing entities, and there are no significant concerns on payment arrears.

6.28 The credibility of the budget is a critical feature of the ability of the government to control fiscal discipline and prevent shortcomings in the financing of sectoral budgets. It is expected that with the recent enactment of the Financial Management and Budget Regime Law (Law 550), which sets forth strict limits to budget modifications, budget outcomes will increase the reliability of the budget as policy tool.

Comprehensiveness and Transparency

6.29 This section examines budget comprehensiveness and the oversight of aggregate fiscal risk, as well as public access to fiscal and budget information.

6.30 ***Budget Classification.*** A strong classification system is required for meaningful public expenditure monitoring. The system used in Nicaragua for formulation, execution and reporting is based in four main budget classifications: administrative (institutional), economic (per type of expenditure), per source of financing, and programmatic.¹³⁹ The classification system can produce information that approximates international standards, e.g., the programs have certain similarity to functional groups under GFSM/COFOG.¹⁴⁰

6.31 As is well known, a main issue in the application of the system is the incorporation of expenditures of a current nature into investment projects classified fully as capital expenditures. In this subject matter, the rules and their application are being revised.

6.32 ***Budget Documentation.*** In order for the legislative branch to execute its functions of oversight and approval, budget documentation should allow a comprehensive vision of fiscal projections, budget proposals and the outcomes of preceding years. Law 550 establishes that the following budget documentation is to be submitted to the National Assembly: (i) the bill of law, including general provisions, the revenue budget, the expenditure budget and the annexes thereto; (ii) the introductory message to the bill of law, including the list of objectives, estimates, statistics, macroeconomic context, projections, assumptions and other information used to prepare the budget; and (iii) the medium-term budget framework.

6.33 Apart from the detailed information on revenues and expenditures, some selective characteristics of the budget documentation are described herein:¹⁴¹

- macroeconomic assumptions include *inter alia* estimates of growth, inflation and exchange rate;
- the estimate on fiscal deficit describes the anticipated composition of its financing; but not the details on debt stock and financial assets;

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139. The classifications also allow for aggregation by general functions and other specific purposes, e.g., expenditures related to the poverty reduction strategy.

140. For purposes of this report, the international standard for classification systems is the Government Finance Statistics Manual (GFSM) issued by the IMF, which incorporates the Classification of the Functions of Government (COFOG) supported by the UN. In Nicaragua, fiscal statistics are based on GFSM 1986.

141. The list makes reference to budget documentation per se, on the basis of the 2006 budget. As is usual in very country, the MHCP manages additional information to prepare the budget.

- even though it is not part of the budget documentation *per se*, the information on budget outturn of the preceding period is available through the respective execution report; conversely, the budget documentation does not include budget figures for the current year (modified or estimated) *in the same format* as the proposal;
- summarized budget data on revenue and expenditure, for the current (estimated) and prior years, is included for the main classifications used.
- the budget implications of main new policies are discussed, albeit in a very general manner.

6.34 Coverage of government operations. Fiscal information (understood as the budget, the execution reports and the financial statements) should include all budget and extra-budget activities to allow a complete picture of public revenues, expenditures and financing. To this effect, Law 550 requires an extensive coverage of budget documentation, which must include the General Budget for the Republic (the PGR includes the three branches of government and the constitutional entities) and the budgets of decentralized entities, enterprises and financial institutions of the State, and other autonomous agencies dependent upon the PGR. The documentation meets to a great extent with this provision, with some exceptions.¹⁴²

6.35 However, the annual budget execution report for 2005 covered only the PGR (including transfers to other entities, but not in their revenues).¹⁴³ And, as noted later in the chapter, the public sector financial statements have not been issued yet. On the other hand, budgets and execution reports do include ample information on projects financed by providers of external assistance, even though it is possible that some minor grants still escape the system.¹⁴⁴

6.36 Intergovernmental fiscal relations. Even though this report focuses on the financial management of the central government, it is worth analyzing three critical elements of intergovernmental fiscal relations: the transparency of rules for the horizontal allocation among sub-national governments of transfers from the central government, the timeliness of provision of information to local governments for their planning processes, and the gathering of budget data to allow the preparation of consolidated fiscal information for the general government. As explained below, the Nicaraguan system performs inadequately in all three aspects; see also para. 9.26.

6.37 First, while the Law on Budget Transfers to Municipalities (Law No. 466 of 2003) provides for a formula to distribute the annual transfer to municipalities, the formula is known to be too complex, and no significant efforts have been made to disclose better its application for

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142. An outstanding absence in the 2006 budget documentation is that of the budgets for universities and centers of higher technical education. The transfers from the PGR to these entities represented 4.3% of the consolidated expenditure budget of the public sector in 2006, but since there is no information available on their own revenues, the percentage that escapes from the budget documentation cannot be measured accurately.

143. According to the budget documentation of 2006, revenues of decentralized entities by function and other autonomous agencies (except universities) -that are not transfers from the central government- amount to C\$4,877 million (most of them corresponding to contributions to the Nicaraguan Social Security Institute), i.e. approximately 23 percent of central government revenues.

144. For purposes of this report, the concept of in-kind grants -which comprise assistance granted through direct administration by the cooperating agencies or by agreement between these agencies and non-government organizations (NGOs)- is not covered in this section.

the benefit of oversight from civil society and the beneficiaries themselves. On the other hand, the law does not devolve to municipalities the expenditure responsibilities consistent with the increase of revenue that the same law sets forth. Therefore, a situation has arisen where, notwithstanding the existence of the formula, the central government continues to implement local expenditures with an unclear division of responsibilities.¹⁴⁵

6.38 Second, the information on transfers to municipalities is made available to them on October the 15th of every year, date on which the PGR is submitted to the National Assembly. However, since this date coincides with that of submitting sub-national budgets to Municipal Councils, local governments are not able to introduce modifications at this stage.

6.39 Finally, Law 550 introduces requirements for the municipalities to provide data on their budgets and execution to the MHCP through the Nicaraguan Institute of Municipal Development (INIFOM), in order to allow general government budget consolidation. But the latter has not been carried out. It should be noted, though, that the 2007 budget norms link transfers to municipalities to previous reporting on execution through a compilation platform (TRANSMUNI).

6.40 *Oversight of aggregate fiscal risk.* In general, the central government should monitor and take timely actions regarding the fiscal risks with national implications that could arise from the activities of sub-national governments, autonomous government agencies and public enterprises. In this area, recent legislation (Law 550) imposes information requirements for quarterly and annual budget execution, as well as annual financial statements, to decentralized agencies, state-owned enterprises, other autonomous agencies dependent upon the PGR, and municipalities. The implementation of mechanisms to facilitate compliance with these requirements is underway, albeit not yet reaching the point where overall fiscal position and risks are consolidated and monitored systematically.

6.41 *Public access to key fiscal information.* Law 550 requires that the general and sector budgets, as well as the monitoring reports should be put at the disposition of citizens through information and communication media available, at the latest fifteen days after their issuance. An important medium that has been recently used by the MHCP to disseminate such information is the Citizen Access Portal (www.consultaciudadana.gob.ni), where the budget documentation, the in-year execution reports and the annual execution reports of the PGR are published. Notwithstanding of these advances, some critical information is not yet easily available to the public.

6.42 To start with, the public sector financial statements have not been published yet. Second, the Office of the Controller General (CGR) has not yet finalized an audit on the PGR execution report. Third, the information on tender processes and public contracting is fragmented, with each public institution handling award data without necessarily or obligatorily communicating them to the Contracting Directorate of the MHCP, which makes it difficult for the public to have access to the pertinent information. This situation is being gradually addressed through the State's Procurement and Public Contracts Integrated System (SICCE). Finally, the information on resources available to primary service units is scarce and uneven amongst different sectors, although certain aggregated information is available at the central level.

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145. See a detailed discussion of this subject in World Bank and IMF (2004).

6.43 *Conclusions.* *Comprehensiveness of budget is necessary to ensure that all activities and operations of governments are taking place within the government fiscal policy framework, and are subject to adequate budget management and reporting arrangements. Transparency is an important element that enables external scrutiny of government policies and programs and their implementation.*

6.44 The budget information in Nicaragua is ample, based on a good classification system,¹⁴⁶ and has a comprehensive institutional coverage as far as the budget document per se is concerned. But that is not the case with the execution reports which, up to now, include only the General Budget of the Republic (PGR) and not the execution of revenues from the rest of the central government. At the same time, public access to information is limited due to the absence of certain key information (financial statements, audit reports, reports of resources received by service-delivery units, and comprehensive publication of procurement and contracting processes). Likewise, the limited transparency of the fiscal decentralization system and the difficulty of monitoring the aggregate fiscal risk of the public sector are areas in need of improvement.

6.45 The ability of the government to control aggregate fiscal discipline of the public sector could be affected if fiscal neutrality of transfers to municipalities is not attained, and if the mechanisms to compile and consolidate all public finances are not implemented. On the other hand, the scrutiny on the government's financial management –a key element to improve the strategic allocation and operational efficiency of the use of funds- is limited in view of the absence in the public domain of the aforementioned key information.

6.46 In the short term, improvements can be expected with the preparation of execution reports for all budgets and of financial statements (both are requirements stipulated by Law 550), the revision of rules and their application vis-à-vis current expenditures in investment projects, the implementation of transparency in procurement through the State's Procurement and Public Contracts Integrated System (SICCE), and the publication of customized financial information on resources received and used by service-delivery units, particularly in the education and health sectors. To the extent that decentralized entities (by function and territory) comply with the requirements of Law 550 on provision of information, the monitoring of aggregate fiscal risk will be facilitated, although the creation of capacity in the MHCP to carry out this task may possibly take more time. Finally, it is well known that subjecting further decentralization progress to a framework of fiscal neutrality is both critical and urgent.

Budget Planning

6.47 This section discusses the process of budget formulation, based on two principles: (i) an orderly and effective participation in the formulation process by the implementing entities and the pertinent authorities impacts the extent to which the budget will reflect macroeconomic, fiscal and sector policies; and (ii) due to its multi-annual implications, decisions on expenditure policy should be in line with the medium-term availability of resources and sector strategies.

6.48 *Annual budget formulation.* The MHCP prepares a clear annual calendar that is generally observed by the entities. According to the schedule, and as required by Law 550, the MHCP distributes the budget policy to the implementing entities by May 30 of each year, allowing the entities at least six weeks to prepare their preliminary budget drafts. The budget policy includes

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146. Albeit not convergent with GFSM 2001.

the ceilings approved by the Cabinet. The formulation process is duly regulated, allowing adequate participation by the sectoral entities, even though flexibility is limited basically to the capital budget. With the more rigorous process for budget modifications (addressed later in this report) introduced by Law 550, the implementing entities that were accustomed to simpler mechanisms to modify their budgets during the year, found themselves in need to strengthen significantly their budget formulation capacity.

6.49 According to Law 550, the National Assembly should receive the bill of annual law of the PGR by October 15 of each year, and has until December 15 to consider and approve it - with or without modifications. As with other laws, the executive has the capacity to veto, either totally or partially, the amendments proposed by the legislature.¹⁴⁷ In case the budget is not approved within the legal schedule, the project submitted by the executive takes effect until the budget law for the fiscal year is approved. For the three years reviewed (2004-2006), the Assembly approved the budget in a timely fashion, but for fiscal year 2005 it was enacted after the beginning of the fiscal year due to the veto introduced by the President on the basis of fiscal risk concerns.

6.50 *Multi-year perspective.* Law 550 introduced the Medium-Term Budget Framework (MPMP), which must contain at least an estimate of revenues, expenditures, physical and production goals, program of public investments, programming of external disbursements, loans and grants, evolution of public debt, and a description of budget policies and criteria that support the MPMP.

6.51 The budget documentation of 2006 included the MPMP for the first time, as part of a strategy that reasonably anticipated its development by stages. Thus, the Medium-Term Fiscal Framework (MFMP) and the MPMP were prepared using projections of main aggregates as basis, against Medium-Term Sector Expenditure Framework (MGSMP) that started with three pilot institutions (ministries of education, health and transport) for the 2006 budget and was extended to other entities that form part of the PGR for the 2007 budget. The same Law 550 provides for transitional arrangements to gradually implement the MPMP throughout three years after the law entered into force, i.e. until 2008.

6.52 The MFMP, which in turn is founded on the Economic and Financial Program (PEF/PRGF), includes the projections of fiscal aggregates based on macro categories of receipts and payments. The systematic links between the MFMP and the annual budgets cannot be assessed yet due to the recent implementation of the instrument.

6.53 The MGSMP includes current and capital expenditures for the entities that form part of the PGR, and the aggregates are consistent with those of the MFMP. However, there is little evidence, e.g. in costed sectoral strategies, as to the process of policy assessment and reconciliation between the top-down and bottom-up multi-year planning. Still, it is worth mentioning that certain costing exercises have been developed (e.g., in education and health care), which -subject to continuous quality enhancement- will provide greater support to the MGSMP.

6.54 As noted in the previous chapter, important progress has been made in the institutionalization of the Investment Technical Committee functions and of the National Public Investment System (SNIP), which currently has an ample coverage in the central administration. The Public Investment Program (PIP) is part of the MPMP, and recent years have witnessed

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147. See footnote No. 1.

significantly increasing compliance in securing ex-ante technical approvals from the Public Investment Unit (UIP), as well as in recording public investment projects in the official portfolio (*banco*). And, in line with the development of the MPMP, investment decisions are slowly but increasingly made in the context of sectoral strategies.

6.55 Conversely, the analyses and documentation of implications of the PIP on future recurrent expenditures are still incipient. The same can be said with regards to the internal capacity to monitor and evaluate PIP implementation, a function performed primarily by providers of external assistance with regards to their financed activities.

6.56 *“Results-based budgeting”*. In the context of implementation of Law 550, more formal attempts have been made to project and include in budget documentation goals and indicators per program financed by the budget, with an emphasis in education, health and transport sectors. As is normal in the introduction of this type of instruments, the first set of indicators deal fundamentally with figures on coverage. As in the case of medium-term budgeting, the first efforts are worthy but a natural progression is envisioned and required.

6.57 The set of indicators by program could progressively reach a customized, yet manageable, mix of dimensions (e.g., effectiveness, efficiency, quality) and scopes (e.g., process, outputs, outcomes). Similarly, the sophistication of cost accounting systems to calculate unit standards and measure the marginal cost of changes in performance could be gradually built. Credibility of the new practices should rely on a formal program monitoring process that informs budget ceilings and allocations for upcoming years. In the longer term, introduction of incentives documented in performance agreements is an option to be considered.

6.58 *Earmarked funding*. Inevitably, efforts to enhance budget planning and programming are restricted by earmarked allocations mandated by the Constitution and laws. As part of the total expenditure, at least 6 percent must be allocated to public universities and 4 percent to the Supreme Court of Justice. And as part of the revenues, 6 percent was allocated in 2006 to municipalities, a figure that according to current legislation must increase at least 0.5 percent per year until reaching 10 percent).¹⁴⁸ There are other minor mandated allocations, as well as miscellaneous fees and charges (*rentas con destino específico*) that the entities can claim for their own use. Altogether, legally earmarked funds can amount to around 19 percent of primary expenditures (Table 6.4).

**Table 6.4: Legally Earmarked Funds
(percentage of primary expenditures)**

	2006 Budget
Universities	6.1
Municipal transfers	4.9
Supreme Court of Justice	4.0
Other legal allocations	1.1
Entities' "own funds"	2.7
Total	18.8

Source: (2006 budget documentation).

6.59 *Conclusions*. *A policy-based budgeting process enables the government to plan the use of resources in line with its fiscal policy and national strategy.*

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148. The funds allocated to universities have shown to favor mostly the non-poor, while the funds allocated to municipalities are not fiscally neutral (IMF and World Bank, 2006).

6.60 The annual formulation of the budget is made in an orderly fashion, with due participation of the implementing entities, notwithstanding the small margin –because of earmarked funds and "fixed" expenditures– for flexibility. Institutionalization of the national public investment system (SNIP) is growing, particularly at the pre-investment assessment stage, but monitoring and evaluation remain weak. As for the medium term budget framework, the steps are recent but relevant. The framework has a clear legal basis, and the MHCP has an adequate strategy in place to implement this new instrument in stages.¹⁴⁹

6.61 In the short to medium term, the capacity to prepare or refine costed sectoral strategic plans needs to be developed for reconciliation of the top-down and bottom-up multi-year budget planning. The public investment program (PIP) should be based on those plans, with due consideration to recurrent cost implications. Once they are comprehensively implemented, the elements that compose the medium term framework, i.e. the fiscal framework and the sectoral expenditure framework, will reduce fiscal risks and provide informative elements that will increase the quality and consistency of decisions on the strategic allocation of resources.

6.62 The effort to incorporate results elements in the budgeting process is incipient and limited by budget rigidities. Basic goals and budget indicators have been developed, but the accountability framework has not. Enhancements to the dimensions and scope of indicators, and to the capacity to measure the marginal cost of changes in performance, should be progressively built.

6.63 As is expected from such a significant overhaul of the budget system, which should be gradually implemented over the medium and long term, there are capacity gaps in executing entities and in the MHCP that need to be addressed. And, inevitably, any effort to modernize budget planning and programming will be limited to the extent that significant legally earmarked budget allocations remain.

Predictability and control in budget execution

6.64 This section analyzes selective elements of the budget execution systems, with an emphasis on management of treasury and debt, and internal controls.

6.65 *Availability of funds for expenditures.* Planning, monitoring and management of cash flows and balances are essential to support budget execution and prevent unnecessary financing costs. The Treasury Directorate of the MHCP prepares an annual flow of funds that comprises funds from the Treasury and external resources for budget support. The flow of funds is updated on a quarterly basis on the basis of information provided by the tax collection, public credit and budget entities, and on a weekly basis according to the flow observed. These processes are, however, kept in information systems parallel to the Integrated Financial Management System (implementation of SIGFA's financial programming module has been long overdue).

6.66 In relation to the certainty on availability of funds to implementing entities, the first parameter is the PGR, which sets forth the maximum limits to be spent per agency, source of financing, and personnel expenditures. Expenditures cannot be executed in absence of budget credits, which in turn are subject to quotas of quarterly commitments and of monthly accruals. These quotas affect the levels of program, subprogram, project, group of expenditure, and source of financing, and are incorporated into SIGFA as soon as they are approved by the Budget Directorate of the MHCP.

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149. MHCP (2005).

6.67 While the quarterly commitment quotas provide a reasonable certainty to entities to implement their expenditures, in practice their reliability could be affected by some operating problems in the issuance of payments. The main problem affects investment projects with accounts in foreign currency, because: (i) the mechanism of direct payment (i.e., from the Treasury to the supplier) is executed “manually” between the Treasury and the Central Bank (BCN), resulting in transaction processing times significantly greater than other types of payment; and (ii) the alternative mechanism of payments through rotating funds is limited to a global 5 percent of the budget for certain lines of expenditure, and a maximum of C\$20,000 per individual payment. In principle, the global limit for payments through rotating funds is sound, as long as it is complemented by a functional system of direct payments. But if the latter fails, there will necessarily be delays that affect the flexibility of the entities to execute.

6.68 On the other hand, in sectors such as education and health that execute a large numbers of small payments to or through service units spread across the country, the flow of fund model is in need of customization in order to better the balance between efficiency and control.

6.69 The modifications to the budget during the year are additional factors that can affect the availability of funds for execution. During the review period, modifications at the aggregate level have been significant (see Table 6.5), but these have increased -not diminished- the expenditure. As noted earlier, the increments were a consequence of internal revenues that exceeded the amount budgeted (see Table 6.2 above) and of automatic budget additions for under loans and grants for projects.¹⁵⁰ Therefore, the budget modifications, at least until 2005, did not bear a negative impact on the funds available for the entities (see Table 6.1 above).

Table 6.5 In-year Expenditure Budget Modifications
(in percentage of the total budget)

	2003	2004	2005
PGR: Total, net	17.1	11.1	24.5

Source: Own estimates, based on MHCP.

6.70 *Cash management, debt and guarantee records.* Law 550 sets forth the principle of centralization of revenues and expenditures on the basis of the Treasury Accounts System, which includes the Single Treasury Account (CUT), collection, payment and “mixed” accounts (external grants and loans). Operation of the system allows estimating and consolidating most central government cash balances on a daily basis,¹⁵¹ excluding rotating funds. The latter can be calculated periodically through the Implementing Units Integrated System (SIUE) or the Project Financial Management Integrated System (SIGFAPRO), but these processes are not run on a daily basis and not all the entities use the SIUE.

6.71 The quality of records and reports is key to assure proper budgeting and timely payments of debt service. In Nicaragua, the responsibility to maintain public debt databases is shared by MHCP’s Directorate of Public Credit (central government internal debt) and the BCN (external

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150. These automatic additions are no longer allowed since the enactment of Law 550.

151. In the context of its reviews, the CGR has identified some “own funds” (rentas con destino específico) that collecting entities have not recorded and transferred on a timely basis.

debt).¹⁵² MHCP records are seemingly complete for the central government, but not for public enterprises and municipalities. The MHCP and the BCN jointly issue comprehensive information on a quarterly and annual basis (www.bcn.gob.ni), usually within the next quarter following the period reported. This information includes internal and external debt, composition per debtor and creditor and per instrument and maturity, debt service, emissions and disbursements, and solvency indicators.

6.72 The legal framework to contract public debt and issue guarantees is clearly defined in the Public Debt General Law (Law 447 of 2003), which, *inter alia*, demands the annual preparation of the Public Debt Policy (Presidential Decree). The Policy is prepared by the MHCP on the basis of the Economic and Financial Program (PEF), and establishes the maximum limits for annual contracting and net debt, the general concessional terms for external loans, the maximum rate allowed for internal loans, and the maximum amount of contingent liabilities (guarantees) to be subscribed. According to the Law, contracting of debt and issuance of guarantees are valid only with the authorization of the MHCP, even though the permanent registry of guarantees is still to be implemented.

6.73 Payroll controls. MHCP's Directorate of Public Administration (*Función Pública*) administers the Fiscal Payroll System (SNF), which allows direct and timely linkages between the payroll and the personnel database. The latter is fed by each government entity, which in turn keeps the individual files. The authority to introduce changes in the databases is limited to authorized officers of each entity, and the SNF keeps a logbook of said changes.

6.74 However, in early 2006 the SNF covered only about half of public servants (some 52,000 employees of 27 institutions). The rest of the payroll is managed through unconnected individual systems that prevent, for example, to know with accuracy and timeliness the total number of public servants and to have a general overview of payroll preparation practices. Likewise, no payroll-specific audits are conducted systematically –when made, these are performed on an *ad hoc* basis in each entity.¹⁵³

6.75 Procurement controls.¹⁵⁴ The State's Public Contracting Law (Law 323 of 2000, as amended) promotes competitive processes, establishes ceilings for three types of tenders (public, by registration, and restricted) and for the use of quotations, and describes the exception mechanisms. However, there is currently no information system that permits gathering and producing aggregate data on the number and amount of processes under each of the cited methods. The recent worthy introduction of the Public Procurement and Contracting System (SICCE) aims at, among other objectives, filling the cited gap.

6.76 The Office of the Controller General (CGR) authorizes the exceptions to the established procedures. The exceptions are presumably made according to the law ("for reasons of urgency, safety or other reasons of public interest", by means of a justified petition). The CGR publishes

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152. The BCN keeps its database in the Debt Management Financial and Analysis System (DMFAS/SIGADE) developed by UNCTAD. The MHCP uses its own system, and partially the DMFAS. Reports are shared between the two entities.

153. In the context of its budget reviews, the CGR has identified certain deficiencies in personnel management, such as supplemental financing with donor funding to staff on fiscal payroll, and weaknesses in management of paid leave and staff loans.

154. This report covers only some selective aspects of government procurement management, a subject that is broadly analyzed in the Country Procurement Assessment Report (CPAR).

monthly summaries of the approved exceptions (www.cgr.gob.ni), but not of the correlated justifications.¹⁵⁵

6.77 With respect to the complaint mechanisms available to bidders, the Law sets forth three administrative instances: (i) recourse of clarification before the Tender Committee;¹⁵⁶ (ii) recourse of impugnation before the Reviewing Committee;¹⁵⁷ and (iii) recourse for annulment before the CGR.¹⁵⁸

6.78 In the legal front, there is a plan –but to no concrete outcome yet– to submit to the National Assembly a project for a modern law of public sector administrative contracting, which would bring the framework closer to international practice.

6.79 *Other internal controls.* As for the effectiveness of controls to commit expenditures, Law 550 provides for the “committed expenditure” step. Accordingly, SIGFA procedures require the recording of this stage prior to the payment. However, it is known that in practice the implementing entities record the commitment and accrual stages concurrently, which could affect Treasury’s cash programming and could lead to delays for expenditures that are not recorded by the institutions until the payments are ready to be made. Therefore, the commitment control system is only partially effective.

6.80 In terms of the overall internal control framework, in December 2004 the CGR issued the Technical Internal Control Norms (NTCI) and proceeded with their induction in 2005 through a series of training events. The NTCI are based on international practice (COSO framework) and thus emphasize risk management. The entities had until June 2006 to design their pertinent systems of internal control, according to the NTCI. The CGR is in the process of certifying implementation (about 60 certifications were issued in 2006).

6.81 Given the recent introduction of the NTCIs, there is no data yet to assess the general level of understanding, compliance and cost-effectiveness of the internal control rules and procedures.

6.82 *Internal audit.* The Organic Law of the CGR and the Government Control System (Decree 625 of 1980, as amended) determines the obligation of public sector entities to have internal audit units (UAI). In accordance with the law, the UAI is in charge of ex-post examination of financial or administrative transactions as a service to the superior authority of the entity, to which it reports. However, internal auditors can only be dismissed with the authorization of the CGR, which receives copies of the UAI reports. Their independence is also granted, at least according to the law, in terms of the unrestricted access to documentation and the prohibition to participate in administrative processes.

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155. The CGR must receive copy of contracts exceeding C\$500,000 for review (the ceiling for purchases by quotation is of C\$100,000, and thus, not all contracts by tender are submitted to the CGR). In 2005, the CGR received 699 contracts. That same year, 202 applications for exception of procedures were approved.

156. The recourse for clarification could unnecessarily delay the procurement process, if it is based on trivial arguments to affect the competition.

157. The Reviewing Committee is presided over by a representative of the MHCP, and formed additionally by the third-ranking officer of the contracting entity, and a representative of the Office of the Attorney General of the Republic (PGR).

158. According to the time periods established by Law, a complaint that goes throughout all administrative instances would take about 46 days.

6.83 The UAIs are subject to the technical norms¹⁵⁹ and scrutiny of the CGR, which receives copies of their work plans and reports. The entity administrators are bound to adopt in a timely fashion the corrective measures indicated in the internal audit reports.

6.84 The legal framework is generally adequate, but actual performance is heterogeneous across the different institutions. In the absence of statistical data, anecdotal reference points that most UAIs do not comply fully with professional norms and devote most time to special studies, as opposed to systematic reviews.¹⁶⁰ There is no system to monitor internal audit recommendations, but it is presumed that administrations observe the most important matters, although not necessarily in a timely and comprehensive fashion.

6.85 Conclusions: *Predictable and controlled budget execution is necessary to enable effective management of policy and program implementation.*

6.86 There are strengths, especially in terms of fiscal discipline, in the centralization of treasury balances through the Single Treasury Account (CUT), as well as in the controls for contracting and recording public debt, albeit further enhancements are possible. In other areas there is more room for improvement.

6.87 Compliance with the timely recording of expenditure commitments, e.g. through automatic links with the SICCE, needs to be ensured. Similarly, the mechanism of direct payments by the Treasury should be improved, requiring better coordination between the MHCP and the Central Bank. The development of the Civil Service Integrated System (SISEC) and the extension of the Fiscal Payroll System (SNF) should continue with the purpose of developing a consolidated payroll system, which in turn should be subject to systematic audits. The implementation of the Technical Internal Control Norms (NTCI) needs to be complemented with information systems that assess their performance. Finally, internal audits require greater professionalization, more systematic risk-based approaches, greater dissemination and better follow-up to its reports.

6.88 The procurement processes and correlated statistics will be more transparent and efficient through the ongoing development of the SICCE. There is also a need, though, to reform procurement legislation (a draft is already available) in line with international practice. Specific areas for improvement include bidders' registration, guarantees, price adjustment, confidentiality of bids, bid evaluation and award, bidder's access to review of procurement decisions, responsive and responsible bidder, suspension of bidders, procurement of consulting services, sanctions regime, and options for procurement consolidation strategies (e.g. *contratos marco*).

6.89 Evidently, weaknesses in internal controls may diminish the operational efficiency in the use of resources and create opportunities for corrupt practices, abuse and waste. Likewise, weaknesses in the controls of commitments and payments may generate fiscal risks. Further attention to systems, processes and controls for budget execution are therefore necessary to ensure greater operational efficiency, fiscal discipline and transparency.

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159. Internal auditors must comply with the Government Auditing Norms (NAGUN) and, complementarily, with the International Standards for the Professional Practice of Internal Auditing (ISPPA) issued by the Institute of Internal Auditors.

160. For the purposes of this report, systematic reviews are those that address significant aspects of: reliability and integrity in operational and financial information; effectiveness and efficiency of operations; safeguarding of assets; and compliance with laws, regulations and contracts.

Accounting, recording and reporting

6.90 This section discusses the record keeping, preparation and issuance of government financial information for managerial and scrutiny purposes.

6.91 Account reconciliation. The frequent and timely reconciliation of data from different sources is fundamental for the reliability of financial reports. Bank reconciliations for the accounts managed by the Treasury are made on a daily basis, with the support of SIGFA automatic processes. Monthly reconciliation reports are also produced. However, the automation of account statement uploading is still pending, as is the reconciliation of rotating funds, which must be reconciled by the implementing entities. No aggregate information is kept on the state of reconciliations of the rotating funds.

6.92 Resources received by service delivery units. Monitoring of these resources, for example, the amounts received by health care centers and schools in cash and in kind, is important to validate whether the financial management systems effectively support the delivery of public services. The Ministry of Health keeps central databases on funds in cash received and used by its decentralized units. So does the Ministry of Education with respect to schools, although the information is generally less complete and of poorer quality. Resources in kind or provided by NGOs to service delivery units are rarely tracked. It must be mentioned, however, that an effort is made by the local Public Investment Technical Units to monitor investments programmed in SNIP.

6.93 Hence, there are various systems in operation, but these do not yet gather complete data on the resources received by service delivery units. Moreover, the available information is not compiled and analyzed in periodical reports.

6.94 In-year budget reports. Timely and periodical information on budget execution is essential for the MHCP to supervise fiscal performance and for the implementing entities to manage their budget. In this sense, Law 550 provides for adequate mechanisms: the entities that conform the PGR must record the execution of their budgets in the financial management system and according to the rules set forth by the MHCP, whereas decentralized and autonomous entities must submit their quarterly execution reports to the MHCP thirty days after the end of each quarter at the latest, for consolidation purposes.

6.95 In practice, with SIGFA's platform, budget execution reports can be generated on "real time" for internal use. Among other features, these reports: (i) allow direct comparison to the classifications of the approved PGR; (ii) cover all items of the PGR (but not the detailed use of transfers, as noted previously); and (iii) distinguish between the stages of commitment, accrual and payment. Public reports are prepared on a quarterly basis during the thirty days following the end of each quarter. The main concern on the quality of the information, as mentioned before, is the usual practice of simultaneous recording of the stages of commitment and accrual, which prevents a reliable timely overview of the actual level of committed expenditures.¹⁶¹

6.96 Annual reports. Law 550 presents an adequate legal framework for accrual-based government accounting, and provides for the requirement of the MHCP to submit the Annual

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161. Other weaknesses identified by the CGR include: (i) the lack or inadequate use of the SIUE in some cases, which has prevented the identification with enough detail of some expenditures financed through rotating funds; and (ii) the recording or modification of certain transactions after the closing date. See CGR (2005).

Public Sector Investment Account¹⁶² to the National Assembly and the CGR by March 31 of the next year. However, the mechanisms (methodologies, training, subsidiary records) to put this requirement into effect are still under development. For this and other reasons, such as the identified but pending clean-up of certain account balances, the public sector financial statements are not yet produced, not even for the central administration.

6.97 The MHCP does prepare, on a yearly and timely basis, a Budget Execution Report. Even though this report does not include cash balances¹⁶³ nor the accounting methodology used, it does present ample information on revenues and expenditures of the PGR.¹⁶⁴ These reports are usually published within three months after the end of the year.

6.98 *Poverty-reduction expenditure tracking.* The budget documents, as well as in-year and year-end execution reports, all identify public spending and transfers associated with poverty-reducing activities, including HIPC debt relief, as well as other external and internal sources of financing for those programs. In line with international practice, poverty-reduction expenditure is tracked through the “tagging” of specific line items in the budget classification matrix, a process made directly in SIGFA by the MHCP on the basis of poverty spending definition by SETEC.¹⁶⁵ The latter prepares periodical reports on implementation of poverty-reduction expenditures. The described procedure helps to ensure that, in terms of fund management and monitoring, no physical funds or other parallel structures are needed –thus strengthening institutionalization.

6.99 *Conclusions. Timely, relevant and reliable financial information is required to support fiscal and budget management and decision-making processes.*

6.100 The information on budget execution (per month, quarter and year) is prepared on a timely basis, supported by a good recording system and by a good system of reconciliations of bank accounts handled by the Treasury, all of which are key features to control fiscal discipline, transparency and scrutiny. Moreover, the budget formulation, execution and recording systems allow for the tagging and monitoring of poverty-reduction expenditure.

6.101 However, execution reports are still not supplemented with data on bank balances and, even less, with accounting financial statements. These elements are necessary to corroborate the integrity of the currently produced reports, and to increase the information and scrutiny on patrimonial elements that, due to their nature, are not reflected in the budget execution reports. The development of mechanisms to produce financial statements is one of the main challenges assumed by the MHCP within the framework of its plan to implement Law 550.

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162. It is understood that the presentation requirements for the Annual Investment Account (article 137 of Law 550) also cover the Accounting Financial Statements (article 138), but the Law is not completely explicit on this point.

163. In the absence of financial statements, a first critical step for transparency would be to reconcile budget execution with bank balances at the end of the year. For example, as mentioned by the CGR (CGR, 2005), the budget execution report of 2004 includes expenditures of C\$1,796 million classified as “other” under the concept of “internal financing”. Presumably, these funds represent an increase of financial assets, but in absence of the reconciliation with bank balances, this presumption cannot be corroborated. In 2005, the amount of “others” was reduced to C\$11.4 million.

164. Among other information, the annual budget execution report presents the execution of revenues and expenditures according to different classifications (economic, administrative, functional, per financing source), the allocations and transfers to decentralized entities, the investment projects, grants and loans, debt service, budget modifications, expenditures financed through debt relief funds, and expenditures connected to the Poverty Reduction Strategy.

165. The scope of this PFM assessment does not cover the quality of poverty spending definition.

6.102 On the other hand, it is also necessary to examine with greater detail and support the efforts of the different sectors, mainly of the Ministries of Education and Health, to compile and process more information on the resources received (or not) allocated to service-delivery units (schools and health centers). Apart from being an essential accountability tool, this type of information is necessary to assess the operational efficiency of the mechanisms to transfer and use funds in decentralized programs.

External scrutiny and auditing

6.103 This section analyzes institutional mechanisms to scrutinize public finances, with a focus on the functions of external auditing and of legislative oversight of the budget and its implementation.

6.104 *External auditing.* In principle, an effective external auditing helps to guarantee integrity of public finance information and accountability for the efficient and legal use of resources. In accordance with its Organic Law, the CGR is the institution in charge of carrying out financial, compliance and other audits, in public sector entities. These audits must adhere to the Government Auditing Norms (NAGUN).¹⁶⁶ Additionally, Law 550 establishes that the CGR will audit the Budget Execution Report submitted by the MHCP, and send it to the Commission of Economic, Financial and Budget Affairs of the National Assembly.

6.105 Even though the members of the Superior Council of the CGR are elected by the National Assembly, the CGR itself is an independent and autonomous constitutional entity. In line with the provisions of its Organic Law, the CGR submits its reports to the superior authority of the entity audited. The National Assembly only receives the annual performance report of the CGR in systematic manner, but can request and review special audits. According to the Constitution, the CGR must make public the results of its investigations and, according to the NAGUN, the audit reports have a public nature once approved by the Superior Council. These can be found in the Documentation Center of the CGR and, selectively, in its Internet page (www.cgr.gob.ni).

6.106 As is evident in its annual performance reports, external audits made by the CGR do not comprise all entities, and constitute mostly special examinations.¹⁶⁷ Financial audits are conducted primarily by private firms, subject to CGR review, but these audits are limited to certain decentralized entities and projects with external financing. Although there are no public sector financial statements as explained before, the annual Budget Execution Report is not audited by the CGR.¹⁶⁸ Performance audits are not conducted.

6.107 In accordance with CGR instructions, the entities must implement its recommendations within a maximum term of three months. The CGR has an information system that records the number of recommendations, officers to whom an administrative or civil liability, or a criminal presumption has been determined, and the correlated amounts when an economic loss has been established. The recommendations are monitored but, in general, the responses -though formal- are delayed or not very thorough. No annual reports are produced to give account on compliance by entities in the implementation of recommendations of audits previously conducted.

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166. In general, the NAGUN are consistent with the rules of the International Organization of Supreme Audit Institutions (INTOSAI). The NAGUN also adopt in a supplementary manner the International Auditing Standards (IAS) for financial audits.

167. See CGR (2006).

168. In 2005 an "evaluation", not an audit, was performed on the 2004 budget execution (CGR, 2005). A plan is underway to prepare a first audit of the Budget Execution Report, covering fiscal year 2006.

6.108 *Legislative approval of the budget.* The powers of the National Assembly in budget matters are clear, known and generally respected. The pertinent legal framework is contained in the Constitution and in Law 550, which has strengthened the oversight role of the legislature, attributing important control functions to the Commission of Economic, Financial and Budget Affairs,¹⁶⁹ with the support of the General Directorate of Analysis and Monitoring of Public Expenditure. This unit has stable personnel devoted to analyze and monitor the budget, and to this end, prepares reports for the exclusive use of deputies (they are not published).¹⁷⁰

6.109 The scope of budget examination is broad. It comprises the bill of law and the analysis of its annexes, which -as indicated before- comprise the fiscal policies and the fiscal framework, the medium-term priorities of the MPMP, and the details of expenditures and revenues for the next fiscal year, amongst others. The Assembly has enough time (2 months, between October 15 and December 15) to carry out this review.

6.110 While the budget initiative belongs constitutionally to the executive, the legislature may propose amendments. Law 550 regulates the amendment procedures, both for the bill of the annual budget law and to the annual law itself during execution. The legislative branch cannot modify the budget ceiling, unless it defines the sources of revenue for such increase.¹⁷¹ The President has the power to totally or partially veto the amendments proposed by the Assembly, both to the annual budget (as happened for the budgets of 2005 and 2003), as well as to subsequent amendments proposed.

6.111 The modifications to the budget law during its execution are made by law and, thus, are subject to legislative scrutiny.¹⁷² Law 550 indicates that the legislative branch will process the modifications with priority, within a maximum term of 60 days. The rules in budget reallocations are clear and set forth strict limits to the executive: the MHCP can only reallocate budget line items, without prior legislative approval, between the same entity and even then within certain restrictions (e.g., it is prohibited to reallocate from investment to current expenditures, and MHCP must inform the Commission of Economic, Financial and Budget Affairs of every reallocation of the investment expenditure).

6.112 While Law 550 introduced greater discipline in the approval of budget modifications, an unintended consequence has been the restrictions to receive short-term grants, which given their nature and the donors' different fiscal years, are difficult to anticipate when the budget proposals

169. The Commission gives an opinion on the bill of law of the PGR, issuing a majority opinion and a minority opinion. In 2005, the plenary session adopted the minority opinion for the budget of 2006. The Commission is formed by a non-fixed number of deputies (11 in 2005 and 16 in 2006) and is renewed annually. These factors can weaken the institutionalization of the financial and budget expertise in the legislative body. In other countries, the duration of the mandate in permanent commissions is usually longer.

170. It must be stated that Nicaragua is one of few countries in the region that has such office of technical advisory services in budget matters.

171. Law 550 establishes the mechanisms to incorporate new sources of revenue during the discussion and approval of the annual budget law. It sets forth consensual mechanisms between the executive and legislative branches, through a Technical Committee formed by the MHCP and the Commission of Economic, Financial and Budget Affairs, which has to render a decision within a term of 10 days.

172. Law 550 broadened legislative control towards areas until then exempt from such procedure; for example, in matter of additions due to loan and grant operations. Before, they were approved ex post facto by means of a retroactive amendment to the budget law, usually at the end of the fiscal year, applying the principle of 'legislative silence' in the case of loans and grants. The exception currently kept is related to budget additions for entities' own revenues (rentas con destino específico), which are reported on a monthly basis by the MHCP to the Commission of Economic, Financial and Budget Affairs.

are prepared. At the same time, there are no sufficient incentives for the executive to spend political capital in the passing of budget modifications for small donations. Given that these grants usually bear limited impact on fiscal discipline and public expenditure policy, a more streamlined approach such as ex-post reporting under a reasonable aggregate ceiling, could be considered so as to prevent undesirable alternatives, such as off-budget funding implementation.

6.113 *Legislative scrutiny of audit reports.* On budget execution, the legislative branch, through the General Directorate of Analysis and Monitoring of Public Expenditure, maintains access to SIGFA and conducts periodical monitoring (each month through direct access to execution figures; quarterly through the in-year execution reports prepared by the MHCP; and annually through the Budget Execution Report submitted by the MHCP).

6.114 Law 550 establishes that the National Assembly is entrusted to approve or reject the budget execution annual report (although it does not indicate if this process is made through law, and thus, subject to veto). Previously, the executive, through the MHCP, has to substantiate such report by the second week of May. As noted before, the same law asks the CGR to submit its audit on the report to the Commission of Economic, Financial and Budget Affairs of the National Assembly before the appearance of the Ministry of Finance.

6.115 However, there are dysfunctions in the legislative scrutiny of the external audit reports. As explained earlier, not all audit reports conducted by the CGR are informed to the legislative branch in a systematic or compulsorily manner. Only those audits conducted per request of the same legislature are submitted to it. These reports are reviewed within an approximate period of one year (there is no fixed term to examine these reports) by the Commission of Economic, Financial and Budget Affairs or by the specialized commissions that have required such reports.

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6.116 The legislature performs hearings and interpellations on an occasional manner on the main conclusions of the audit reports, but does not usually issue formal opinions on them or monitor their implementation. The monitoring of audit recommendations is done by the same CGR, but there is no legal obligation to inform the legislative power on their effective implementation by the government, e.g. through its annual report.

6.117 *Conclusions. Effective scrutiny by the legislature and thorough external audit is an enabling factor in accountability for fiscal and expenditure policies and their implementation.*

6.118 There are positive aspects in the clarity and application of the legal framework with respect to the legislative review and approval of the annual budget law, as well as in the mechanisms to approve in-year budget modifications, recently regularized through Law 550. It must be noted, however, that strict ex-ante legislative approval can affect the country's capacity to benefit from short-term grants, which given their nature are difficult to anticipate at the time of budget formulation. Elements could be introduced into the law to better balance the capacity of the government to receive this type of grants (which bear little fiscal and public expenditure impact), and the legislature's right to oversee public finances.

6.119 As for the ex post scrutiny of public expenditure, although guaranteed by law, in practice is limited because the National Assembly does not receive all external audit reports, and when it

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173. The National Assembly, as a consequence of the review of CGR reports, may request special studies on specific matters. In fact, these requests make up to great extent the regular work of the CGR, but its effective use by the legislative branch is deficient.

does, their review and discussion take a significant amount of time, with minimal subsequent monitoring.

6.120 With respect to the Office of the Controller General of the Republic (CGR), and important recent step was the preparation of an evaluation of the 2004 annual budget execution report. However, since this activity did not constitute a financial audit, its scope was limited in comparison to international practice. On the other hand, for the audit reports that are indeed produced (most of them of a “special” type), the monitoring of recommendations is made in a formal fashion but, in general, the response from implementing entities is delayed and not particularly thorough. The monitoring system that the CGR is putting into practice is another important step that would help to improve monitoring during future years.

6.121 The absence of a financial and compliance audit on budget execution limits guarantees of information integrity and the effectiveness of accountability for the efficient and legal use of public resources. Consequently, emphasis should be put on the CGR’s plans to prepare the first PGR execution audit, and on the future sustainability of the practice.

Donor practices

6.122 This section analyzes some elements of the practices of providers of external assistance that impact upon the performance of the national PFM system.

6.123 *Predictability of budget support.* The degree of certainty of annual budget support, as well as its distribution throughout the fiscal year, impacts upon the capacity of the government to implement its budget plans. In this sense, two practices usually recommended to the providers of external assistance are: (i) to send information to the government on the annual amounts foreseen, at least six weeks before the government submits the budget to the legislative branch; and (ii) to reach an agreement with the government on the quarterly programming of disbursements at the start, or before the start, of the fiscal period.

6.124 In Nicaragua, an essential step in that direction was the signature, in May 2005, by the Government and the Budget Support Group (BSG)¹⁷⁴ of a Joint Financing Arrangement (JFA) which purpose, *inter alia*, is to facilitate greater predictability in external aid and its alignment with the budget system. The JFA has incorporated the good practices cited in the previous paragraph through the requirements to: (i) formally communicate the intended budget support around June of the preceding year, and its confirmation by September 15; and (ii) decide on a quarterly disbursement calendar in November of the preceding year.

6.125 Given the recent implementation of the JFA framework, there is room for improvement, particularly in terms of ensuring greater correspondence between the annual and quarterly commitments and actual disbursements. Granted, this is not an easy task, knowing the different budget support approaches to which providers of external assistance are bound in their internal regulations, e.g. broad-based vs. sectoral support, fixed vs. variable tranches, policy actions vs. outcomes.

6.126 It is also important to note that the JFA does not yet include all providers of external assistance who provide budget support, and that the commitments are not always confirmed on

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174. The providers of external assistance that form the BSG are the European Commission, Finland, Germany, The Netherlands, Norway, Sweden, Switzerland, United Kingdom and the World Bank.

the deadline fixed in the JFA.¹⁷⁵ Prior to the signing of the JFA, in the limited cases when annual budget support projections were delivered, the discrepancies with the plans were due mainly to noncompliance with prior conditions (including adequate macroeconomic and fiscal conditions)

6.127 *Financial information on investment projects.* In principle, donor support to projects can be channeled in various ways, with varying degrees of participation by the government in the planning and management of the resources. While the government should be able to budget and report on the assistance transferred in cash, it depends on the providers of external assistance for budget estimates and reporting on implementation of aid in-kind. Donor reports on cash disbursements are also important for reconciliation between donor records and government project accounts.

6.128 In Nicaragua, donor practices on the financial information provided to the government for budgeting and reporting are not uniform. Some providers of external assistance disburse primarily through advances to rotating funds, a procedure that gives certain autonomy to the government for budgeting execution. Others present regularly the disbursement projections, although not necessarily linked to the budget preparation cycle. The information is not generally submitted in accordance with the detailed classifications used by the government, but their level of aggregation allows the latter to break it down by budget lines without major difficulty. The information on in-kind grant projections seems scarce.¹⁷⁶

6.129 With respect to ex-post information on disbursements made, this information is usually made available to the government through access to on-line systems, quarterly or biannual reports submitted within two months subsequent to each period, or in response to specific requests.¹⁷⁷ The Ministry of Foreign Affairs incorporates and publishes disbursement data in the Official Cooperation Information System (www.sysoda.cancilleria.gob.ni). However, this information is not used yet in a systematic manner to reconcile financial figures against budget records.

6.130 *Use of national procedures.* National systems for management of funds are those established in local legislation and regulations, and applied by the mainstream line management functions of the government. The use of different procedures (specific to providers of external assistance) could divert capacity away from managing the national systems. Conversely, the use of these systems by the providers of external assistance can help to focus efforts on strengthening and complying with the national procedures also for domestically funded operations. Direct budget support (general or sector based) will by definition use national procedures in all respects. Other types of financing, e.g. earmarked budget support, basket funds and discrete project funding, may use some or no elements of national procedures.

6.131 In Nicaragua, the use of national systems has increased in recent years, particularly to the extent that budget support and common funds have substituted partly the assistance provided before almost exclusively through tied projects. However, although there is no complete

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175. The medium-term review of 2005 was delayed due to, inter alia, the deviation from the program with the IMF and the corresponding absence of a "letter of agreement" by the IMF on macroeconomic and fiscal aspects.

176. For purpose of this report, the concept of in-kind grants includes assistance granted through direct administration of the cooperating agencies or through agreement between them and NGOs.

177. Providers of external assistance, who accounted for over 70 percent of disbursements of external loans and grants budgeted in 2006, provided this information periodically.

information to quantify the use of national systems for external loans and grants,¹⁷⁸ they presumably cover less than 50 percent of such resources.¹⁷⁹ The preference still shown for specific project procedures reflects, in part, the concerns of providers of external assistance for the weaknesses described before in the country procurement and auditing systems.

6.132 Conclusions. Important agreements have been reached to try to align external funding with the national budget system. Worth highlighting is the Joint Budget Financing Arrangement (JFA), which includes commitments on the provision of information that will improve predictability of budget support. Also worth noting is the growing use of national systems and the prompt access of the government to information on disbursements made by the providers of external assistance.

6.133 On the other hand, it must be acknowledged that the cited actions have only recently been introduced, and thus, their impact is still not to full potential. Future actions could concentrate in the incorporation of a greater number of donors to the efforts underway, in terms of timely provision of projections and disbursements (and greater convergence between both), in cash and in kind, and greater use of national procedures in investment projects. All of the above is consistent with the National Harmonization and Alignment Action Plan.

C. Reform Process

Recent Reforms

6.134 Within the framework of dialogue around the Country Financial Accountability Assessment (CFAA) report of 2003, an ambitious two-year action plan was prepared with the objective to address certain weaknesses found in systems and procedures. As detailed in Annex 1, and briefly in the following paragraphs, there was a mixed record of implementation -although in absolute terms a majority of actions were implemented or partially implemented, evidencing the commitment to reform-. However, it must be acknowledged that most of the actions took place in the second year, and thus, their impact upon the performance of the system has just recently been noted, as inferred from the conclusions of the preceding chapter.

6.135 Implementation arrangements. In November 2003 an inter-institutional agreement¹⁸⁰ was issued to implement the government action plan to improve Public Financial Management (PFM), based largely on the actions suggested by the CFAA that fell under the realm of the executive branch. Its implementation and monitoring took place under the strong leadership of the MHCP, particularly the Directorate of the SIGFA Project (currently the General Directorate of Technology). However, in other entities, and even some normative directorates of the MHCP,

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178. For such estimate, it is necessary to calculate the average of the proportion of external funds that use national systems for each of the four areas of procurement, payments/accounting, auditing and reporting. It has not been possible to gather information at this level of detail for all funds.

179. Of the loans and external grants incorporated in the 2006 budget, 29 percent corresponds to budget support and 3 percent to common fund-type operations (Supplementary Social Fund, FONSALUD, PRORURAL).

180. Government of Nicaragua (2003).

the cited agreement was not fully owned.¹⁸¹ Moreover, there was no mechanism to monitor the areas related to external scrutiny and auditing.¹⁸²

6.136 *Legal framework.* Based on studies about the country legal framework and comparative international legislation, the MHCP prepared a modern bill of law of financial management that eventually derived in Law 550 of August of 2005, as amended (Law 565 of November of 2005) As explained in the different sections of the preceding chapter, the Law incorporated features largely consistent with good international practice for the different components of the budget management system.

6.137 *Budget formulation.* In April 2005, the MHCP adopted a strategy and action plan to develop a medium-term budget framework in Nicaragua.¹⁸³ The document is based on international experience in the adoption of this type of instruments and provides for an adequate sequence of gradual implementation. Additionally, the 2006 and 2007 budget documentation showed relevant improvements with respect to preceding years, most importantly the incorporation of the medium term fiscal, budgetary and sectoral expenditure frameworks, as well as the budgets for almost all public sector entities.

6.138 On the other hand, a basic methodology was prepared to estimate recurrent costs of the public investments program, but it was not complemented nor has been put into actual practice yet. With respect to the reclassification of current expenditures included in the capital budget, some improvements have been made with new projects, but the criteria for -and actual-reclassification have not been developed.

6.139 *Financial Management and Audit Integrated System (SIGFA).* In terms of the continuous improvement of the information tool e-SIGFA, relevant progress was made with the technological platform and certain procedures (e.g., control of rotating funds, single collection form). Furthermore, certain administrative systems were developed (cash flow programming, procurement and contracting, civil service and public assets), but their implementation and integration is still limited. The coverage of entities that use SIGFA was extended, but not under a clear strategy to incorporate decentralized entities and “third level” implementing units. With respect to security, progress was made in the administration of users and roles for the different subsystems, in telecommunications and partially in logbooks, but not so in the external security audit.

6.140 *Treasury.* The methods to record and control rotating funds were improved, including the "APEX" and "ADEX" procedures that allowed incorporation into the PFM system of projects financed with external loans and grants. Also, the introduction of the single collection form facilitated the transfer and reconciliation of information on internal revenues. On the other hand, the development of detailed programming of cash flows and gap management as part of the e-SIGFA, and of criteria to sequence the processing of payment orders, had little progress. Likewise, the implementation of the payment system through electronic fund transfers (ETF) has experienced delays.

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181. In effect, the areas under the control of the MHCP, particularly through technical assistance coordinated under the SIGFA Project, were the ones that showed higher levels of implementation.

182. Certain political economy conditions prevented an effective coordination between the executive and the CGR during the two years covered by the action plan.

183. MHCP (2005).

6.141 *Internal control and internal auditing.* In September 2004, the CGR issued new Internal Control Technical Norms for the Public Sector (NTCI), which are generally consistent with international practice. The CGR conducted induction and training activities for the implementing public sector entities. Similarly, the MHCP also conducted training activities, including for internal auditors, in areas related mainly to the information system e-SIGFA. However, instruments of sector tracking of public expenditure flows (e.g., "expenditure tracking surveys") were not implemented.

6.142 *Deconcentration and decentralization of budget execution.* The diagnosis of the financial management models for decocentrated and decentralized budget execution was not performed. It is known, however, that the Ministry of Health prepares on a regular basis financial execution reports that cover its de-concentrated units (some of which use a sectoral financial management system called "SLAFT"). Given its complexity, more difficult has been the effective implementation of sound procedures for adequate expenditure recording, reporting and monitoring in the decentralized units of the education sector

6.143 *Accounting and financial statements.* In terms of restructuring the accounting function, progress was limited (it assumed bank reconciliations, but kept the management of assets). The process to clean up initial balances advanced to the level of actual identification of the required accounting adjustments, but its implementation was not officially made. New reports were designed, and the annual Budget Execution Report was improved, but the reconciliation against cash balances, the addition of comparative historical revenue and expenditure data, and the identification of accounts payable in arrears, were not added. With Law 550, the execution reports on transfers to decentralized entities are now required.

6.144 *External auditing.* Under its modernization project, the CGR prepared some studies related to its organizational structure, updated its technological tools, prepared auditing manuals and the NTCI, and trained its personnel. Furthermore, it started to publish some of its auditing reports in the Internet and, for the first time, prepared a report to evaluate budget execution (of 2004). However, this report did not constitute a financial and compliance audit, with its pertinent opinion, on the budget execution prepared by the MHCP. There are plans underway to prepare such a first audit.

6.145 *Public participation.* The executive adopted a strategy of access to information (EVA) and incremented the quantity and quality of financial information in the public domain (www.consultaciudadana.gob.ni). Progress was also made in the publication of procurement processes. However, these progresses have not been supplemented with a multimedia strategy that includes other means to the citizens with no Internet access.

6.146 *Coordination of external aid.* The maintenance of public investment project records has been strengthened, including for projects financed with external loans and grants, which are now incorporated into the budget. There is a linkage between the e-SIGFA and the SNIP that makes it easy to compare the information within the two systems. However, the reconciliations are not made in a regular manner, at the stage of budget execution, between the data in SIGFA, SNIP and SYSODA. On the other hand, progress was made in coordinated sectoral assistance ("SWAps"), particularly in the health and rural development sectors.

6.147 *Human resources*. In general, progress was made in the implementation of the Civil Service Law (Law 476),¹⁸⁴ including the development of the Civil Service Integrated System (SISEC) –bearing an indirect though relevant effect on PFM-.In the case of financial management officers, both the MHCP and the CGR have implemented specific training programs, as indicated before. However, budget limitations prevented the development of more continuous and sustainable programs.

6.148 *Public debt records*. The Public Debt General Law and its Regulations were approved, and the first annual public debt policies were issued. Under the new legal framework, the coordination and exchange of information between the MHCP (that records internal debt) and the BCN (that records external debt) has improved. Internal debt records have also improved, although in two separate databases (DMFAS/SIGADE and other registry developed internally). Work was undertaken on the conceptual framework for the automatic link between DMFAS/SIGADE and SIGFA, but it has not been developed.

6.149 *Revenue System*. In general, the process to implement projects for strengthening management of revenues and customs required more time than initially anticipated by the collecting agencies. The cross-checks of internal information have improved, but not necessarily so with external data. As for the coordination with the Treasury, the establishment of collection accounts and the single collection forms improved the flow of information and of funds. In 2005, a study to estimate fiscal expenditure was concluded, but these assessments are not made yet in a systematic manner or identified in budget documents.

Continuation of the Reform

6.150 *Government ownership and leadership*. As noted in the receding paragraphs, an ambitious process of reform in different fronts was launched, with relevant progress overall and some stumbling blocks. Commitment of the government was formally expressed in the National Development Plan (see Chapter I). The approval of Law 550 and its amendments showed a positive stance from the executive and legislative branches towards the enhancement of transparency and management of public finances. It is expected that the gradual development of the participation and consensus building system will improve the mechanisms of dialogue among government, civil society, private sector and international community in development matters, including PFM.

6.151 At the operational level, the key implementation instruments are the annual operating plans of the different projects that support PFM modernization, such as Public Sector Technical Assistance, Efficiency and Transparency in State Contracting, Strengthening of Tax and Customs Administration and –in the case of the CGR- its Modernization Program. As for budget support, the public finance area of the performance assessment matrix (PAM) of the JFA is aligned with the National Development Plan’s matrix to reform and modernize public administration.

6.152 *Coordination*. It was explained before that MHCP’s strong leadership has been a critical element to implement PFM reforms. The coordination of providers of external assistance in this area has also improved significantly, e.g., through the operation of the Budget Support Group (BSG), the governance sector “table”, and the increasingly joint financing of public programs.

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184. Advances include the issuance of regulations, classification of positions, progress in accreditation (even though not at the pace initially envisaged) and development of the SISEC, amongst others.

However, coordination of the reform between the MHCP and sector entities has not been equally effective—as evidenced by the initial problems in implementation of Law 550—Likewise, coordination has been weak with regards to external audit reform, entrusted to the CGR (a constitutionally autonomous entity).

6.153 *Sustainability*. It must be recognized that, to a good extent, reforms achieved have been made with strong support of technical assistance hired under projects with external financing. Therefore, notwithstanding that the extensive use of national financial management systems and their incorporation into the legal framework are signs of institutionalization, their sustainability will depend also upon other aspects, mainly: (i) the professionalization of public servants, with the effective application of merit-based human resource management, per the Civil Service Law; and (ii) building the government’s own capacity to formulate, implement, supervise and evaluate public sector modernization projects, particularly as external financing is gradually aimed more towards budget support rather than specific projects.

D. Main Conclusions

6.154 Good performance of public financial management (PFM) institutions and systems allows governments to achieve and balance the three interrelated objectives of budget management: aggregated fiscal discipline, efficient allocation of resources consistent with public policy priorities, and operational efficiency. This Chapter assessed PFM performance in Nicaragua based on an international framework of reference that addresses seven critical dimensions: (i) credibility of the budget; (ii) comprehensiveness and transparency; (iii) budget planning; (iv) predictability and control in budget execution; (v) accounting, recording and reporting; (vi) external scrutiny and audit; and (vii) donor practices that affect PFM.¹⁸⁵

6.155 *Credibility of the Budget*. From 2003-2005, expenditure execution usually exceeded the amounts budgeted, posing a fiscal discipline risk. However, this risk did not materialize because the over-execution of expenditures corresponded mainly to domestic revenues, grants and concessional loans that also exceeded budget forecasts. Even when in both cases budget credibility was affected, it should be noted that their effects were distributed in a relatively uniform manner among the different implementing entities, and there are no significant concerns on payment arrears.

6.156 The credibility of the budget is a critical feature of the ability of the government to control fiscal discipline and prevent shortcomings in the financing of sector budgets. It is expected that with the recent enactment of the Financial Management and Budget Regime Law (Law 550), which sets forth strict limits to budget modifications, budget outcomes will increase the reliability of the budget as policy tool.

6.157 *Comprehensiveness and transparency*. The budget information in Nicaragua is ample, based on a good classification system (albeit not consistent with the latest international best practice), and has a comprehensive institutional coverage as far as the budget document per se is

185. This report is based primarily on PFM performance measurement analytics undertaken through a partnership of the Government of Nicaragua with the British Department for International Development (DFID), the European Commission (EC), the Inter-American Development Bank, and the World Bank. The performance measurement framework was developed by the Public Expenditure and Financial Accountability (PEFA) partnership.

concerned. But that is not the case with the execution reports which, up to now, include only the General Budget of the Republic (PGR) and not the execution of revenues from the rest of the central government. At the same time public access to information is limited due to the absence of certain key information (financial statements, audit reports, reports of resources received by service-delivery units, and comprehensive publication of procurement and contracting processes). Likewise, the limited transparency of the fiscal decentralization system and the difficulty of monitoring the aggregate fiscal risk of the public sector are areas in need of improvement.

6.158 The ability of the government to control aggregate fiscal discipline of the public sector could be affected if fiscal neutrality of transfers to municipalities is not attained, and if the mechanisms to compile and consolidate all public finances are not implemented. On the other hand, the scrutiny on the government's financial management –a key element to improve the strategic allocation and operational efficiency of the use of funds- is limited in view of the absence in the public domain of the aforementioned key information.

6.159 In the short term, improvements can be expected with the preparation of execution reports for all budgets and of financial statements (both are requirements stipulated by Law 550), the revision of rules and their application vis-à-vis current expenditures in investment projects, the implementation of transparency in procurement through the State's Procurement and Public Contracts Integrated System (SICCE), and the publication of customized financial information on resources received and used by service-delivery units, particularly in the education and health sectors. To the extent that decentralized entities (by function and territory) comply with the requirements of Law 550 on provision of information, the monitoring of aggregate fiscal risk will be facilitated, although the creation of capacity in the MHCP to carry out this task may possibly take more time. Finally, it is well known that subjecting further decentralization progress to a framework of fiscal neutrality is both critical and urgent.

6.160 *Budget planning.* The annual formulation of the budget is made in an orderly fashion, with due participation of the implementing entities, notwithstanding the small margin –because of earmarked funds and "fixed" expenditures– for flexibility. Institutionalization of the national public investment system (SNIP) is growing, particularly at the pre-investment assessment stage, but monitoring and evaluation remain weak. As for the medium term budget framework, the steps are recent but relevant. The framework has a clear legal basis, and the MHCP has an adequate strategy in place to implement this new instrument in stages, which should consider integration of SNIP into the process.

6.161 In the short to medium term, the capacity to prepare or refine costed sectoral strategic plans needs to be developed for reconciliation of the top-down and bottom-up multi-year budget planning. The public investment program (PIP) should be based on those plans, with due consideration to recurrent cost implications. Once they are comprehensively implemented, the elements that compose the medium term framework, i.e. the fiscal framework and the sectoral expenditure framework, will reduce fiscal risks and provide informative elements that will increase the quality and consistency of decisions on the strategic allocation of resources.

6.162 The effort to incorporate results elements in the budgeting process is incipient and limited by budget rigidities. Basic goals and budget indicators have been developed, but the accountability framework has not. Enhancements to the dimensions and scope of indicators, and

to the capacity to measure the marginal cost of changes in performance, should be progressively built.

6.163 As is expected from such a significant overhaul of the budget system, which should be gradually implemented over the medium and long term, there are capacity gaps in executing entities and in the MHCP that need to be addressed. And, inevitably, any effort to modernize budget planning and programming will be limited to the extent that significant legally earmarked budget allocations remain.

6.164 *Predictability and control in budget execution.* There are strengths, especially in terms of fiscal discipline, in the centralization of treasury balances through the Single Treasury Account (CUT), as well as in the controls for contracting and recording public debt, albeit further enhancements are possible. In other areas there is more room for improvement.

6.165 Compliance with the timely recording of expenditure commitments, e.g. through automatic links with the SICCE, needs to be ensured. Similarly, the mechanism of direct payments by the Treasury should be improved, requiring better coordination between the MHCP and the Central Bank. The development of the Civil Service Integrated System (SISEC) and the extension of the Fiscal Payroll System (SNF) should continue with the purpose of developing a consolidated payroll system, which in turn should be subject to systematic audits. The implementation of the Technical Internal Control Norms (NTCI) needs to be complemented with information systems that assess their performance. Finally, internal audits require greater professionalization, more systematic risk-based approaches, greater dissemination and better follow-up to its reports.

6.166 The procurement processes and correlated statistics will be more transparent and efficient through the ongoing development of the SICCE. There is also a need, though, to reform procurement legislation (a draft is already available) in line with international practice. Specific areas for improvement include bidders' registration, guarantees, price adjustment, confidentiality of bids, bid evaluation and award, bidder's access to review of procurement decisions, responsive and responsible bidder, suspension of bidders, procurement of consulting services, sanctions regime, and options for procurement consolidation strategies (e.g. *contratos marco*).

6.167 Evidently, weaknesses in internal controls may diminish the operational efficiency in the use of resources and create opportunities for corrupt practices, abuse and waste. Likewise, weaknesses in the controls of commitments and payments may generate fiscal risks. Further attention to systems, processes and controls for budget execution are therefore necessary to ensure greater operational efficiency, fiscal discipline and transparency.

6.168 *Accounting, recording and reporting.* The information on budget execution (per month, quarter and year) is prepared on a timely basis, supported by a good recording system and by a good system of reconciliations of bank accounts handled by the Treasury, all of which are key features to control fiscal discipline, transparency and scrutiny. Moreover, the budget formulation, execution and recording systems allow for the tagging and monitoring of poverty-reduction expenditure.

6.169 However, execution reports are still not supplemented with data on bank balances and, even less, with accounting financial statements. These elements are necessary to corroborate the integrity of the currently produced reports, and to increase the information and scrutiny on patrimonial elements that, due to their nature, are not reflected in the budget execution reports.

The development of mechanisms to produce financial statements is one of the main challenges assumed by the MHCP within the framework of its plan to implement Law 550.

6.170 On the other hand, it is also necessary to examine with greater detail and support the efforts of the different sectors, mainly of the Ministries of Education and Health, to compile and process more information on the resources received (or not) allocated to service-delivery units (schools and health centers). Apart from being an essential accountability tool, this type of information is necessary to assess the operational efficiency of the mechanisms to transfer and use funds in decocentrated programs.

6.171 *External scrutiny and auditing.* There are positive aspects in the clarity and application of the legal framework with respect to the legislative review and approval of the annual budget law, as well as in the mechanisms to approve in-year budget modifications, recently regularized through Law 550. It must be noted, however, that strict ex-ante legislative approval can affect the country's capacity to benefit from short-term grants, which given their nature are difficult to anticipate at the time of budget formulation. Elements could be introduced into the law to better balance the capacity of the government to receive this type of grants (which bear little fiscal and public expenditure impact), and the legislature's right to oversee public finances.

6.172 As for the ex post scrutiny of public expenditure, although guaranteed by law, in practice is limited because the National Assembly does not receive all external audit reports, and when it does, their review and discussion take a significant amount of time, with minimal subsequent monitoring.

6.173 With respect to the Office of the Controller General of the Republic (CGR), and important recent step was the preparation of an evaluation of the 2004 annual budget execution report. However, since this activity did not constitute a financial audit, its scope was limited in comparison to international practice. On the other hand, for the audit reports that are indeed produced (most of them of a "special" type), the monitoring of recommendations is made in a formal fashion but, in general, the response from implementing entities is delayed and not particularly thorough. The monitoring system that the CGR is putting into practice is another important step that would help to improve monitoring during future years.

6.174 The absence of a financial and compliance audit on budget execution limits guarantees of information integrity and the effectiveness of accountability for the efficient and legal use of public resources. Consequently, emphasis should be put on the CGR's plans to prepare the first PGR execution audit, and on the future sustainability of the practice.

6.175 *Donor practices that affect PFM.* Important agreements have been reached to try to align external funding with the national budget system. Worth highlighting is the Joint Budget Financing Arrangement (JFA), which includes commitments on the provision of information that will improve predictability of budget support. Also worth noting is the growing use of national systems and the prompt access of the government to information on disbursements made by the providers of external assistance.

6.176 On the other hand, it must be acknowledged that the cited actions have only recently been introduced, and thus, their impact is still not to full potential. Future actions could concentrate in the incorporation of a greater number of donors to the efforts underway, in terms of timely provision of projections and disbursements (and greater convergence between both), in cash and

in kind, and greater use of national procedures in investment projects. All of the above is consistent with the National Harmonization and Alignment Action Plan.

PFM Reform

6.177 During the two years of implementation of the governmental action plan to improve PFM (2004-2005),¹⁸⁶ an ambitious process of reform in different fronts was launched, with relevant progress overall and some stumbling blocks. Commitment of the government was formally expressed in the National Development Plan. The approval of Law 550 and its amendments showed a positive stance from the executive and legislative branches towards the enhancement of transparency and management of public finances. It is expected that the gradual development of the participation and consensus building system will improve the mechanisms of dialogue among government, civil society, private sector and international community in development matters, including PFM.

6.178 At the operational level, there is financing available to implement the different projects that support PFM modernization.¹⁸⁷ As for budget support, the public finance area of the performance assessment matrix (PAM) of the JFA is aligned with the National Development Plan's matrix to reform and modernize public administration.

6.179 The strong leadership of the MHCP has been a key element to implementation of PFM reforms. The coordination of the providers of external assistance in this area has also improved significantly. However, the coordination of the reform between the MHCP and sector entities has not been equally effective –as evidenced by the initial problems in implementation of Law 550–. Likewise, the coordination has been weak with regards to the reform of external auditing, entrusted to the CGR (a constitutionally autonomous entity).

6.180 On the other hand, it must be recognized that, to a large extent, the reforms achieved have been made with the support of technical assistance contracted under projects with external financing. Therefore, notwithstanding that the extensive use of financial management systems and its incorporation into the legal framework are signs of institutionalization, its sustainability will also depend upon other aspects, mainly: professionalization of public servants, with the effective application of merit-based human resource management; and (ii) development of governmental capacity to formulate, implement, supervise and evaluate modernization projects, particularly as external financing gradually shifts from specific projects to budget support operations.

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186. Based on the Country Financial Accountability Assessment Report (World Bank and IDB, 2003).

187. Mainly financing operations for Public Sector Technical Assistance, Efficiency and Transparency in State Contracting, and –in the case of the CGR- its Modernization Program.

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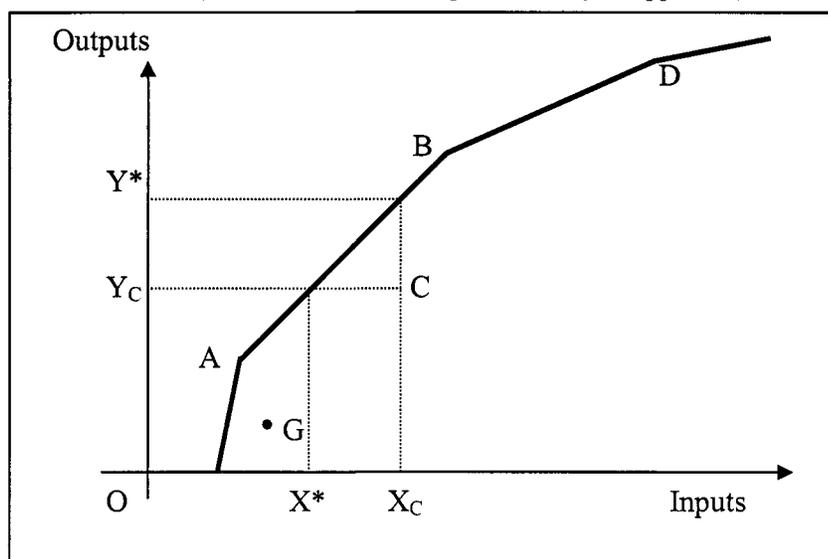
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Annex A
Technical Note on the Efficiency of Public Spending in Nicaragua

A.1 This Annex discusses the relative efficiency of public spending in Nicaragua compared to that in other developing countries, summarizing the findings of ongoing research at the World Bank¹⁸⁸ and the Inter-American Development Bank¹⁸⁹ on the measurement of efficiency in public spending.¹⁹⁰ In this research, efficiency is measured as the distance between a country's current input-output combination in the production of public services and an empirically derived world production possibilities frontier. One such production possibilities frontier is shown in Figure A.1, along with the different combinations of Inputs (X) and Outputs (Y) observed in countries A, B and D, which lie on the frontier, and for countries C and G, which lie inside the frontier. The countries lying on the production possibilities frontier are characterized by either spending the least amount on inputs among all the countries producing a similar level of output, or by producing the greatest output among all the countries with similar levels of spending on inputs.

Figures A.1: The Production Possibilities Frontier
 (based on Data Envelopment Analysis approach)



A.2 Using the construct in Figure A1, efficiency can be measured in terms of amount of inputs used or in terms of outputs produced. The input-oriented measure of efficiency in country C is calculated as the distance OX^* divided by the distance OX_C . The output-oriented measure of efficiency for country C is calculated as the distance OY_C divided by the distance OY^* . With

188. Herrera, Santiago and Gaobo Pang, (2004), "Efficiency of Public Spending in Developing Countries: An Efficiency Frontier Approach", World Bank working paper, December.

189. Machado, Roberto (2006), "El gasto en los países centroamericanos y República Dominicana: eficiencia agregada, eficiencia-insumos y eficiencia-resultados", IDB Working Paper, September.

190. The efficiency measurements discussed in this Annex focus on the narrow concept of technical efficiency and do not extend to the broader concept of allocative efficiency, which would require comparable data on input prices across countries that is largely unavailable.

this method of calculation, all the countries that lie on the production possibilities frontier exhibit an efficiency measure of 1.0, while all countries lying inside the frontier (to the right and below) have efficiency measures less than 1.0.

A.3 Herrera and Pang (2004) have constructed a set of production possibilities frontiers for a number of activities in the education and health sectors, using information on public expenditures and output indicators from a sample of over 140 developing countries. There are eight output indicators in education referring to primary and secondary enrollment (gross and net), average years of schooling, first and second level completion rates and the literacy rate among youth aged 15-24 years. Each of these output indicators is related to total public expenditures in education to derive single-output/single-input measures of efficiency.¹⁹¹ The same is done in health by relating total public expenditures on health and four output indicators referring to life expectancy at birth, DPT immunization, Measles immunization and the disability-adjusted life expectancy (DALE) index, which takes into account both mortality and morbidity.

A.4 While single-input/single-output measures of efficiency are the simplest to calculate, they also have some shortcomings. One is that they do not take into account private spending on health and education. Another is that they do not take into account any factors other than direct spending on health and education that may have a significant impact on sector outcomes. Since different countries rely on these other factors to varying extents (which may depend in part on their relative prices), single-input measures of efficiency tend to be biased against those countries that rely least on these other inputs. Similarly, the single-input/single-output measures fail to acknowledge the existence of tradeoffs in the delivery of outputs. For example, countries with the same spending on education may have widely diverging outcomes in one output indicator versus another, depending on the subs-sector emphases given in each country. Focusing on one single outcome indicator versus another could, therefore, bias the relative measures of efficiency depending on the outcome indicator chosen. To account for the potential biases associated with single-input/single-output based measures, Herrera and Pang (2004) also generate measures of spending efficiency based on a multiple combination of inputs and multiple combinations of outputs. In education, the multiple combination of inputs includes teachers per pupil and the adult literacy rate, in addition to sector spending levels. In health, the combination of inputs includes public and private expenditures in the sector, and the adult literacy rate.¹⁹²

The Relative Efficiency of Education Spending

A.5 Table A1 presents the efficiency scores measured for the various outcome indicators in education, both using input-oriented measures and output-oriented measures, as well as the single and multiple input/output combinations, with data for 1996-2002. These scores are

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191. Instead of using total public expenditures in the x-axis of the empirically constructed production possibilities frontier, Herrera and Pang (2004) use an orthogonalized measure of public expenditures, derived as the difference between actual public expenditures (in education or health) and the amount predicted on the basis of GDP per capita.

192. These estimates of efficiency are subject to statistical variability. The confidence intervals associated with each efficiency score are fairly easy to calculate for the single input/single output case, but not so for the case of multiple inputs and outputs. This is one reason why this paper puts less emphasis on those findings vis-à-vis the single input/output findings.

presented for Nicaragua and the other Central American countries, together with the average scores exhibited by other regions around the world.

A.6 Table A1 indicates that the efficiency of public spending on education in Nicaragua is considerably lower than the Latin American average under the input-oriented measures. Nicaragua scores an average of 0.52 (for single input/output measures), compared to an average of 0.57 in Central America and 0.58 for Latin America. A similar picture also emerges from the comparisons of output-oriented efficiency measures,¹⁹³ where Nicaragua achieves an average efficiency score of 0.47 versus Central America and Latin America averages of 0.54 and 0.65. Looking at the individual output-oriented measures, Nicaragua appears to exhibit the greatest inefficiencies in the indicators related to secondary education.

A.7 Using multiple inputs and outputs, a similar picture of relative inefficiency prevails, though somewhat less pronounced than under the single input/output measures. While the absolute efficiency scores in this case are higher than when using the single input/single output measure, Nicaragua's score is lower than the Central and Latin American regional averages, both under the input-oriented and output-oriented measures. Overall, these findings suggest that there is ample room for increasing the efficiency of public education spending in Nicaragua, especially at the secondary level.

The Relative Efficiency of Health Spending

A.8 The efficiency scores of public spending on health are presented in Table A2. Contrary to the picture that emerged in education, the efficiency of public spending on health in Nicaragua does not appear to be appreciably different from the average efficiency scores achieved in the Central and Latin America regions. Using the input-oriented single input/output measures, for example, Nicaragua exhibits an efficiency score of 0.65, compared to an average of 0.65 in Central America and of 0.69 in Latin America and the Caribbean. Using the output-oriented measures, Nicaragua's average efficiency score of 0.90 is virtually identical to the Central America and LAC averages of 0.91 and 0.90. The same efficiency picture emerges when using multiple inputs and outputs, with Nicaragua exhibiting similar scores to the two regional averages.

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193. A number of countries exhibit contrary patterns in efficiency, showing a relatively high efficiency score under the input-oriented measure and a relatively low measure under the output-oriented measures, or vice-versa. This is most notable in the cases of Guatemala and Panama, and may be related to the concave curvature of the production possibilities frontier, which reflects decreasing returns to scale. Nicaragua (and Honduras), however, exhibit very low efficiency scores under both measures.

Table A.1 Efficiency Scores for Public Spending in EDUCATION

	Central America and Panama							Other Regional Averages					
	NIC	CRI	SLV	GTM	HND	PAN	Ave.	LAC	AFR	EAP	ECA	MNA	SAS
INPUT-Oriented Measures													
<i>Single Input/Single Output</i>													
Primary Enrollment -- Gross	0.71	0.67	0.86	0.83	0.73	0.68	0.75	0.74	0.69	0.74	0.67	0.65	0.75
-- Net	0.69	0.68	0.80	0.84	0.70	0.80	0.75	0.77	0.68	0.78	0.72	0.68	0.71
Secondary Enrollment -- Gross	0.67	0.61	0.79	0.82	0.66	0.61	0.70	0.69	0.65	0.69	0.67	0.63	0.70
-- Net	0.69	0.62	0.81	0.85	na	0.62	0.72	0.69	0.64	0.71	0.71	0.64	0.72
Average Years of Schooling	0.23	0.22	0.40	0.46	0.22	0.24	0.29	0.32	0.21	0.36	0.37	0.18	0.25
First Level Complete	0.23	0.25	0.40	0.46	0.25	0.31	0.32	0.36	0.21	0.43	0.48	0.20	0.26
Second Level Complete	0.23	0.22	0.40	0.46	0.22	0.25	0.29	0.32	0.22	0.37	0.33	0.19	0.27
Youth Literacy Rate (ages 15-24)	0.69	0.63	0.81	0.85	0.68	0.63	0.72	0.72	0.66	0.73	0.86	0.63	0.72
Average	0.52	0.49	0.66	0.70	0.50	0.52	0.57	0.58	0.50	0.60	0.60	0.48	0.55
<i>Multiple Inputs & Outputs</i>													
EDU 22 gross	0.85	0.73	0.87	0.96	0.83	0.72	0.83	0.82	0.88	0.83	0.72	0.73	0.91
EDU 32 gross	0.88	0.75	0.94	0.99	0.85	0.78	0.87	0.89	0.92	0.89	0.86	0.92	0.96
EDU 32 net	0.87	0.78	0.94	1.00	na	0.91	0.90	0.93	0.87	0.94	0.93	0.92	1.00
EDU 33	0.86	0.91	0.98	1.00	0.92	1.00	0.94	0.89	0.91	0.97	0.94	0.80	0.95
EDU 33 BL	na	0.73	0.95	1.00	0.87	1.00	0.91	0.89	0.91	0.97	0.94	0.81	0.95
Average	0.86	0.78	0.93	0.99	0.87	0.88	0.89	0.88	0.90	0.92	0.88	0.84	0.95
OUTPUT-Oriented Measures													
<i>Single Input/Single Output</i>													
Primary Enrollment -- Gross	0.73	0.76	0.86	0.81	0.79	0.77	0.79	0.82	0.62	0.79	0.72	0.67	0.72
-- Net	0.80	0.91	0.88	0.84	0.82	0.98	0.88	0.93	0.64	0.93	0.90	0.79	0.78
Secondary Enrollment -- Gross	0.43	0.43	0.46	0.30	0.26	0.53	0.40	0.61	0.23	0.50	0.70	0.54	0.39
-- Net	0.37	0.48	0.48	0.28	na	0.64	0.45	0.66	0.26	0.58	0.84	0.60	0.44
Average Years of Schooling	0.42	0.56	0.48	0.32	0.44	0.79	0.50	0.60	0.32	0.63	0.79	0.53	0.38
First Level Complete	0.22	0.29	0.32	0.33	0.29	0.43	0.31	0.36	0.19	0.49	0.50	0.22	0.20
Second Level Complete	0.07	0.11	0.04	0.06	0.20	0.49	0.16	0.24	0.09	0.37	0.38	0.26	0.22
Youth Literacy Rate (ages 15-24)	0.74	0.98	0.88	0.79	0.85	0.97	0.87	0.94	0.72	0.95	0.99	0.88	0.66
Average	0.47	0.56	0.55	0.47	0.52	0.70	0.54	0.65	0.38	0.66	0.73	0.56	0.47
<i>Multiple Inputs & Outputs</i>													
EDU 22 gross	0.77	0.77	0.86	0.81	0.79	0.78	0.80	0.85	0.68	0.83	0.80	0.71	0.79
EDU 32 gross	0.86	0.78	0.89	0.97	0.82	0.78	0.85	0.89	0.82	0.88	0.89	0.91	0.90
EDU 32 net	0.83	0.91	0.92	1.00	na	0.98	0.93	0.96	0.79	0.97	0.96	0.92	1.00
EDU 33	0.84	0.99	0.98	1.00	0.93	0.10	0.96	0.98	0.98	1.00	1.00	0.99	0.99
EDU 33 BL	0.75	0.70	0.82	1.00	0.77	1.00	0.84	0.86	0.86	0.94	0.93	0.80	0.89
Average	0.81	0.83	0.89	0.96	0.83	0.73	0.87	0.91	0.83	0.92	0.92	0.87	0.91
The combinations of multiple inputs and outputs referred to above are as follows:													
	<i>Inputs</i>							<i>Outputs</i>					
EDU 22 gross	pub. exp.; teachers/pupils							gross primary/secondary enroll.					
EDU 32 gross	pub. exp.; teachers/pupils; adult liter.							gross primary/secondary enroll.					
EDU 32 net	pub. exp.; teachers/pupils; adult liter.							net primary/secondary enroll.					
EDU 33	pub. exp.; teachers/pupils; adult liter.							1st/ 2nd level complete; youth lit.					
EDU 33 BL	pub. exp.; teachers/pupils; adult liter.							1st/ 2nd lev.comp.; ave.yrs.sch.					

Note: these figures represent the measurements based on the Data Envelopment Analysis model with variable returns to scale.

Source: Based on data for 1996-2002, from Herrera, S. and G. Pang (2004).

Table A.2 Efficiency Scores for Public Spending in HEALTH

	Central America and Panama							Other Regional Averages					
	NIC	CRI	SLV	GTM	HND	PAN	Ave.	LAC	AFR	EAP	ECA	MNA	SAS
INPUT-Oriented Measures													
<i>Single Input/Single Output</i>													
Life Expectancy at Birth	0.63	1.00	0.63	0.71	0.65	0.56	0.70	0.69	0.65	0.72	0.58	0.73	0.69
Immunization DPT	0.63	0.53	0.66	0.71	0.68	0.55	0.63	0.68	0.66	0.73	0.63	0.76	0.71
Immunization Measles	0.72	0.53	0.69	0.71	0.73	0.53	0.65	0.69	0.65	0.73	0.67	0.76	0.71
Disability Adjusted Life Expectancy	0.63	0.61	0.63	0.71	0.65	0.58	0.64	0.70	0.65	0.72	0.60	0.71	0.69
<i>Average</i>	<i>0.65</i>	<i>0.67</i>	<i>0.66</i>	<i>0.71</i>	<i>0.68</i>	<i>0.55</i>	<i>0.65</i>	<i>0.69</i>	<i>0.65</i>	<i>0.73</i>	<i>0.62</i>	<i>0.74</i>	<i>0.70</i>
<i>Multiple Inputs & Outputs</i>													
Health 22	0.81	1.00	0.79	0.88	0.81	0.80	0.85	0.82	0.85	0.82	0.72	0.91	0.93
Health 32 DPT	0.81	1.00	0.79	0.89	0.81	0.80	0.85	0.83	0.86	0.82	0.74	0.91	0.94
Health 32 MEA	0.91	1.00	0.79	0.89	0.82	0.80	0.87	0.83	0.86	0.82	0.77	0.91	0.94
Health 33	0.81	1.00	0.79	0.89	0.81	0.91	0.87	0.87	0.86	0.82	0.80	0.93	0.94
<i>Average</i>	<i>0.84</i>	<i>1.00</i>	<i>0.79</i>	<i>0.89</i>	<i>0.81</i>	<i>0.83</i>	<i>0.86</i>	<i>0.84</i>	<i>0.86</i>	<i>0.82</i>	<i>0.76</i>	<i>0.92</i>	<i>0.94</i>
OUTPUT-Oriented Measures													
<i>Single Input/Single Output</i>													
Life Expectancy at Birth	0.89	1.00	0.91	0.85	0.86	0.97	0.91	0.92	0.63	0.87	0.91	0.90	0.83
Immunization DPT	0.91	0.90	0.95	0.79	0.96	0.96	0.91	0.87	0.62	0.83	0.95	0.90	0.75
Immunization Measles	0.98	0.88	0.96	0.83	0.98	0.92	0.93	0.91	0.63	0.83	0.95	0.90	0.71
Disability Adjusted Life Expectancy	0.84	0.96	0.89	0.79	0.88	0.95	0.88	0.90	0.56	0.83	0.90	0.86	0.79
<i>Average</i>	<i>0.90</i>	<i>0.93</i>	<i>0.93</i>	<i>0.81</i>	<i>0.92</i>	<i>0.95</i>	<i>0.91</i>	<i>0.90</i>	<i>0.61</i>	<i>0.84</i>	<i>0.93</i>	<i>0.89</i>	<i>0.77</i>
<i>Multiple Inputs & Outputs</i>													
Health 22	0.94	1.00	0.95	0.89	0.96	0.98	0.95	0.93	0.81	0.91	0.97	0.97	0.96
Health 32 DPT	0.94	1.00	0.95	0.89	0.96	0.98	0.95	0.94	0.81	0.91	0.97	0.97	0.96
Health 32 MEA	0.99	1.00	0.96	0.89	0.98	0.97	0.96	0.94	0.80	0.91	0.96	0.98	0.96
Health 33	0.94	1.00	0.96	0.89	0.96	0.99	0.96	0.95	0.82	0.91	0.97	0.98	0.97
<i>Average</i>	<i>0.95</i>	<i>1.00</i>	<i>0.95</i>	<i>0.89</i>	<i>0.96</i>	<i>0.98</i>	<i>0.96</i>	<i>0.94</i>	<i>0.81</i>	<i>0.91</i>	<i>0.97</i>	<i>0.98</i>	<i>0.96</i>
The combinations of multiple inputs and outputs referred to above are as follows:													
	<i>Inputs</i>							<i>Outputs</i>					
Health 22	pub. exp.; adult literacy							life expect.;DPT immun.					
Health 32 DPT	pub. exp.; adult literacy; private exp.							life expect.;DPT immun.					
Health 32 MEA	pub. exp.; adult literacy; private exp.							life expect.;MEA immun.					
Health 33	pub. exp.; adult literacy; private exp.							life expect.;DPT immun.; DALE					

Note: these figures represent the measurements based on the Data Envelopment Analysis model with variable returns to scale.

Source: Based on data for 1996-2002, from Herrera, S. and G. Pang (2004).

The Scope for Efficiency Gains

A.9 Based on the preceding comparisons, there is potentially much scope for improving the efficiency of Nicaragua's public spending in education and to a lesser extent also in health. Considering the single-variable, input-oriented measures of efficiency, where Nicaragua exhibits an average score of 0.50 in public education spending under both the input and output oriented measures, there is room for raising efficiency by around 50 percentage points through the adoption of practices applied by the countries at the efficiency frontier. According to this result, Nicaragua could in principle reduce its total public spending on education by half with the adoption of such practices, and still achieve the same education outcomes as it currently has. Or alternatively, it could double the value of its outcome indicators by adopting such practices while maintaining the level of public education spending the same. In health, there appears to be

potential room for increasing efficiency by 35 percentage points or by 10 percentage points, depending on whether an input-oriented or output-oriented efficiency measure is used.¹⁹⁴

Table A.3 Measuring the Potential Efficiency Gains for Nicaragua

	Efficiency Scores at 75th Percentile of:				Nicaragua Score	Potential Efficiency Gain w.r.t. 75th percentile of:	
	World Distribution		LAC Distribution			World	LAC
	Score	Country	Score	Country			
INPUT-Oriented Measures (Single Input/Single Output)							
<i>EDUCATION</i>							
Primary Enrollment – Gross	0.76	Romania	0.86	El Salvador	0.71	0.06	0.17
-- Net	0.79	Syria	0.91	Peru	0.69	0.13	0.25
Secondary Enrollment – Gross	0.71	Armenia	0.73	Chile	0.67	0.05	0.08
-- Net	0.73	Georgia	0.74	Peru	0.69	0.05	0.07
Average Years of Schooling	0.31	Turkey	0.39	Chile	0.23	0.27	0.42
First Level Complete	0.36	Mexico	0.40	El Salvador	0.23	0.37	0.44
Second Level Complete	0.33	Peru	0.40	El Salvador	0.23	0.32	0.44
Youth Literacy Rate (ages 15-24)	0.77	Oman	0.81	El Salvador	0.69	0.10	0.14
<i>Average</i>	<i>0.60</i>		<i>0.66</i>		<i>0.52</i>	<i>0.13</i>	<i>0.21</i>
<i>HEALTH</i>							
Life Expectancy at Birth	0.70	Fiji	0.71	Guatemala	0.63	0.10	0.12
Immunization DPT	0.71	China	0.71	Peru	0.63	0.11	0.11
Immunization Measles	0.73	Honduras	0.73	Honduras	0.72	0.02	0.02
Disability Adjusted Life Expectancy	0.71	St. Kitts & Nevis	0.71	Guatemala	0.63	0.12	0.12
<i>Average</i>	<i>0.71</i>		<i>0.72</i>		<i>0.65</i>	<i>0.09</i>	<i>0.09</i>
OUTPUT-Oriented Measures (Single Input/Single Output)							
<i>EDUCATION</i>							
Primary Enrollment – Gross	0.81	Guatemala	0.86	El Salvador	0.73	0.10	0.17
-- Net	0.96	Tonga	0.98	Panama	0.80	0.21	0.23
Secondary Enrollment – Gross	0.68	Czech Rep.	0.71	Chile	0.43	0.59	0.66
-- Net	0.79	Tajikistan	0.76	Guyana	0.37	1.14	1.06
Average Years of Schooling	0.64	Jordan	0.72	Trinidad & Tob.	0.42	0.51	0.70
First Level Complete	0.38	Philippines	0.39	Mexico	0.22	0.73	0.77
Second Level Complete	0.32	Hungary	0.27	Peru	0.07	3.44	2.75
Youth Literacy Rate (ages 15-24)	0.99	Jordan	0.99	Argentina	0.74	0.35	0.35
<i>Average</i>	<i>0.70</i>		<i>0.71</i>		<i>0.47</i>	<i>0.48</i>	<i>0.50</i>
<i>HEALTH</i>							
Life Expectancy at Birth	0.94	St. Lucia	0.96	Trinidad & Tob.	0.89	0.05	0.08
Immunization DPT	0.96	Latvia	0.94	Trinidad & Tob.	0.91	0.06	0.03
Immunization Measles	0.96	Jordan	0.96	Brasil	0.98	-0.02	-0.02
Disability Adjusted Life Expectancy	0.92	Hungary	0.96	Costa Rica	0.84	0.10	0.15
<i>Average</i>	<i>0.95</i>		<i>0.96</i>		<i>0.90</i>	<i>0.04</i>	<i>0.06</i>

Source: Lächler, based on data for 1996-2002 from Herrera and Pang (2004).

A.10 While countries should certainly strive to position themselves on the efficiency frontier, the measures and reforms needed to achieve a position on the frontier may be beyond the present political or technological capacity of many developing countries. It is more reasonable to assume that, through a concerted reform effort, a country may raise its efficiency scores to the levels attained by countries that rank at the 75th percentile of the world or regional distribution of efficiency scores. Comparing Nicaragua's efficiency scores with the scores prevailing in these countries, therefore, would provide a more realistic measure of potential efficiency gains than the earlier comparison with the countries at the efficiency frontier. Such a comparison is carried out in Table A3.

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194. These percentage point differences in health spending are derived as the simple differences between the efficiency score at the efficiency frontier (1.0) and the average score (single input/single output) exhibited by Nicaragua under the input-oriented measure (0.65) and under the output-oriented measure (0.90).

A.11 Table A3 presents the scores achieved by the countries that rank at the 75th percentile of the world distribution and of the LAC distribution of efficiency scores for each social sector indicator, and compares them to the scores obtained for Nicaragua. The last two columns in Table A3 indicate the potential efficiency gain that could be had by moving toward the top quarter of the distribution. Using the input-oriented measures, these figures suggest that Nicaragua could reduce its total spending in education by between 13 and 21 percent (depending on whether the World or LAC distribution of efficiency scores is used as the comparator) without sacrificing education outcomes. In health spending, the fiscal savings through these potential efficiency gains are more modest, averaging 9 percent.¹⁹⁵

A.12 Using the output-oriented efficiency measures, the results in the lower half of Table A3 suggest that Nicaragua could raise its average education outcomes by close to 50 percent, while keeping total education spending the same. Again, the potential efficiency gains in health are more limited, averaging between 4 and 6 percent.¹⁹⁶

Explaining Variations in Efficiency Across Countries

A.13 Herrera and Pang (2004) also have made an attempt to identify some of the factors that explain efficiency scores across countries. This is done by examining the statistical association between the efficiency scores discussed earlier and several explanatory variables through a Tobit regression analysis, using country sub-samples of varying sizes over two time periods. The independent variables used in this regression analysis are (i) the overall size of government expenditure, (ii) the size of the public wage bill, (iii) per-capita GDP, (iv) the degree of urbanization, (v) the prevalence of HIV/AIDS, and (vi) the degree of income inequality. The main findings from these regressions are the following:

- Larger government expenditures are negatively associated with efficiency scores. This suggests that there is a trade-off between efficiency and size of public expenditure, which may be reflecting eventually declining economies of scale in the provision of public services.
- Higher wage expenditures are negatively associated with efficiency scores in education, but not in the context of health indicators. Higher wage bills may be reflecting the prevalence of stronger unions in the public sector, which generally does not promote sector efficiency.
- Urbanization is positively associated with efficiency scores in almost all output indicators in both sectors, except for Life Expectancy. The positive association is possibly reflecting the greater economies of scale in the delivery of public services available to a more concentrated population, while the negative association with the efficiency indicator for Life Expectancy may be reflecting a greater incidence of crime and opportunities for dissolute living in urban areas.

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195. These potential fiscal savings were calculated as $(1 - (\epsilon_H / \epsilon^*))$, where ϵ_H represents the efficiency score exhibited by Nicaragua and ϵ^* represents the efficiency score exhibited by the country at the upper 25th percentile of the LAC or World distribution.

196. These potential percentage increases in outcome indicators were calculated as $((\epsilon^* / \epsilon_H) - 1)$, where ϵ_H represents the efficiency score exhibited by Nicaragua and ϵ^* represents the efficiency score exhibited by the country at the upper 25th percentile of the LAC or World distribution.

- HIV/AIDS prevalence is negatively associated with efficiency in the health sector, as would be expected, but yields mixed results in education.
- The Gini coefficient measuring income inequality is negatively associated with efficiency in education, but shows no systematic relation in health.

Efficiency of Public Spending in Terms of Overall Performance

A.14 Machado (2006) has recently extended the preceding analysis to measure the operational efficiency of public spending in terms of a country's overall development performance, for a sample of 19 Latin American countries over the period of 1990-2003. In this analysis, overall economic performance is measured through a set of indicators in seven areas: distributive equity, macroeconomic stability, economic performance, education, health, institutional development and poverty level.¹⁹⁷

Table A.4 Indicators of Public Sector Performance in Latin America

	Macro		Economic				Poverty	Overall
	Equity	Stability	Perform.	Education	Health	Inst. Dev.		
	<i>Performance Indexes calibrated to average 1.0</i>							
Argentina	0.99	0.10	1.01	1.09	1.04	0.76	1.29	1.15
Belize	na	1.12	1.31	0.98	1.00	1.62	na	1.43
Bolivia	0.87	2.19	0.95	1.01	0.89	0.66	0.54	0.63
Brasil	0.91	0.48	0.88	1.03	0.98	1.19	0.82	0.80
Chile	0.92	0.84	1.33	1.01	1.08	2.69	1.92	1.57
Colombia	0.90	0.61	0.88	0.98	1.01	0.50	0.82	0.64
Costa Rica	1.05	0.94	1.20	1.04	1.09	2.10	1.94	1.64
Ecuador	0.98	0.42	0.84	1.06	1.03	0.38	0.45	0.86
El Salvador	1.00	1.30	1.03	0.95	0.98	1.10	0.32	0.84
Guatemala	0.95	5.16	1.03	0.90	0.94	0.39	0.49	0.80
Honduras	0.97	0.81	0.94	0.95	0.95	0.56	0.42	0.58
Mexico	1.06	0.45	0.97	1.06	1.04	1.22	0.70	1.19
Nicaragua	1.22	0.69	0.92	0.91	0.97	0.78	0.23	0.82
Panama	0.93	2.12	1.14	1.06	1.04	1.37	1.05	1.34
Paraguay	0.91	0.77	0.77	1.00	0.99	0.22	0.56	0.55
Peru	0.96	0.28	1.03	1.04	0.98	0.75	0.49	0.86
Dominican Rep.	1.02	0.50	1.19	0.96	0.94	0.87	0.65	0.84
Uruguay	1.17	0.12	0.82	1.04	1.04	1.83	4.73	1.58
Venezuela	1.19	0.08	0.74	1.03	1.02	0.00	0.58	0.87
Average	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Source: Machado (2006), Table 5.

A.15 Table A4 presents the performance scores for each indicator, as well as an overall performance score that is calculated as a simple average of the other scores. (Note that each of

197. These performance indicators were constructed as follows:

- Distributive equity is measured by the Gini index.
- Macroeconomic stability is measured by the variance of the growth rate and the inflation rate over the period 1990-2003.
- Economic performance is measured by the average rate of growth and the average unemployment rate (both averaged over 1990-2003), and GDP per capita in 2004 (based on PPP).
- Education performance is measured by the literacy rate and the primary enrollment rate.
- Health performance is measured by life expectancy at birth and the infant mortality rate.
- Institutional development is measured with the indicator developed in Kaufman, Kray and Mastruzzi (2006); and
- Poverty is measured by the percentage of the population living with less than 2 US\$ per day in 2003.

the indicator measures has been calibrated so that it averages 1.0 across all countries.) Nicaragua scores below the average in each one of the performance indicators, except for the distributive equity indicator, and exhibits the largest shortfalls in the area of poverty. Offhand, one would expect Nicaragua to score below the regional averages, as most of these performance indicators tend to be positively correlated with the level of per capita GDP and considering that Nicaragua represents one of the poorest countries in Latin America; see the right hand side of Table A5, which compares the levels of per capita GDP in 2004 (expressed in Purchasing Power Parity terms).

Table A.5: Public Expenditure Levels

	Public Expenditures				GDP/capita
	Total	Social	Education	Health	2004
	<i>(percent of GDP, average 1990-2003)</i>				<i>(in PPP US\$)</i>
Argentina	25.0	16.1	3.4	3.7	\$12,222
Belize	20.7	12.0	4.9	2.5	\$6,201
Bolivia	23.3	7.5	4.2	1.0	\$2,499
Brasil	45.5	25.3	5.2	4.2	\$7,531
Chile	20.8	13.5	3.2	2.5	\$9,994
Colombia	18.1	6.3	2.1	1.7	\$6,669
Costa Rica	21.8	13.1	3.7	4.0	\$8,714
Ecuador	17.7	5.3	2.2	0.8	\$3,643
El Salvador	13.8	5.2	2.1	1.2	\$4,633
Guatemala	11.7	4.9	2.1	1.0	\$3,964
Honduras	24.6	8.5	4.7	2.7	\$2,644
Mexico	19.6	10.5	4.5	2.9	\$9,010
Nicaragua	20.4	7.7	3.4	2.9	\$3,340
Panama	21.3	9.1	2.4	3.1	\$6,689
Paraguay	13.5	5.8	2.8	0.8	\$4,423
Peru	17.7	7.3	2.6	1.5	\$5,219
Dominican Rep.	15.6	6.2	2.4	1.4	\$6,846
Uruguay	28.2	18.9	2.8	2.6	\$8,658
Venezuela	20.1	7.4	3.2	1.1	\$5,554
Average	21.0	10.0	3.3	2.2	\$6,234

Source: Machado (2006), Table 7 and Table 8. Total public spending refers to the consolidated general government, including social security, while social spending refers to public spending on education, health and nutrition, social security, labor and social assistance, housing and water & sanitation.

A.16 Table A5 also presents the level of public expenditures in each country as a fraction of GDP for different expenditure categories. Total public spending as a share of GDP in Nicaragua is slightly below the regional average (20.4 percent versus 21 percent). Also, the share of total social spending in Nicaragua is below the regional average, even though the share of public sector spending on health and education is slightly higher than the regional average. Arguably, the performance indicators reviewed earlier are influenced by public policies and actions, which are related, in turn, to the amount of public spending. This lends itself to estimating the efficiency of public spending by comparing the relative scores on the overall performance indicators to the relative amounts of total public spending. Similarly, the relative scores on the poverty performance indicator are compared to the relative level of social spending, as shown next.

Table A.6 Public Spending Efficiency Scores in Terms of Overall Performance
(Efficiency scores are based on the Free Disposable Hull approach)

<i>Input-oriented</i>		<i>Outcome-oriented</i>	
Guatemala	1.00	Guatemala	1.00
Belize	1.00	Belize	1.00
Ecuador	1.00	Ecuador	1.00
Costa Rica	1.00	Costa Rica	1.00
Venezuela	1.00	Venezuela	1.00
El Salvador	1.00	El Salvador	1.00
Nicaragua	0.94	Peru	1.00
Chile	0.91	Dominican Republic	0.98
Panama	0.90	Uruguay	0.96
Bolivia	0.80	Chile	0.96
Uruguay	0.78	Nicaragua	0.95
Paraguay	0.78	Panama	0.94
Mexico	0.73	Mexico	0.83
Honduras	0.71	Bolivia	0.79
Peru	0.70	Colombia	0.74
Dominican Republic	0.60	Argentina	0.70
Argentina	0.42	Paraguay	0.69
Colombia	0.38	Honduras	0.67
Brasil	0.14	Brasil	0.49

Source: Own calculations based on figures in Machado (2006)

A.17 Table A6 presents the efficiency scores obtained by dividing each country's overall performance score in Table A4 by that country's total amount of public spending per capita,¹⁹⁸ and comparing the resulting ratio to the indicator achieved by countries situated on the efficiency frontier. Nicaragua's efficiency scores turn out to be close to the median scores for all the countries in the region. These findings suggest that Nicaragua does not stand out as particularly inefficient from an overall public spending perspective, compared to other countries in the region. The earlier sector-specific findings, however, also suggest that Nicaragua needs to devote special attention to the quality of education spending, which appears to have been much less efficient than other countries in the region..

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198. The data on public spending per capita was calculated by multiplying the first and the last columns in Table A5. The resulting efficiency scores presented in Table A6 differ from the ones derived by Machado (2006), who uses the GDP-share of public expenditures, rather than the per-capita amounts employed here.

Annex B
Basic Parameter Assumptions Underlying the Fiscal Sustainability Analysis

The figures for the NPV of the future stream of public revenues shown in Table 2.7 were calculated on the basis of equation (13) of Annex A of the 2004 Nicaragua DPR.¹⁹⁹ That equation is reproduced below:

$$b_0 = [s + m\theta/(1+\gamma)][(1+g)/(r-g)] + [ab_0^*/(1-\alpha)][\rho - (1+r^*)/(1+g)].$$

Each of the parameters contained in this equation is defined in the table below, except for two composite parameters, **a** and γ . The first of these is defined as, $\mathbf{a} = (1+g)/(1+r)$, while the second denotes the nominal rate of GDP growth, such that $(1+\gamma) = (1+g)(1+\pi)$.

The figures presented in Table 2.7 in Chapter II can be derived by inserting the parameter values for 2006 from the tables below, together with various combinations of values for real GDP growth (g), the fiscal surplus ratio (s) and assumptions about donor lending behavior (ρ). (For reference, the parameter values that applied in 2003 are also shown.)

Key Macroeconomic Parameter Values for Nicaragua in 2003 and 2006

	Symbol	Values	
		2003	2006
Domestic Economic Parameters			
Real GDP growth (%)	g	variable	variable
Nominal domestic interest rate (\$ indexed. %)	i	12.0	10.0
Real domestic interest rate (%)	r	10.0	8.0
Inflation rate (%)	π	8.1	8.9
Monetary base (% of GDP)	m	8.5	7.3
External Economic Parameters			
Nominal (concessional) interest rate (%)	i^*	3.0	3.0
Real (concessional) interest rate (%)	r^*	1.0	1.0
Dollar inflation rate (%)	π^*	2.0	2.0
Policy Parameters			
Rate of currency depreciation (%)	ϵ	6.0	5.0
Primary fiscal surplus (% of GDP)	s	variable	variable
Base money expansion rate (%)	θ	= γ	= γ
External Debt Level			
Nominal value of external debt (% of GDP)	b_0^*	104.0	70
NPV of external debt (% of GDP)	β	30.0	35.0
Growth of external debt parameter 1/	ρ	variable	variable

Source: Central Bank of Nicaragua and World Bank estimates.

Note: Table 2.7 in the main text assumes a value for ρ equivalent to $1/\gamma$

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199 World Bank, (2004) "Nicaragua Development Policy Review: Sustaining Broad-Based Growth" (Report No. 29115-NI), December 3.

Annex C

Review of Public Spending on Education

Main Findings of Previous Reviews

C.1 The 2001 PER recorded important accomplishments in the education sector since the 1990s, particularly with respect to expanding infrastructure and increasing access. An important milestone noted in the study was the substantive progress made on moving forward school autonomy efforts by decentralizing management and finance functions in the schools and by fostering active parental and community participation in decision-making at the school level. Despite visible gains in school enrollment and the sector's important shift towards decentralization and school autonomy, the study highlighted the need to focus on increasing access to initial and preschool education for the cohorts aged 0-3 and 4-6, whose participation rates were found to be well below regional averages.

C.2 The PER highlighted the existence of a variety of programs aimed at addressing similar objectives. Too often, however, programs lacked coordination and targeting. Greater selectivity in investments in infrastructure was suggested in order to strike an effective balance between building new school infrastructure and ensuring proper maintenance of existing classrooms to reduce unusually high rates of deterioration. For this purpose, the PER had recommended greater reliance on the Preventive Maintenance Fund (PMF) operated by FISE as well as an in-depth study to ascertain with more precision the current stock and quality of classrooms and related school infrastructure. Finally, the review found few programs targeted at improving curricula relevance, school retention at all levels and rural and disadvantaged populations who have the least access and survival in the formal school system.

C.3 The 2003 Poverty Assessment noted progress in improving primary education indicators, which gives some comfort in terms of ensuring the achievement of the Millennium Development Goals (MDG) for education by 2015. At the same time, the assessment found little progress on improving other key education outcomes, such as adult literacy levels or increased access to early childhood education and secondary education. In general, the assessment noted the critical role of education in raising welfare levels in rural and urban areas, particularly among females. Female literacy was found to be a factor associated with the probability of school attendance among children from extreme poor households. The assessment recommended the (i) establishment or scaling up of programs targeted to vulnerable families with an integrated package of services to help infants and preschool children with improvements in nutrition status and cognitive development; (ii) design programs and mechanisms to reduce the direct and indirect costs of schooling for children and young people from extremely poor households for whom schooling costs are a major barrier to either enrollment or retention.

C.4 The 2004 Development Policy Review (DPR) also recorded continued improvements in education indicators and significant progress on institutionalizing management and administrative policies to improve service delivery and accountability at school level, most notably the continuation of the school autonomy program. The review also pointed to immediate remaining challenges that needed to be addressed in order to reach the Millennium Development Goals (MDGs) by 2015. Chief among these are the need to accelerate efforts to increase the completion rate of the 6-year primary education cycle, particularly in rural areas where almost a third of children aged 7 to 12 were not in school, improving teacher qualification levels and strengthening institutional capacity in the Ministry of Education to monitor programs, measure impacts and improve accountability at all levels. Given the constrained fiscal capacity of Nicaragua, which leaves little room to increase expenditures education in a way that would be commensurate with current and emerging needs in post primary education, the review suggested to focus,

at least in the short to medium term, on efforts to increase the efficiency of expenditure and improve the quality of the programs being offered in order to achieve better outcomes with the same level of spending.

C.5 The main recommendations emanating from the DPR are to (i) accelerate the implementation of the school autonomy program, (ii) develop a vision to de-concentrate sector responsibilities to municipal level, especially functions related to administrative and pedagogical support to schools, (iii) scale down redundant functions at the central level, clarify roles and responsibilities at central level and improve the technical profile of Ministry officials, (iv) undertake a more systemic and comprehensive development of the various levels of the sector, particularly at secondary education to bring enrollment and financing in Nicaragua at par with regional and international levels, (v) promote greater accountability at school level by using the results from national student assessments to inform parents and assist teachers to improve their performance, and (vi) develop a human resource strategy with a particular emphasis on raising the profile of teaching professionals and improve the quality of teacher education programs.

C.6 The preceding analytical studies have been consistent in their findings and recommendations: it is clear that Nicaragua will need to continue its efforts towards increasing access to primary education, particularly in rural areas and amongst vulnerable population groups to ensure it achieves the MDG of universal completion of primary education by 2015. At the same time, improving the quality of primary education programs is essential to ensure the gains achieved thus far are sustained in the medium to long term. In addition, as the primary education system expands, it is important to increase investments in other levels of the system, most notably early childhood development, pre-school and secondary education. Since substantial investments in the sector are not likely to materialize in the short to medium term, nor are the required expenditures to reach strategic milestones in those levels well defined, it is imperative that the Ministry improves the efficiency of current expenditure, while additional public and external resources are sought to cover much-needed investments in early childhood and secondary education. The next section takes stock of recent developments in sector indicators, outcomes and expenditure to shed light on the likely magnitude of expenditures needed in the medium term to expand coverage in pre- and post-primary education.

C.7 Among the most noteworthy events that have taken place in the sector since the publication of the 2001 PER, have been the passage of the Education Participation Law and approval of the Education for All – Fast Track Initiative (EFA-FTI). The Education participation Law (413) was passed in 2002 thus providing a legal framework to scale up rapidly the incorporation of schools into the autonomous program with financial assistance from external partners. The EFA FTI Secretariat approved and disbursed financial allocations to Nicaragua worth USD 7 million for 2004-2005 and an additional USD 10 million for 2006-2007. Specific activities to be financed by the EFA FTI are incorporated in the Common Work Program and its corresponding Annual Program of Activities. While the Ortega administration has embraced the EFA FTI, it has expressed concerns with aspects of the Education Participation Law, particularly with the financial transfers provided to the schools. In fact, for the academic year beginning in 2007 all financial transfers to the schools were stopped pending a final decision on MINED for a way forward. The next section will provide a more detailed description of the concerns and possible implications for the sector in broad terms and for the current education program supported with an IDA Credit.

Trends in Education Indicators

C.8 Access and internal efficiency. Enrollment in primary education has increased in absolute terms from 838,437 students in 2000 to nearly 1 million in 2006; representing an average annual growth rate of about 2.1 percent over the period 2000-2006; Table C.1. The increase responds to greater efforts to increase first time enrollment in grade 1 to cater for the natural growth in the school age population. The positive trend is supported by data from the two most recent household surveys, which highlights a

decline in the proportion of children aged 7-12 not attending school from 12.1 percent in 2001 to 9.4 percent in 2005. While the decline in the proportion of non-attendance is most evident amongst children from extremely poor households, from 27 percent to 21 percent from 2001 to 2005, respectively, the proportion of children out of school remains extremely high and, therefore, in need for urgent attention.

Table C.1 - Enrollment by Level, 1995 & 2001-2006

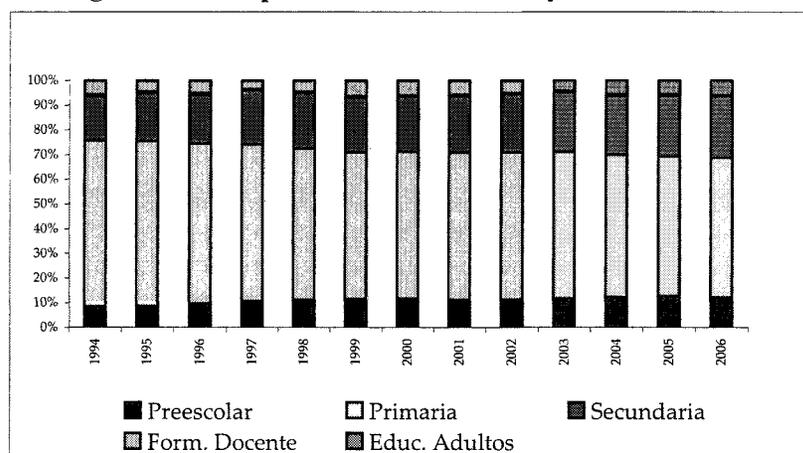
<i>Level</i>	1995	2001	2002	2003	2004	2005	2006
Special Education	3,009	3,366	3,262	3,486	3,366	3,353	3,371
Preschool	99,145	163,832	177,534	183,709	199,422	213,672	209,950
Primary	764,587	866,516	923,391	927,217	941,957	945,089	966,206
Secondary	220,746	334,986	364,012	376,409	394,347	415,273	425,718
Teacher Education	7,460	6,201	6,774	6,243	5,886	5,351	5,479
Adult Education	51,293	83,413	78,316	66,347	89,074	91,961	99,623
Total	1,146,240	1,458,314	1,553,289	1,563,411	1,634,052	1,674,699	1,710,347

Source: Indicadores MECD. Incluye Toda la Oferta de Cobertura del MECD

C.9 In an effort to target programs aimed at this population, MINED is actively working to identify needs and service gaps at municipal level to target and strengthen educational programs in underserved areas. An annual report with information on the status of educational indicators across departments and municipalities and their relative ranking according to an index of indicators is being used to plan investments and design programs (*Indice del Estado Educativo Municipal*). According to the latest report, published in December 2006, the highest rankings were observed in the Departments of Carazo, Chinandega, Masaya, Esteli and Leon while the lowest rankings were observed in the Departments of Matagalpa, RAAN and RAAS. The five municipalities with the highest enrollment rates and efficiency were Cinco Pinos, Moyogalpa, Puerto Morazan, Jicaral and San Juan del Sur.

C.10 In terms of the distribution across levels of education, the primary education level holds the largest proportion of the enrolled population, Figure C.1. While the proportion changed from 1995 to 2001, from 66 percent to 59 percent in 2001, the proportion has remained almost constant over the last five years. The changes in the school pyramid are mostly due slight increases in access to preschool and secondary education.

Figure C.1 - Proportion of Enrollment by Level 1994-2006



C.11 The net enrollment rate in preschool education increased from 31.8 percent in 2000 to 41.7 percent in 2005. In primary education the net enrollment rate increased from 84.1 in 2000 to 91.9 in 2005 and from 36.8 percent to 44.3 percent in secondary education over the same time period.²⁰⁰ In 2005 the official age at entry in the first grade was also reduced from 7 years to 6 years to promote an earlier entrance into the formal school system, which is consistent with international best practice. The policy appears to be yielding results: in 2005, approximately 75 percent of first graders in urban areas were in the appropriate age range (6 and 7). In rural areas, however, only 54 percent were in the appropriate age bracket; in fact, a third of first graders were 9 years or older. Overall, the highest annual growth rates in enrollment for the 2001-2006 period are preschool and secondary education, which is consistent with the existing policy framework supported by the PRSP and the Common Work Program at the sector level.

Table C.2 - Average Annual Growth rate in Enrollment by Level 2001-2006

Level	2001	2002	2003	2004	2005	2006	Average 2001-2006
Special Education	6.38%	-3.09%	6.87%	-3.44%	-0.39%	0.54%	1.44%
Preschool	-1.73%	8.36%	3.48%	8.55%	7.15%	-1.74%	4.00%
Primary	3.35%	6.56%	0.41%	1.59%	0.33%	2.23%	2.45%
Secondary	6.23%	8.66%	3.41%	4.77%	5.31%	2.52%	4.94%
Teacher Education	7.81%	9.24%	-7.84%	-5.72%	-9.09%	2.39%	0.91%
Adult Education	-3.18%	-6.11%	-15.28%	34.25%	3.24%	8.33%	2.79%

Source: Indicadores MECD. Incluye Toda la Oferta de Cobertura del MECD

C.12 With respect to internal efficiency indicators, progress has been steady since 2001, but it has also been slow. Repetition rates have remained unchanged since 2001, at around 11 percent for in primary education and 6 percent in secondary education. The proportion of students who complete primary education in the allotted time for the cycle (6 years), increased from 27 percent in 1997, to 36 percent in 2001 and 41 percent in 2006; Table C.3. Completion rates within six years are higher among female students and in urban areas. It is important to note the substantive improvements of this indicator in rural areas, from a low base of 14 percent in 1997, to 23 percent in 2001 and 31 percent in 2006. Increasing the proportion of students who complete without repeating a grade is of particular importance not only to ensure learners become confident of their academic abilities and prospects for their educational future (the likelihood of dropping out increases sharply for overage students) but also to increase the efficiency of resource use by creating more places in the system.

C.13 Improvements in the primary completion rate are hampered by a high rate of repetition and drop out, and the fact that many students simply fail to register for the next school year. This last phenomenon is most pronounced in the transition from first to second grade. Figure C.2 shows the decline in enrollment across successive years, from 2000 to 2005. As illustrated, in 2001 the absolute student enrollment in the first grade stood at 234,001, of whom 22,198 students were repeaters while 20,122 students dropped out at the end of the school year. According to these numbers, the eligible population that would have been able to enroll in second grade in 2002 was 213,879, however, the actual number of students enrolled stood at 176,310. Furthermore, if the second grade repeaters (15,005) are subtracted from the 2002 enrollment, the net first time enrollment in the second grade is only 161,313 students. That means that 28,269 students that finished the first grade simply failed to register for the second

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200. The net enrollment rate was adjusted in 2005 to reflect the latest findings from the 2005 Census which indicates an inter-census rate of 1.7 percent as opposed to the 3.1 percent estimated using the 1995 Census.

grade in 2002. This same trend is also observed in the transition from 2002 to 2003, and from 2003 to 2004; Table C.4.

Table C.3 - Percentage of Students Completing Primary School in 6 Years

Year	Total	Female	Male	Urban	Rural
1997	27	29	24	42.3	14.9
1998	31	34.4	27.2	48.8	16.8
1999	32.2	35.7	28.9	49.5	18.7
2000	35.4	39.2	31.9	54.1	21.5
2001	36.3	40.5	32.4	52.5	23.3
2002	38.5	42.8	34.6	59.2	27.7
2003	40.8	45.3	36.7	58.9	30.2
2004	40.9	45.1	37	60.8	30.2
2005	41.2	45.6	37.2	58.2	31.2
2006	41	45.2	37.1	57.3	31.3

**2006 is preliminary

Table C.4: Enrollment Losses between First and Second Grade; 2001 – 2004

Year	First Grade				Second Grade			
	Initial Enroll.	Final Enroll.	Repeaters	Drop outs	Initial Enroll.	Final Enroll.	Repeaters	Drop outs
2001	234,001	213,879	24,297	20,122				
2002	246,136	223,938	35,878	22,198	176,318	164,966	15,005	11,352
2003	241,236	221,434	42,045	19,802	178,725	168,129	17,155	10,596
2004					179,717	167,468	18,560	12,249

C.14 The drop out rate in primary education remains high, particularly in the early grades of the cycle. The average annual drop out rate in grade 1 for 2000 through 2005 was 17.5 percent compared to 20 percent 1990-2000. Since 2005 there has been a marked improvement in lowering the drop out rates in grade 2 and beyond, which is a commendable achievement for the Ministry. While there is still some way to go to eliminate drop out in primary education, the immediate challenge remains in grade 1 which is an exit point for a number of students, see Table C.5.

Table C.5 – Drop out Rates in Primary Education by Grade 1990-2005

Year	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
1990	23.5	7.5	9.8	11.9	10.9
1995	21.2	9.2	13.7	16.5	13.1
2000	19.9	10.2	9.6	11.9	8.5
2001	17.7	10.1	8.7	11.5	9.2
2002	19.9	9.2	10.5	11.3	10.1
2003	16.3	8.1	8.9	10.5	11.6
2004	18.6	9.4	10.7	11.8	9.0
2005	15.3	2.2	4.1	6.8	7.9
Average 1990-2000	20.70	8.24	10.88	13.43	10.78
Average 2001-2005	17.57	7.78	8.58	10.38	9.56

Data for 2006 are preliminary

C.15 The factors associated with high drop out rates in grade 1 are in most instances related to a mix of demand and supply side constraints. On the demand side, important factors include poor school readiness, language barriers and direct/indirect costs of school attendance. On the supply side, there are factors such as distance to nearest school, poor quality of education facilities/services and lack of qualified teachers with experience on catering for the needs of students from extremely poor households many of whom have never taken part in any kind of early stimulation or school readiness programs. It should be noted that in 2005, 2006 and 2007 the Ministry of Education has implemented successfully various emergency programs in poor neighborhoods aimed at identifying and enrolling students aged 6-8 who were not attending school or had dropped out prematurely. These programs tend to be *ad-hoc* and expensive, so it is important for the Ministry to devise strategies to retain students in grade 1 to decrease the need for annual emergency programs. This would free up financial resources for other important activities to improve the quality of education.²⁰¹ While the precise magnitude of demand or supply side constraints needs to be established, findings from recent household surveys indicate monetary problems as the most important constraint for primary school aged children especially those students living in extremely poor households in rural areas. For the secondary school aged population, the main constraints are financial, work activities and lack of interest in schooling opportunities. This translates into about 40 percent, 1 percent and 43 percent of the populations of reference, respectively.

C.16 The situation in secondary education is similar of that in primary education with respect to the high level of drop out rates. The difference, however, is that whereas in primary education the rates are on the decline, improvements in secondary are negligible, if any at all; Table C.6.

Table C.6 – Drop out Rates in Secondary Education by Grade, 1990-2005

Year	Grade 7	Grade 8	Grade 9	Grade 10
1990	21.9	4.2	1.4	3.8
1995	21.4	13.6	17.2	17.1
2000	19.2	10.7	12.1	8.8
2001	16.5	8.6	9.8	6.6
2002	20.3	13.1	16.4	10.9
2003	18.9	11.4	12.8	7.8
2004	16.2	10.4	11.4	6.8
2005	18.0	13.2	14.9	10.6
Average 1990-2000	21.5	12.0	13.5	12.0
Average 2001-2005	18.0	11.3	13.1	8.5

2005 es preliminar

C.17 Quality Indicators. The total teaching force increased by approximately 5,000 positions between 2002 and 2004, equivalent to approximately an 11 percent increase in the overall teaching force. As illustrated in Table C.7, teacher salaries also increased over the same time frame, even though the average teacher salary remains below the target benchmark (3.5 times GDP per capita) established under the EFA FTI indicative framework.

C.18 Perhaps one of the most serious problems in the sector, with a direct effect on the quality of education, is the increase in the number of unqualified teachers ('empíricos'). At the primary education level, the percentage of unqualified teachers had a slight increase, from 25.8 percent²⁰² in 2002 to 26.3

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201. The cost per successful student in the Programa Aprestamiento en Vacaciones carried out in December 2005 was USD 20. Similarly, the Programa de Rescate de Matricula 2006 and the Programa Salvemos Primer Grado was USD 65 per student.

202. Radiografía del empirismo docente, JR Laguna, Diciembre, 2005 – Estadística Escolar 2000-2005, MECD

percent in 2004, while in secondary education the increase was fairly substantial, from 37 percent to 51 percent. An in-depth study on the situation of teacher qualification level in the education system in Nicaragua found that the highest proportion of unqualified primary school teachers was registered in State/Municipal, Non-autonomous schools (40 percent) while Autonomous Schools had the lowest proportion (19 percent). At the secondary level, the proportion of unqualified teachers is above 50 percent, irrespective of type of school establishment. While it would be important to study the factors associated with the observed differences in the teacher profile depending on the type of establishment, it is clear the proportion of unqualified teachers remains dangerously high and warrants immediate action.

Table C.7 - Evolution of Teacher Salaries (in nominal Cordobas)

	2000	2001	2002	2003	2004	2005
Average primary school teacher salary (in <i>Córdoba</i> s)	1,048.48	1,232.32	1,579.45	1,616.85	1,931.93	2,529.37
Average primary school teacher salary (in <i>Córdoba</i> s) ²⁰³	1,109.61	1,293.45	1,617.87	1,655.27	1,970.35	2,615.42
Average teacher in relation to times GDP per capita.	1.42	1.52	1.88	1.81	1.96	2.54

Source: *Dirección General de Prospección y Políticas (DGPP) Radiografía Empirismo 2004, Dic 2005, J.R. Laguna. Datos 2005 tomados de Estado de la Educación Básica y Media 2005, Gutiérrez y Laguna, MINED.*

C.19 It is unclear the extent to which current teacher salary levels have had on staff turnover or on the persistently high proportion of unqualified teachers, which remain in the system despite the Ministry's efforts to accelerate pre and in-service teacher education programs. Situation analyses and working papers point to several factors which have had an impact on the poor quality of the teaching force, including (i) the lack of a comprehensive teacher education reform policy; (ii) the lack of coordination between the universities who have the responsibility of secondary education teacher training programs and the Ministry of Education; and (iii) the lack of an educational policy of assigning experienced teachers to the first 3 grades of the primary education cycle, which are the most crucial years;²⁰⁴ and (iv) the absence of professional development programs for teachers, including pedagogical advisory services to support and strengthen teacher practice.

C.20 The national student assessment carried out in 2002 showed that most students in the 3rd and 6th grades achieved basic levels of proficiency in Spanish and Mathematics (Table C.8), with students in private schools generally exhibiting a margin of 10 to 12 percentage points above public school students. The proportion of students in basic and proficient levels also varied by type of establishment, with private school faring better compared to public schools. An analysis of teacher profile factors and their impact on student performance indicated that only about half of the teachers feel well prepared to teach grade school Geometry while 39 percent felt well prepared to teach concepts related to probability in the sixth grade. An assessment was carried out in October 2006 to analyze trends in student learning and investigate the impact of school-based associated factors on learning. In addition, in October 2006 Nicaragua participated in the regional student assessment (SERCE) coordinated by UNESCO. The assessment is expected to become a rich database that will generate a series of regional/sub-regional comparisons and lessons learned.

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203. Includes teacher salaries in private schools.

204. It is very revealing that in 2004, 24.6 percent of all first grade teachers were 'empiricos', while only 15.4 percent of all sixth grade teachers had this status; Laguna (2005).

Table C.8: Students Achieving Basic Proficiency in National Tests; 2002

Grade and Subject	% of Students with Basic Proficiency
3rd grade- Mathematics	61.7
3re grade-Spanish	71.2
6th grade- Mathsematics	88.1
6th grade- Spanish	69.7

Source: Porta *et al.*, 2004a

C.21 School Management. The school autonomy program started as a pilot in 1993, with the participation of 20 large, urban secondary schools that volunteered to participate. In 1995, the model was extended to primary schools with special adaptations in rural areas, and by 1997, a total of 3,950 schools were participating in the autonomy program. The autonomy program was institutionalized with the Education Participation Law passed in 2002, along with its internal regulations for its operationalization. By 2006, a total of 4,997 primary schools (or 58 percent of the total) and 501 secondary schools (or 40 percent of the total), enrolling a total of 942,476 students, were operating under the Participation program,²⁰⁵

C.22 Key elements of the Education Participation Law are the decentralization of decision making and of financial resources to schools that are incorporated to the autonomous program. Financial resources, in the form of grants, are transferred from the Ministry of Education to the schools based on a capitation grant formula. On occasion, a nominal amount is added to cover minor school repairs and rehabilitation. School fees and levies are not official in Nicaragua, however, it is not uncommon to find schools collecting levies, fees or contributions to cover services ranging from maintenance of school grounds to school fairs and lotteries. Although there is no information available on the proportion of school-based revenue relative to the grant sent from the Ministry of Education, anecdotal evidence indicates that in some cases school based revenue can be substantive. Evidence from qualitative studies indicates that school fees, coupled with the indirect costs of schooling (uniform, shoes, materials, lunch meal, etc.), have a deleterious impact on school age children from extremely poor households who are unable to afford such expenses. In 2007, the Ministry of Education denounced the practice of collecting school fees and banned schools from charging students. While this is an important step forward to removing demand side barriers, it is equally important to ensure some of the revenue that was used to finance educationally sound programs or grounds keeping facilities, can be offset by an increase in the Ministry's financial resources to the school. Otherwise, there is a risk of deterioration to the school grounds or erosion in the quality of service delivery.

C.23 A recent analysis of the profile and characteristics of schools that have been incorporated into the autonomous model indicates these are heterogeneous with respect to size, urban or rural location, or average socio-economic level of its students.²⁰⁶ The single most important factor positively and consistently correlated with good school management practice is the strong and clear leadership from School Principals and School Councils.

C.24 While the school autonomy program has not undergone a rigorous impact evaluation, a recent analysis of the model yields some important findings. Among the positive aspects of the program are the empowerment of parents, students and teachers to identify, manage and solve issues affecting their school and its immediate community as well as better indicators such as lower repetition rates, fewer unqualified

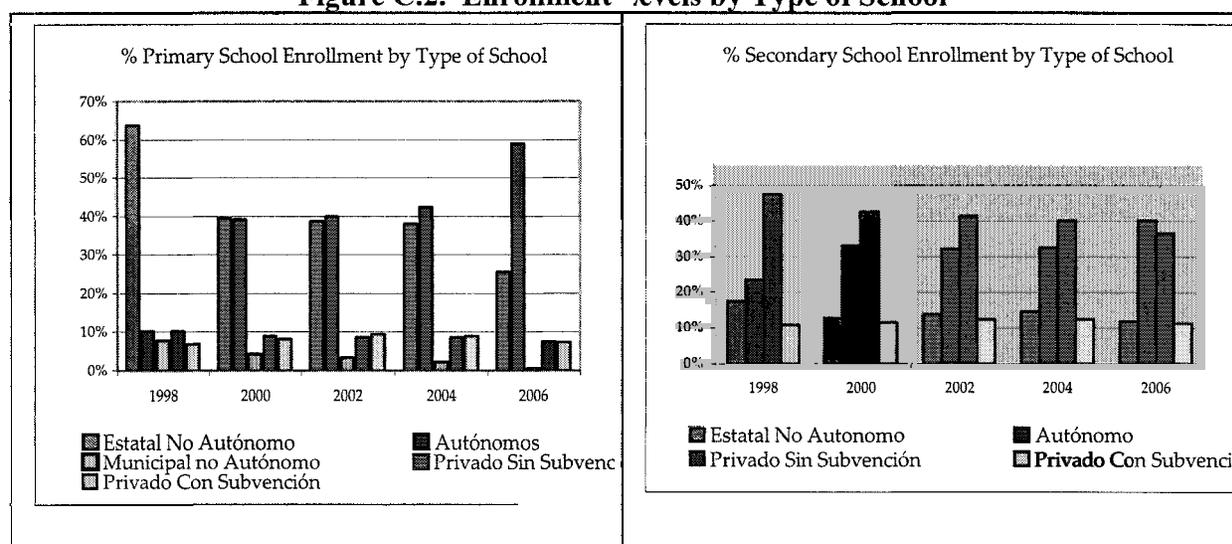
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205. School autonomy is one of the aspects of the Education Participation Law.

206. Castro, Vijil, Cuadra, Álvarez y Traa, 1998, Evaluación del Programa de Autonomía; Castro y Vijil, 2004, Estudio sobre Participación y Calidad Educativa para CERCA, AED.

teachers and higher test scores in 3rd grade Spanish as displayed in the 2002 national assessment.²⁰⁷ there are some less encouraging results, however, including a significantly higher than average student-teacher ratio, which is not entirely surprising since the transfer is based on a capitation grant, and the lack of proper monitoring and evaluations mechanisms to provide oversight and compliance with fiduciary agreements, including payments for utilities and teacher end-of-year bonuses. A weakness of the grant transfer program has been the lack of a mechanism to mitigate against the perverse incentives that capitation grants can often have on enrollment. An enrollment audit²⁰⁸ carried out in 2002 by the Ministry of Education identified inflation in the enrollment statistics in the order of 19 percent at the primary level and of 23 percent at the secondary level. Since then, the Ministry has adopted several measures to correct the problem and while these have been effective in reducing over reporting of students to 16 percent at the primary level and to 6 percent at the secondary level, the persistence of this problem, coupled with other problems, prompted the Ministry to make some changes to the transfer formula in 2005-2006.

Figure C.2. Enrollment levels by Type of School



C.25 Given the positive aspects as well as the challenges of the program, it would be advisable to undertake an in-depth study of the autonomy model to identify the aspects and factors that have contributed towards successful outcomes as well as the aspects that have presented challenges overtime. The study would potentially inform decision makers in the Ministry on a possible way forward that maximizes the positive aspects/outcomes, particularly those linked to improving educational quality and eliminate those elements that have distorted the process of decentralization and local administration. This analysis could begin by exploring the results of the 2006 national assessment and should seek broad participation from all sectors of Nicaragua's education community. It would be advisable to modify the model within the existing legal framework, and taking account the General Education Law, which stipulates that all education reforms must be broadly consulted (Articles 63 y 64).

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207. J.R. Laguna, *Radiografía del empirismo*, Dic 2005

208. Porta E. y Gutiérrez R., "Estimación del índice de veracidad de la matrícula reportada por los centros autónomos" Managua, MECD, 2003.

Evolution of Sector Expenditures

C.26 Since the late 1990s, there has been a marked upward trend on education expenditure. As illustrated in Table C.9 total expenditure on education has increased from 3.6 percent of GDP in 2001 to 4.9 percent of GDP in 2005. For MINED, expenditure on education increased steadily from 2.5 percent of GDP in 2001 to 2.8 percent of GDP in 2005. About two-thirds of the total expenditure on education is allocated to MINED for pre-university education, a figure that has been constant for a decade. Compared to other countries in the region with similar level of development such as Bolivia, Nicaragua allocates a lower proportion of its budget for education.

C.27 Within the education sector (excluding universities), the bulk of resources are devoted to primary education (77.3 percent), followed by secondary education (12.7 percent) and adult education (5.2 percent). The proportions have remained constant over the last five years, with the only exception being adult education where expenditure increased from 2.3 percent to 5.2 percent of the total expenditure from MINED in 2005. Overall, per student spending is highest at primary level (US\$ 128) followed by secondary education (US\$ 48) and pre-school education (US\$ 20); Figure C.4. It should be noted that Nicaragua presents a highly unusual case in which per student spending at the secondary level is not only below that of per student spending on primary, but well below, at less than half.

Table C.9 - Total Expenditure on Education (in millions of Cordobas)

	1998	1999	2000	2001	2002	2003	2004	2005 ^{/p}
Total Expenditure on Education	1,124	1,734	1,917	2,012	2,303	2,896	3,109	3,934
Expenditure as % of GDP	3.0%	3.9%	3.8%	3.6%	4.0%	4.6%	4.3%	4.9%
<i>MINED</i>	730	1,265	1,378	1,379	1,485	1,774	2,047	2,497
As % GDP	1.9%	2.9%	2.8%	2.5%	2.6%	2.8%	2.8%	3.1%
As % of Total Education	65%	73%	72%	69%	64%	61%	66%	63%
<i>Universities</i>	349	420	490	586	670	795	843	947
As % GDP	0.9%	1.0%	1.0%	1.1%	1.2%	1.3%	1.2%	1.2%
As % of Total Education	31%	24%	26%	29%	29%	27%	27%	24%

/p: preliminary figures

Table C.10 - Public Education Expenditure as % of GDP
(excludes tertiary)

	1999	2000	2001	2002	2003	2004
Uruguay	2.8	2.8	3.2	2.6	2.2	..
Bolivia	5.7	5.5	5.9	6.2	6.4	6.4
Mexico	4.4	4.9	5.2	5.3	5.8	..
Costa Rica	4.9	4.4	4.7	5.1	5.1	5.0
Colombia	4.4	4.2	4.4	5.1	5.1	4.9
Paraguay	4.8	4.9	4.8	4.4	4.3	..
Brasil	4.3	4.3	4.2	4.2	..	..
Panama	4.8	5.0	4.4	4.4	4.4	3.9
Chile	3.8	3.9	..	4.2	4.1	3.7
Argentina	4.5	4.6	4.8	4.0	3.5	..
Nicaragua	2.9	2.8	2.5	2.6	2.8	2.8
Peru	3.4	..	2.9	3.0	..	..
El Salvador	2.3	2.6	2.6	2.9	2.8	2.8
República Dominicana	..	2.3	2.3	2.3	2.3	1.1
Ecuador	1.8	1.3	1.0	..	..	..

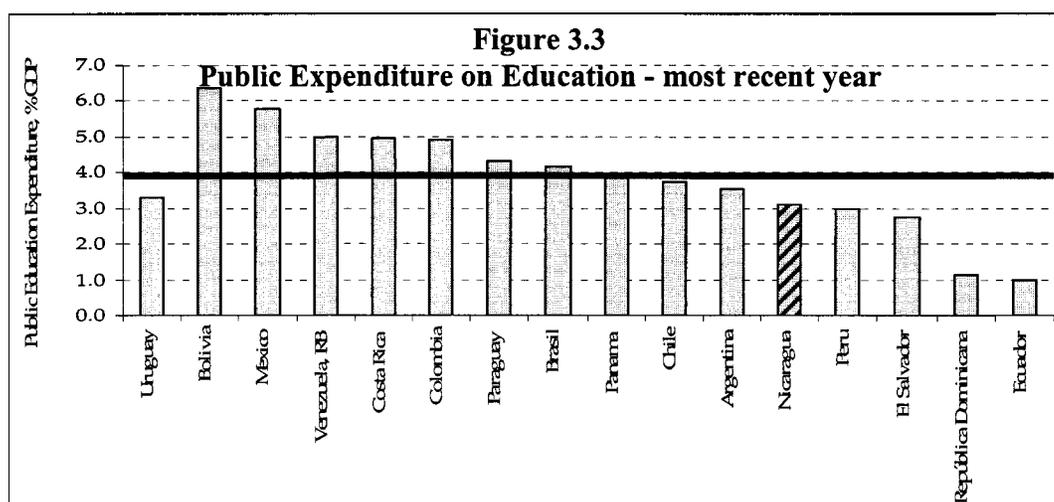
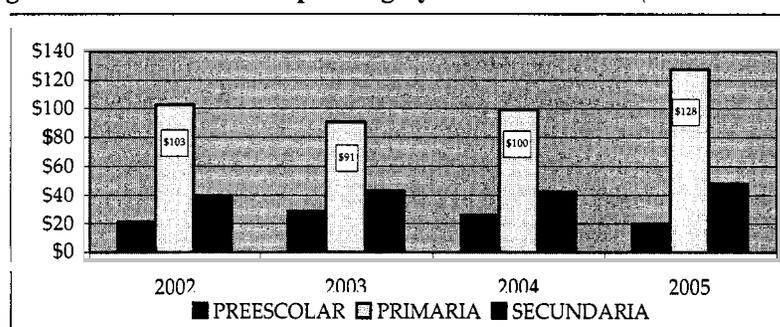


Figure C.4 - Per Student Spending by Level 2002-2005 (in current US\$)



Source: MINED

C.28 Since 2003 the proportion of the budget for education coming from the public budget has increased from 69.3 percent to almost 85 percent; Table C.11. Similarly, the proportion of grant resources shows an upward trend since 2003 (note that data for 2006 are still preliminary), making of for almost one fourth of the total resources allocated to the sector, while resources coming from external credits has decreased substantially. Overall the rate of budget execution in the sector is high, averaging over 90 percent for public resources and grant financing.

Table C.11: Budget Allocation and Actual expenditure by Source of Funds					
Cordobas (in '000)	2002	2003	2004	2005	2006
<i>Allocation</i>					
Treasury Resources	1,132,020	1,236,764	1,375,088	1,792,203	2,247,929
External Grants	240,978	328,108	463,526	661,429	292,134
External Credits	273,229	252,163	328,219	158,222	177,734
Own Resources	-	825	900	708	-
Total	1,646,227	1,817,860	2,167,733	2,612,562	2,717,797
<i>Expenditure</i>					
Treasury Resources	1,120,776	1,229,899	1,373,057	1,784,533	1,550,228
External Grants	211,107	306,863	376,765	602,963	226,537
External Credits	153,320	237,098	243,155	144,198	48,575
Own Resources	-	814	894	708	-
Total	1,485,203	1,774,674	1,993,871	2,532,402	1,825,340
<i>Distribution of Expenditures by Source of Funds</i>					
Treasury Resources	75.5%	69.3%	68.9%	70.5%	84.9%
External Grants	14.2%	17.3%	18.9%	23.8%	12.4%
External Credits	10.3%	13.4%	12.2%	5.7%	2.7%
Own Resources	0.0%	0.0%	0.0%	0.0%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%
<i>Execution Rate by Source of Funds</i>					
Treasury Resources	99.01%	99.44%	99.85%	99.57%	68.96%
External Grants	87.60%	93.52%	81.28%	91.16%	77.55%
External Credits	56.11%	94.03%	74.08%	91.14%	27.33%
Own Resources	-	98.67%	99.33%	100.00%	-
Total					

C.29 The proportion of the public budget devoted to primary education has remained constant at about 68 percent from 2002 to 2006, followed by an average of about 12 percent respectively for secondary education and centrally/common projects and activities; Table C.12. With respect to external grants and credits, the bulk of expenditures are allocated centrally. It is important to highlight that the majority of external financing, whether grants or credits, have been earmarked mainly for primary education and for centrally executed activities and programs.

Table C.12 Actual Expenditure by Source of Funds and Level of Education (2002, 2004 & 2006)

Cordobas (in '000)	Central & Common Projects/ Activities	Primary	Secondary	Preschool	Special	Adult	Teacher	Total
2002								
Row percentage								
Treasury Resources	13.3%	68.6%	12.9%	1.0%	0.9%	1.7%	1.5%	100%
External Grants	94.3%	0.0%	5.7%	0.0%	0.0%	0.0%	0.0%	100%
External Credits	53.0%	38.0%	0.0%	0.0%	0.0%	8.8%	0.2%	100%
Total	28.9%	55.7%	10.6%	0.8%	0.7%	2.2%	1.2%	100%
Column Percentage								
Treasury Resources	34.7%	93.0%	92.3%	100.0%	100.0%	58.8%	98.3%	75.5%
External Grants	46.4%	0.0%	7.7%	0.0%	0.0%	0.0%	0.0%	14.2%
External Credits	18.9%	7.0%	0.0%	0.0%	0.0%	41.2%	1.7%	10.3%
Own Resources	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2004								
Row percentage								
Treasury Resources	13.2%	68.0%	14.1%	0.9%	0.9%	1.8%	1.2%	100%
External Grants	55.3%	37.3%	4.9%	0.3%	0.0%	1.7%	0.5%	100%
External Credits	82.0%	0.0%	9.5%	1.1%	0.0%	7.4%	0.0%	100%
Total	29.5%	53.9%	11.8%	0.8%	0.6%	2.5%	0.9%	100%
Column Percentage								
Treasury Resources	30.7%	86.9%	82.4%	75.9%	99.4%	50.0%	90.0%	68.9%
External Grants	35.4%	13.1%	7.8%	6.8%	0.6%	13.4%	10.0%	18.9%
External Credits	33.9%	0.0%	9.8%	17.3%	0.0%	36.6%	0.0%	12.2%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2006								
Row percentage								
Treasury Resources	12.6%	68.9%	12.4%	2.1%	0.9%	1.7%	1.3%	100%
External Grants	36.0%	47.1%	13.8%	0.0%	0.9%	2.1%	0.0%	100%
External Credits	24.2%	0.0%	0.0%	0.0%	0.0%	75.8%	0.0%	100%
Total	15.8%	64.4%	12.3%	1.8%	0.9%	3.7%	1.1%	100%
Column Percentage								
Treasury Resources	67.7%	90.9%	86.0%	100.0%	87.3%	39.2%	100.0%	84.9%
External Grants	28.3%	9.1%	14.0%	0.0%	12.7%	6.9%	0.0%	12.4%
External Credits	4.1%	0.0%	0.0%	0.0%	0.0%	54.0%	0.0%	2.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Main Conclusions and Recommendations

C.30 Despite important gains in increasing primary school enrollment, the education system in Nicaragua continues to lag behind on key access, quality and equity indicators at all levels of the system. At this juncture, it is imperative to accelerate efforts aimed at (i) expanding access to preschool educational programs to ensure children are prepared for enrollment and successful completion of the primary education cycle; (ii) expanding teacher education programs to raise the technical and pedagogical standards of unqualified teachers, improve teacher practice and promote better learning outcomes; (ii) implementing targeted programs for the school age population in rural areas and in the Atlantic cost to improve schooling outcomes; (iii) expanding access to secondary education and/or job training opportunities for youth aged 15 to 24 years to ensure they have the skills needed to transition effectively into the world of work.

C.31 Cost, Financing and Sector Expenditures. In order to estimate the costs and financing requirements needed to improve the quality of education and expand access beyond the primary education cycle, it would be useful to carry out an in-depth analysis of sector allocations, efficiency of resource utilization and projections of sector requirements, taking into account the likely macro fiscal envelope over the next ten years. The following specific measures are recommended:

- Continue to monitor the implementation of poverty focused programs in the context of Nicaragua's Poverty Reducing Strategy and ensure the most effective and efficient use of resources in the education sector.
- Develop a medium-term cost and financing framework for the education sector that incorporates the poverty-focused program along with targets for new investments in early childhood development, preschool and secondary education to inform decision making on what and how much to invest in the various sub-levels to achieve universal completion of primary education as well as key regional targets on enrollment in pre and post primary education levels. This could be a tool to guide new versions of the Common Work Program (CWP), which receives financing from the Government and the international cooperation, including the World Bank and the EFA FTI.
- Develop a monitoring and evaluation system to track the implementation of the CWP and provide information on sector expenditure in real time. Ideally, the system would be compatible with the country's public financial management information system.

C.32 Sector Administration and Management. In light of the successes with school based management and community empowerment in decision making processes, it is important to maintain the core principles of the decentralization program, while at the same time acknowledging that some aspects need updating based on accumulated experience and evolving social, economic and political context. In that context, the following measures are recommended:

- Support initiatives to strengthen school-based decision-making and resource allocation/management. More specifically, link resource allocation to specific school quality improvements projects/activities, while strengthening local monitoring and implementation capacity in schools and municipalities.
- Strengthen the institutional capacity of the Ministry of Education by introducing a monitoring and evaluation system that provides timely and accurate information on education indicators, outcomes and impacts, as well as on the implementation of the Common Work Program, which at this moment is too fragmented.
- Disseminate key education indicators on school and student performance to promote social accountability and generate support to improve service delivery. A first step could include an analysis of the 2006 national student assessment, which could be useful to identify schools that require additional assistance to reach a desirable standard of quality.

C.33 Improving Access and Quality. The following measures are recommended to improve access and quality of education in Nicaragua:

- Develop a demand-side program that can follow through with the recommendation made in the 2004 DPR to "design programs and mechanisms to reduce the direct and indirect costs of schooling for children and young people from extremely poor households for whom schooling costs are a major barrier to either enrollment or retention".
- Prioritize the Atlantic Coast and the Central regions in carrying out infrastructure investments to improve the supply of schools and teachers in remote areas.
- Expand pre-school education coverage, at least at the third level (children aged 4 and 5), and follow up on the recommendations of the 2004 DPR to focus on establishment or scaling up of programs targeted to vulnerable families with an integrated package of services to help infants and preschool children with improvements in nutrition status and cognitive development.
- Develop a human resource strategy in the sector with a particular emphasis on raising teacher qualification levels. In developing such a strategy, special attention should be given to revamping existing pre and in-service teacher education programs, establish incentives to discourage the practice of hiring unqualified teachers and design an effective pedagogical support system to promote better teacher performance.
- Strengthen the first three grades of the primary education cycle by (i) harmonizing the curriculum in these three grades to emphasize reading, writing and mathematics logic and comprehension, (ii) assigning the most experienced teachers to the first three grades, and (iv) ensuring an adequate supply of classroom and learning materials..
- Design and implement an education policy that is attuned to the special issues facing rural areas and put in place an incentive system to attract qualified teachers in rural areas.
- Expand opportunities for secondary education, implement targeted programs to ensure that the youth aged 15 to 24 years have a second chance to complete their studies (primary or secondary) and ensure short term training courses are demand driven.

Annex D

Review of Public Spending on Health

Main Findings of the 2001 PER

D.1 The PER 2001 noted that the Nicaraguan Health Policy in the 90s was centered on the extension of coverage to the poor segments of the population and high risk groups (children and pregnant women), trying to place more emphasis on prevention than on the provision of direct medical attention. The report concluded that while access to services by the poor improved during the 1990s, they also had the following shortcomings: (a) they tended to overlap with or duplicate each other (there were 8 different models of primary health care in the public health system), (b) they were characterized by excessive investment in infrastructure and spending on central administration spending, and (c) the programs to provide these services generated little systematic information about their costs and effectiveness.

D.2 The following recommendations were offered to address these shortcomings and improve the efficiency of sector expenditures. To improve operational efficiency, the report recommended, (i) preparing a complete analysis of all investments in sector infrastructure, evaluating the level of utilization of the infrastructure and the sustainability of associated recurrent costs, (ii) reducing the duplication of programs and administrative costs by establishing just one model of primary health care. This goal was achieved through the design and approval of the Integrated Model of Health Care (MAIS or *Modelo de Atención Integral de Salud*). (iii) Reaching a consensus among donors regarding overall sectoral proposals, and (iv) developing an appropriate system of information gathering to allow systematic monitoring and evaluation of programs. This is underway through a new work scheme of the Statistical Unit.

D.3 To improve allocative efficiency, the report recommended greater focus on, (i) improving the management of medical inputs, (ii) offering one standard primary health care package – after having identified the most cost effective one, (iii) managing personnel more efficiently, with an emphasis on recruiting more nurses and other technical staff, instead of physicians, and (iv) developing and extending health and nutrition programs directed to households, instead of an infrastructure-based model of health care delivery.

D.4 The report concluded that the implementation of institutional reforms had been uneven and slow. Many of the reforms faced implementation difficulties and required a concerted effort from all key stakeholders. Although the health sector reforms had considerable support during their inception, they had lost their momentum and needed to be revitalized. As the following sections of the present report will show, Nicaragua has made progress in some areas including sector outcomes, but most of the efficiency and equity issues still remain to be addressed.

Health Sector Overview

Evolution of Key Sector Outcomes

D.5 Since 2001, Nicaragua has made gradual, but steady, progress in a number of key health indicators; Table D.1. Infant and child mortality rates have declined together with chronic malnutrition rates. While maternal mortality rates based on MOH data also decreased from 2001 to 2005, it must be noted that these are mainly from facility-based and not nationally representative surveys.²⁰⁹ The most

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209. This figure is likely to be underestimated. For example, the 2000 MOH MMR estimate of 87.6 deaths per 100,000 is substantially smaller than the WHO Core indicator estimate of 230 per 100,000.

recently available data for percentage of attended births by skilled health personnel—which is a well-recognized proxy to measure MMR is from 2000 at 67 percent. With regard to other indicators that are related to maternal health, prenatal coverage increased very slightly from 70 percent to 71.6 percent although more progress was made in terms of the percentage of women who had four prenatal visits and those who gave birth in health facilities. However, family planning coverage declined. Also, while the percentage of children who received the BCG vaccine increased, the percentage of one-year old children who received vaccinations against polio, DPT(diphtheria, pertussis, and tetanus), and MMR (measles, mumps, and rubella) decreased.

Table D.1 Health Outcomes and Outputs, 2001 and 2005

Key Performance Indicators	2001	2005
Infant mortality rate (per 1,000 live births)	35 ^a	30 ^b
Under five mortality (per 1,000 live births)	40 ^a	37 ^b
Chronic malnutrition (children < 5 years of age)	20.2 ^a	18.1 ^{c (2004)}
Maternal mortality rate (per 100,000)	107.2 ^d	86.5 ^d
Institutional births (%)	50.6	58
Prenatal care coverage (%)	70.2	71.6
Pregnant women who had 4 prenatal visits (%)	48.8	56
Family planning coverage (%)	24.5	12.9
On year old children who received BCG vaccine	98	102
One year old children who received polio vaccine	92.6	86.7
One year old children who received DPT (Diphtheria, Pertussis, and Tetanus) vaccine	92	86.2
One year old children who received MMR (measles, mumps, rubella) vaccine	101.6	96.3

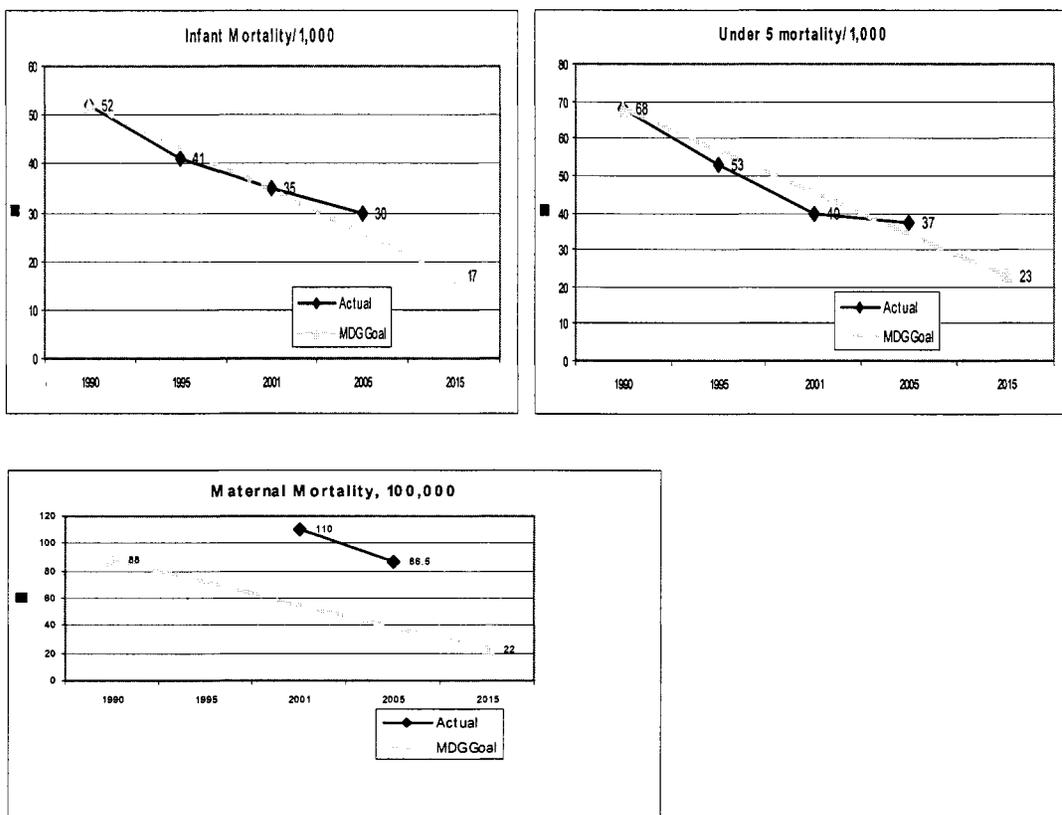
Sources: ^aENDESA 2001; ^bWDR 2006, ^cSEVIN 2004, ^dMOH statistics (INS 2004-2008 document)

Progress in Meeting the Millennium Development Goals

D.6 While Nicaragua has made progress in reducing infant and child mortality rates, as shown in Figure D.1, it is still slightly off-track in reaching its infant and child mortality MDGs. In terms of maternal health, while the MOH-based estimates are promising because they indicate a declining trend in maternal mortality rates, the MOH 2005 estimate of 86.5 per 100,000 is still very far from the 2015 MDG goal set by the Government of 20 per 100,000. It is also highly recommended that a nationally representative survey be conducted to make it comparable with the WHO 2000 estimates of 230 deaths per 100,000. If undertaking such a survey is not feasible then the proxy-for MMR-indicator, i.e. the percentage of women who deliver attended by a skilled health professional should be updated because the most recently available published data for Nicaragua is 67 percent in 2000. Moreover while the percentage of children under 5 years of age who are stunted has declined from 24.5 percent in 1998 to 18.1 percent in 2004 (WDI 2007) it is not clear whether the country is on track with regard to meeting the 2015 MDG nutrition goal because of the absence of comparable 1990 data to adequately track progress. Readily available Government documents do not also appear to specify the MDG target for nutrition.

D.7 According to the latest Living Standard Measurement Study (LSMS), carried out in 2005, respiratory illnesses, followed by chronic illnesses, diarrhea, and skin ailments are the most common types of diseases in Nicaragua (Figure D.2a). Three of these diseases (respiratory, diarrhea, and skin) are largely preventable ones. Respiratory diseases are relatively more prevalent among individuals in the poorest quintiles while chronic illnesses are most common among individuals in richest quintile. On the other hand, indigenous people and agriculture producers are more likely to suffer from diarrhea and other multiple types of illness (Figure D.2b).

Figure D. 1 Progress towards meeting the Millennium Development Goals in Health, Nicaragua 1990-2005



Note: MMR estimates and goals based on Government of Nicaragua MOH statistics 2007.

Sources: World Development Indicators, DHS for 2001 data for IMR and U5M.

Figure D.2a

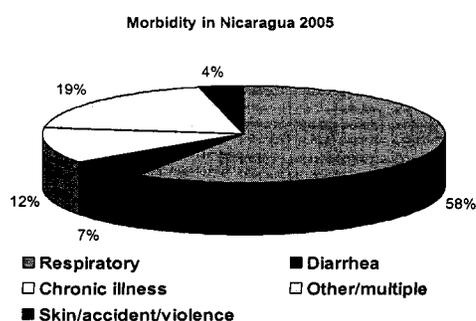
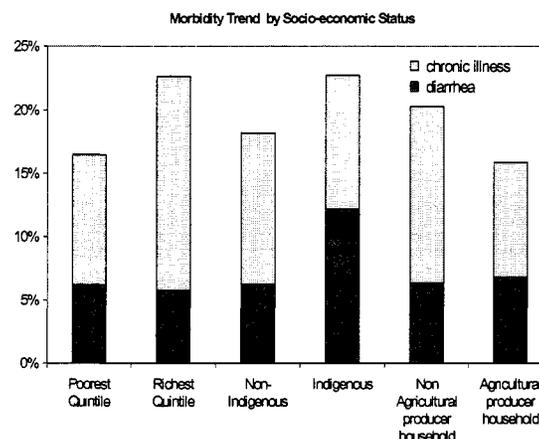


Figure D.2b



Sources: LSMS 2005, authors' calculations

Health Services Provision

D.8 The main actor in the health sector is the Ministry of Health (MOH) which operates through a network consisting of 28 general and 4 chronic disease hospitals, 868 health posts and 175 health centers. The Nicaraguan Social Security Institute (INSS) is the second largest provider of public health services. INSS covered 439,000 active workers in 2006, and an estimated 296,000 dependents, although its coverage has been recently extended to include children from 6 to 12 years of age of active affiliates.

Table D.2 Health Facility accessed in previous month (2005)

Type of Facility	Consultations		Extrapolation to total population
	Number	%	
Health Center and Health Posts	543,341	50.9	2,776,818
Public Hospital (MOH)	137,208	12.8	701,220
Total MOH	680,549	63.7	3,478,038
Private Clinics	189,475	17.7	968,338
Private Hospitals	12,364	1.2	63,188
Private Providers	201,839	18.9	1,031,526
INSS (Private Health Provisional Institutions)	119,739	11.2	611,942
Others	65,687	6.2	335,702
Total	1,067,814	100	5,457,208

Source: LSMS Survey 2005.

D.9 The real number of beneficiaries is unknown, however, as INSS has not compiled reliable figures. According to the most recent LSMS survey, 64 percent of the population uses MOH facilities, 19 percent use the private sector, 11.2 percent use the INSS, and 6.2 percent use other providers or facilities (including traditional medicine). Extrapolating from the LSMS figures, the total population covered by MOH is around 3,500,000 people.

Evolution of Key Sectoral Expenditures

Overall Sectoral Expenditures

D.10 According to 2004 NHA figures, health expenses in Nicaragua are 8 percent of GNP.²¹⁰ MOH expenditures fluctuated yearly since 1997, both due to national budget restrictions and donor contribution fluctuations, reaching 2.8 percent of GDP by 2004. INSS expenditures as a share of GDP increased by 62 percent, from 0.8 percent in 1997 to 1.3 percent in 2004. Household expenditures comprised 3.3 percent of GDP in 2004.

D.11 National health expenditures have grown in US Dollar terms since 1997, increasing by 50 percent from US\$ 258 million in 1997 to US\$ 386 million in 2004. In 2004, 55.3 percent was spent by the public sector and the remaining 44.7 percent by the private sector. The MOH spent 35.6 percent (US\$ 138 million) while INSS spent 16.5 percent (US\$ 64 million) of total health expenditures. Households have a large share (41.1 percent or US\$ 159 million) -- exceeding that of the MOH. The 2006 executed budget of the MOH amounted to US\$178.6million, increasing by 30 percent since 1999. This executed budget is about 3 percent of GNP and 15 percent of the total Government executed budget.

D.12 The total annual health expenditure per capita increased from US\$ 56 in 1997 to \$72 in 2004 (Figure D.3). With the exception of INSS, the NHA do not indicate the covered population for each sub-sector. If

one takes the total population net of INSS affiliates then per capita spending by MOH is about US\$ 28, but if we consider a covered population of 3,500,000, as Table D.2. suggests, then IHSS per capita spending is US\$ 51 per capita. The annual average cost in the case of INSS affiliates is US\$ 176 in 2004 and US\$ 135 if one includes both affiliates and dependents. The incorporation of children occurred recently, plus the coverage extension of the informal sector population decreased its spending per capita. The per capita costs of INSS are significantly higher --ranging from 3.9 times in 2003 to 6.5 times in 1999

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210. Nicaragua keeps a good system of National Health Accounts (NHA), although the most recently published figures only extend until 2003. This section uses 2004 unpublished NHA data and other sources, updating most of the information up to 2006.

Table 4.3. Nicaragua: Contribution to Health Spending by Source. 1997-2004.

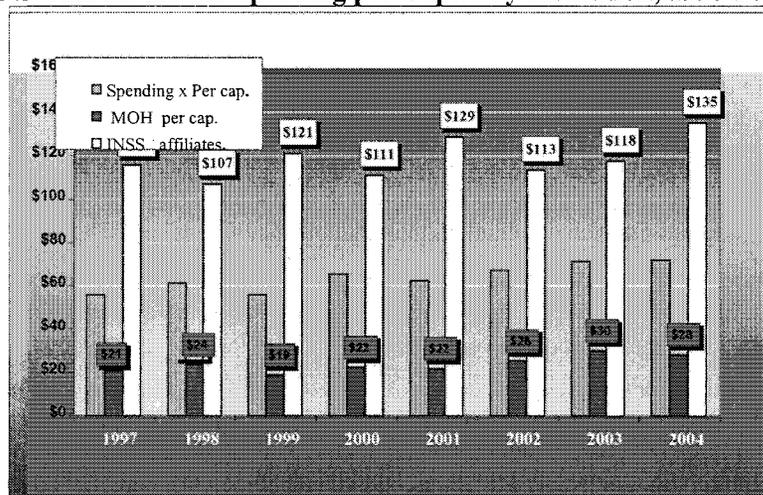
Institution	PERCENTAGE DISTRIBUTION BY INSTITUTION							
	1997	1998	1999	2000	2001	2002	2003	2004
PUBLIC SECTOR	49.3	49.3	49.3	49.3	53.9	52.4	56.6	55.3
Central Government	37.1	37.8	33.5	35.6	36.5	37.7	41.5	38.8
Ministry of Health	35.0	35.8	31.0	31.5	32.1	34.8	38.2	35.6
Ministry of Governance	0.6	0.7	0.8	0.6	0.6	0.6	0.6	0.5
Ministry of Defense	1.0	0.8	0.7	0.6	0.6	0.8	0.6	0.5
Decentralized Institutions	0.4	0.4	0.6	2.8	3.1	1.3	2.0	2.0
Other Ministries	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.2
INSS	12.0	11.3	15.5	13.3	16.9	14.7	15.1	16.5
Public Enterprises	0.3	0.2	0.3	0.4	0.5	0.0	0.0	0.0
PRIVATE SECTOR	50.7	50.7	50.7	50.7	46.1	47.6	43.4	44.7
Private Insurance	0.0	0.2	0.1	0.3	0.8	1.1	1.0	0.9
Households	49.4	49.7	48.2	47.1	42.1	45.4	38.5	41.1
NGO	0.8	0.3	1.9	1.9	1.7	0.8	1.9	2.0
Private Firms	0.4	0.5	0.5	1.4	1.5	0.3	2.0	0.7
TOTAL GENERAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

INSTITUCIÓN	EVOLUTION WITH BASE 1997=100							
	1997	1998	1999	2000	2001	2002	2003	2004
PÚBLICO SECTOR	100.0	112.6	104.4	124.6	133.6	141.8	167.0	168.2
Central Government	100.0	114.9	94.4	119.7	120.4	135.7	162.9	156.9
Ministry of Health	100.0	115.6	92.7	112.1	112.1	132.9	159.0	152.7
Ministry of Governance	100.0	118.5	134.1	119.7	118.3	130.6	127.5	116.0
Ministry of Defense	100.0	88.5	79.9	79.3	78.3	114.6	91.2	81.4
Dec. Institutions	100.0	121.3	174.9	942.3	1006.9	456.7	781.6	800.3
Other Ministries	100.0	82.1	225.7	89.8	99.8	125.1	148.6	201.4
INSS	100.0	106.6	135.4	138.5	172.4	164.0	183.6	207.0
Public Firms	100.0	72.8	105.5	172.5	220.9	0.0	0.0	0.0
PRIVATE SECTOR	100.0	113.0	104.6	124.9	111.2	125.4	124.7	132.2
Private Ins	100.0	1091.0	606.3	2125.1	6085.9	9218.6	8960.5	8094.6
Households	100.0	113.5	101.8	118.9	104.2	122.7	113.3	124.8
NGOs	100.0	44.5	258.8	299.5	259.7	132.5	351.9	383.5
Private Firms	100.0	138.6	122.5	416.3	421.4	81.7	683.9	244.7
TOTAL GENERAL	100.0	112.8	104.5	124.7	122.2	133.5	145.6	150.0

Sources: MOH, NHA, DGPD, authors' calculations

– than MOH per capita spending, if the total population net of INSS is considered (as indicated before, the true coverage by MOH is not known; just estimated).

Figure D.3 Annual Health Spending per Capita by Institution; 1997-2004. In US\$



Sources: MOH, NHA, authors' calculations

D.13 With respect to spending by health function, medical inputs and curative services comprise a substantial portion of expenditures (a combined share of 84 percent in 2002 and 77 percent in 2003), while the combined shares of preventive services and training and research are significantly lower at 10 percent in 2002 and 14.6 percent in 2003 (Table D.4)

Table D.4 Shares of Total Health Spending by Function (%)

Health Function	2002	2003
Curative Services	41.8	33
Preventive services	8.2	7.3
Medical inputs	42.7	43.8
Training and Research	1.6	7.3
Administration	4.4	5.7
Others	1.3	2.9
Total	100	100

Sources: MOH, NHA.

Ministry of Health

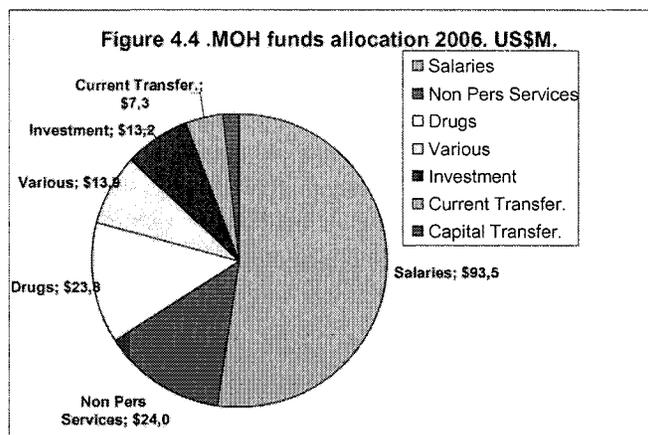
D.14 Sources of funds. The MOH shows a high dependency on external aid, especially with regard to capital outlays. This is a concern because it has implications for sustainability. In 2006, the Current Budget was financed mainly by the Treasury (83 percent), cost recovery (3.4 percent), debt relief (9.3 percent), and donations (4.4 percent). In early 2007 the government eliminated charging user fees for services, although no studies have been undertaken to assess its likely impact.

D.15 Even though Treasury funds have increased in the last two years, especially in 2006 (rising from a low of US\$1.08 million in 1998 to US\$10.8 million in 2006), investment/capital expenditures have depended heavily on foreign aid over the years. In 2006, donations and loans amounted to US\$23 million or 68 percent of allotted funds for capital spending, even though national funds increased to US\$10.8m.

Foreign aid's share peaked in 2001, when it reached 96 percent of a total capital outlay of US\$43.8 million. The funds allotted for 2007 investments also reflect a similar pattern, with only US\$2.0 million from Treasury funds and US\$46.6 million from foreign funds, or 96 percent of total.

D.16 Allocation of MOH Funds. Even though disposable funds in MOH have increased during the decade, the trends in budget line items show reasons for concern. Personnel services increased by 33 percent - - from US\$ 70 million in 2004 to US\$ 93.5 million in 2006. During this period, its share of the executed current budget rose from 57 percent to 60 percent. There are growing pressures on public sector wages and salaries from the public sector unions, which the new government is taking into account in policy directives that promote increasing local health salary levels to approach those prevailing in the Region.²¹¹

Although Non- Personnel Services increased from US\$20 million (2004) to US\$24 million (2006), its relative share has slightly declined from 16 percent to 15 percent. Among all line items, the share of drugs, however, has fallen the most (from 19 percent of the current budget in 2004 to 15 percent in 2006). During this period, capital outlay shares fluctuated, ending up at US\$23.4 million in 2006.



The Nicaragua Social Security Institute (INSS)

D.17 The INSS is the other large health care provider in Nicaragua. INSS began in 1955 as a direct health service provider and transferred all its facilities to the MOH in 1979 when the Sandinista Government took office. In 1993 with a new administration, INSS became again autonomous and its financing and service provision functions were separated. Direct provision of health services were outsourced to private and public accredited institutions, altogether 49 *Empresas Médicas Previsionales* (Medical Insurance Institutions, PMIs). Employers, employees and government contribute to INSS, in varying percentages based on given benefit systems. The *Régimen Integral*, or full health package, receives 15 percent of its financing from the employer salary roll, 6.25 percent from employees, and 0.25 percent from the government, totaling 21.50 percent.

D.18 INSS pays a uniform monthly capitation fee equal to US\$ 14.4 (2005) for each active affiliate in order to provide a given package of services for him/herself and his/her dependents. Coverage is not universal in terms of covered benefits, dependents and age limitations, although it was recently extended to cover children from six to twelve years of affiliates. The new government intends to expand benefits and to also increase service coverage to rural areas and informal sectors. While this policy may appear sound from a long run point of view, it also poses significant challenges in the short run. In particular, extending benefits and coverage will impose a financial, epidemiological and intergenerational risk to PMIs. Their size is relatively small and the majority will not be able to meet the financial cost of

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211. In 2006 a several months-long strike by health workers crippled the health system and resulted in a large increase in medical staff salaries. The directive to approach salary levels prevalent in neighbouring countries poses a strong fiscal threat, considering, for example, that the MOH of El Salvador includes a 7 percent annual obligatory increase in ministry salaries in dollar terms, and that Nicaragua's per capita income is only half of the Salvadoran level.

increasing health demand, triggered by more benefits, more dependents, retirees, and aging beneficiaries, and a decreasing net income due to rising costs and a fixed per capita income. Deficits will arise and bankruptcies could likely follow.

D.19 In order to mitigate these risks, two major steps will need to be taken:

- Enhanced efficiency. INSS appears to over-consume certain services, such as drugs with no epidemiological justification--a natural consequence of free prescriptions and delivery²¹². In order to be more cost effective in its approach to health care, a strong primary health care and preventive policy would also be required.²¹³ While efficiency improvements are necessary, they also require investments in knowledge management, regulation, supervision and monitoring, a stewardship role to be taken by the MOH. Thus, in order to be able to properly carry out these responsibilities well, the MOH requires institutional strengthening.
- Increased capitation spending. The capitation quota has stayed almost unchanged in real terms since 1994, and the revenues generated from increasing it could be used to finance the proposed extra benefits and population coverage. The overall size, gender and age structure of MPIs, as well as family size and the consumption of health services would need to be carefully studied in establishing benefits and capitation schemes. Thus, minimum size requirements and an adjustment of the capitation system to include age and gender structures should be discussed and approved. However, authorities must keep in mind that any financing increase will burden the production costs of the private sector and therefore affect its competitive edge in increasingly open regional and extra-regional markets. This concern suggests that users should partially contribute to financing their consumption of health services.

D.20 Furthermore, in order to help ensure a rational use of health services, the government's intention to establish free health services should be reconsidered and this policy should be restricted to the poor and to the population in need. As a long-run policy, the Government could establish a fixed fee scheme with well specified exemptions, in order to avoid the future financial collapse of the system.

The Relative Efficiency of Health Spending

D.21 Chapter II (Section B) compared the efficiency of public spending in health in Nicaragua, based on the analytical framework presented in Herrera and Pang (2004). By relating total public health expenditures and two other inputs (adult literacy and private expenditures) and four output indicators referring to life expectancy at birth, DPT (Diphtheria, Pertussis and Tetanus), Measles immunization and the Disability-adjusted life expectancy (DALE) index, which takes into account both mortality and morbidity,²¹⁴ results indicate that in contrast to the education sector, the efficiency of public spending on health in Nicaragua is similar to the average efficiency scores achieved in the Central and Latin America regions. Using the input-oriented single input/output measures, for example, Nicaragua exhibits an efficiency score of 0.65, compared to the Central America and Latin America averages of 0.65 and 0.69, respectively. Using the output-oriented measures, Nicaragua's average efficiency score of 0.90 is virtually identical to the Central America and LAC averages of 0.91 and 0.90. The same efficiency picture

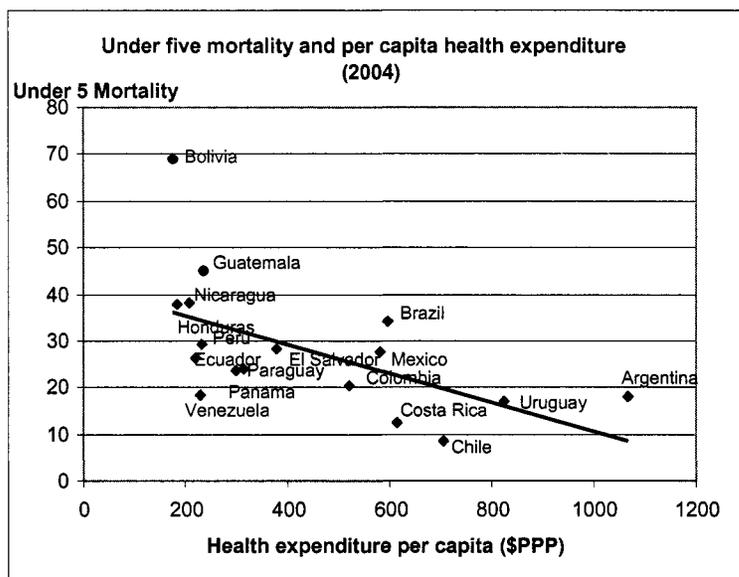
212. Consumption of medication varies from 9.8 drugs per year per beneficiary for 12 small MPI of an average size of 2,212 members, to 24.3 drugs per year per beneficiary for the two largest MPIs of 34,154 members in average. Consumption by region also shows significant variations. There is ample need and room for regulation, auditing measures and quality controls, both to oversee under- and over-prescription of pharmaceuticals, and regulations.

213. INSS benefits exclude preventive examinations.

214. Herrera, Santiago and Gaobo Pang, (2004), "Efficiency of Public Spending in Developing Countries: An Efficiency Frontier Approach", World Bank Working Paper, December.

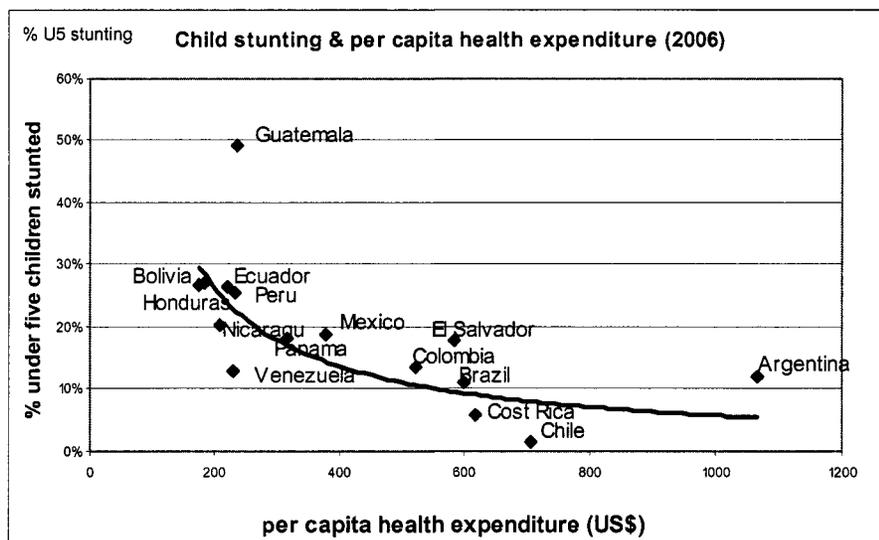
emerges when using multiple inputs and outputs, with Nicaragua having similar scores to the two regional averages. In health, the potential room for increasing efficiency ranges from 10 to 35 percentage points, depending on whether an output-oriented or input-oriented efficiency measure is used.

Figure D.5a Relationship between Under-5 Mortality Rates and per capita health expenditures (PPP)



Source: WDR Core indicators 2006. Based on latest comparable data across countries.

Figure D.5b Relationship between Child Stunting levels and Per Capita Health Expenditures in PPP terms (2004)*



Note:

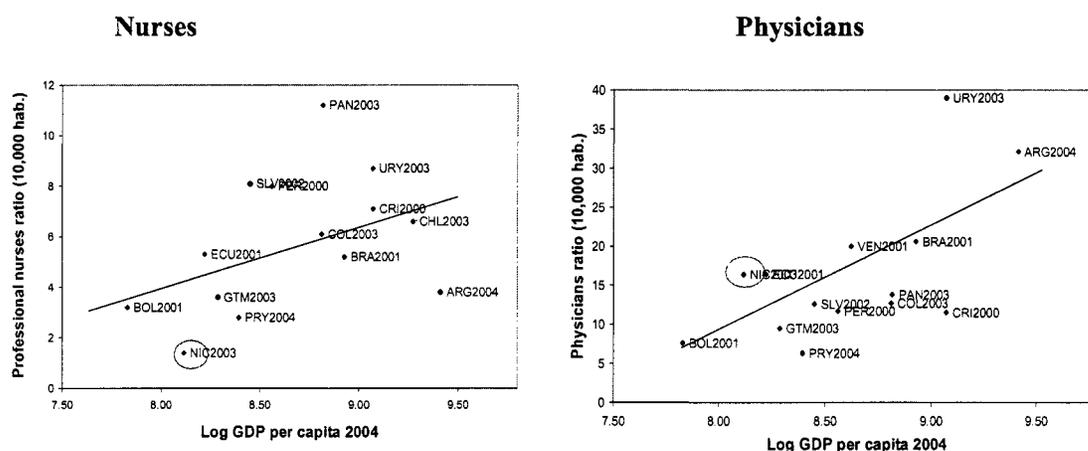
*Based on latest comparable data across countries.
 Source: WHO Core Indicators, 2006, Honduras 2004 figures estimated based on 2001 data and DHS 2005/06.

D.22 A study by Evans et al. (2006) estimated the efficiency of the health system of 191 countries by comparing levels of health outcomes and health inputs (health expenditure per capita and education level). The study finds that it is difficult for systems to be efficient with annual health per capita expenditures lower than US\$80. Nicaragua's per capita health expenditure is higher than US\$80, but it can still improve the efficiency of health spending in terms of some key indicators such as under-five mortality rates; Figure D.5a. Nicaragua has a higher under-5 mortality rate than Peru, Ecuador, and Venezuela although their per capita health expenditures in PPP terms are relatively similar. On the other hand, in terms of chronic malnutrition among young children (Figure D.5b), Nicaragua is doing relatively well relative to other countries with similar PPP health expenditures per capita such as Ecuador, Peru and Bolivia. However, it has higher stunting levels compared to Venezuela.

D.23 Some allocative issues that need to be addressed relate to drug procurement and provision and human resources.

- **Pricing and availability of drugs.** A recent study found that the average price of a list of 35 generic medicines in Nicaragua was 10 times higher than the price paid by an Interamerican Development Bank project in Argentina (Meerhoff, 2004a). Also, in Nicaragua, the public drug and medical supply agency (CIPS) provides subsidized or free drugs. According to MOH estimates, however, only 45 percent of the population in need has access to these drugs, while the rest face prohibitively high prices for non-generic drugs.
- **Human resources.** As shown in Figure D.5, while the number of physicians per every 10,000 habitants is high given Nicaragua's level of development, the number of nurses per 10,000 habitants is low.

Figure D.6 Distribution of Nurses and Physicians per 10,000 inhabitants in relation to GDP per capita, Nicaragua relative to other Latin American Countries



Source: Argel-Urdinola and Tanabe 2007 based on WHO, PAHO and WB indicators.

- Despite having a relatively high number of physicians relative to its level of development, staff distribution issues remain and regions do not benefit equally. About 50 percent of the physicians live and work in Managua (Dussault and Franceschini, 2003). So far, initiatives to improve health workers' deployment have not been successful. However, Nicaragua's experience with social services personnel deployment is worth noting. It is based on an identification of health region needs in the country and workers are to remain in their assigned positions for several years before they can move to other places. They are also replaced once they leave. Such a strategy could be extended to health care workers (WB 2007). The implementation of an efficient incentive system that promotes health worker productivity is a priority issue for the sector reform agenda.

Institutional Issues

D.24 External Donors and the Sector Wide Approach. Nicaragua has done a substantial amount of work in health policy reform that serves as a strong foundation for the SWAP in health. In mid-2004 the MOH released the ten-year National Health Policy and its corresponding 2004-2015 National Health Plan. During the same year, the MOH released a draft Five-Year Implementation Plan detailing how it would operationalize its National Health Plan. The fundamental goal of this plan is to increase access to health care services of the poor people, especially to effective maternal and child health care.

D.25 As a result of this effort, a number of important development partners (World Bank, Holland, Sweden, Austria, Finland, and Spain) and representatives of the GON signed a Code of Conduct (COC) in 2005, outlining the framework of future cooperation to support the implementation of the health sector plan for 2005-2009. During the same year, these parties signed a Joint Financing Arrangement (JFA) stipulating procedures to transfer and report funds provided through (sector) budget support. Through the signing of these documents the framework for a SWAP in the health sector in Nicaragua was established.

D.26 The signed COC and JFA provide a strong legal and procedural framework to the SWAP process. Many financial management issues still need to be improved and intermediate safeguards will be necessary in several areas for the medium term (e.g. in audit, procurement). The GON's Integrated Financial Management System, SIGFA, could have been defined better in terms of reconciling accounts. Further reform is being introduced on the SIGFA.

D.27 Many of the features of the ideal SWAP have not yet been tested since the process has just started. It still remains to be seen if donors will be able to align their support with the GON's planning and budget cycle and make pledges of medium-term financial support and disburse funds in accordance with the needs and regulations of the Ministry of Finance. However, the donors and GON have also learned that the SWAP depends on donor coordination in alignment with government strategies supporting the National Health Plan. Financial support from donors may vary according to their own mandates and operational arrangements. These available financing alternatives have enriched the policy dialogue within the SWAP.

D.28 Decentralization. During the 1990's, MOH initiated a health reform process that included the organization of Local Systems of Integral Health Assistance (SILAIS, *Sistemas Locales de Atención Integral a la Salud*) throughout the country. The MOH established, as one of the main health sector strategies, the strengthening of the SILAIS and Primary Care services. The MOH focused on the integral development of health care services at the local level, strengthening and supporting the decentralization process. The National Health Plan (NHP) for 2004-2015 includes a decentralization plan based on the principle of separation of functions (stewardship, financing, provision and insurance) and the transfer of faculties, decision-making authority and resources to health providers. The Plan states that the SILAIS will become both managers and providers of health services, complementing the stewardship role of the Ministry. Further, MOH has plans to redefine the functions of the SILAIS and local health networks. SILAIS will be responsible for delivering a package of basic health services (PBHS) in accordance with MOH's new health care model. The delivery of this package will be achieved through a capitation transfer to the SILAIS, which in turn will purchase services from local public providers (*municipios*), and qualified private providers, mainly NGOs. MOH will enter into management agreements with SILAIS (*Convenios de Gestión*), which will be the basis for the capitation transfers of the community health-financing scheme to SILAIS. These management agreements introduce a system of performance-based evaluation as they link budget allocation to agreed upon benchmarks related to productivity, quality and patient satisfaction. Municipalities are participating actively in this programming and budget exercise by developing their annual operation plans, which then become the core of the SILAIS annual plan.

Preliminary evidence suggests that these agreements have provided more autonomy to SILAIS in the planning and allocation of resources for their operations (World Bank 2005).

D.29 In addition, the NHP established a set of strategies and activities to consolidate the decentralization plan, including: (i) strengthening the professional capacity of local management staff, and the regional, departmental and municipal councils; (ii) developing accountability mechanisms and monitoring and evaluation indicators for the decentralization process; (iii) designing norms that permit the purchase of hospital services; and (iv) developing a long term plan to transfer the responsibilities and resources for health provision to municipalities. The NHP also mentions the implementation of a decentralized human resource management, but it does not specify the responsibilities of the SILAIS in this area (NHP 2003).

D.30 To support the decentralization plan, the SWAP in health is funding technical assistance necessary to develop the institutional capacity of the SILAIS and local administration units (*municipios*)²¹⁵ for implementing the expansion of the basic package of health care and implement the strategic lines mentioned above. Civil society will play an active role in auditing the actual delivery and quality of services to the community. A community committee will advise and ultimately endorse the provider annual working plan and periodically (e.g., quarterly) provide monitoring feedback to the provider and the supervisory SILAIS. Finally, the SWAP will also support decentralization by: (i) providing advocacy and technical assistance to municipal governments and the Autonomous Governments of the Atlantic Coast on the organization and management of their regional health systems; and (ii) decentralizing management of the MOH human resource function to the SILAIS and hospitals.

D.31 In spite of the original purpose of decentralizing key functions to the SILAIS, the degree of power and decision-making authority transferred to them was low. In terms of the finance function, Bossert et al. (2001), found that SILAIS administered only 19 percent of the budget at the primary level of care. Moreover, the SILAIS' actual control of expenditures was moderate since these are limited to non-personnel services and material and supplies, which account for less than 10 percent of the total SILAIS budget. This situation also contributes to the SILAIS' limited flexibility to make intra-budget reallocations. Regarding user fees and the allocation of their own revenues, the SILAIS could charge for those activities that they manage directly (i.e., inspections) since the local administration units are the ones entitled to set user fees at the health facilities. In both cases, there was autonomy to allocate these revenues according to their priorities. Both SILAIS and the municipalities can receive direct financial aid from international donors to carry out specific health programs.

D.32 Bossert et al. (2001) also found a very low degree of autonomy to perform service organization functions, which still applies to the present situation in Nicaragua. The SILAIS have no influence on the management and budget of hospitals in their regions, since MOH allocates resources to hospitals directly. The MOH still controls the funding, planning and implementation of the main public health programs, which reduces the capacity of SILAIS to follow their own operational program. Another factor that reduces SILAIS' management autonomy are the MOH imposed budget ceilings that limit their ability to deploy medicines and medical supplies according to their programming needs. On the other hand, the SILAIS have the right to propose hiring, transferring and dismissing personnel although they are not allowed to actually implement personnel related actions or to set salaries for their staff. SILAIS can have contracts with private providers for complementary services such as maintenance, laboratory, etc., although there is a central office in charge of maintenance. Similarly, with regard to governance, Bossert (2001) reports that many of the Health Boards (*Juntas de Salud*) at the local level were not functioning, and the ones that were had a very limited role in the decision-making of main SILAIS operations. However, community participation is very high at the local health unit. Health Boards participate in the approval of annual operation and emergency plans. In addition, both local governments and communities have already been participating in health service provision through the co-financing of preventive

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215. The local health administration units are referred as "municipios" in Nicaragua.

maintenance of health centers. Municipalities can request funds to finance preventive maintenance through the presentation of an Annual Maintenance Plan, which includes the individual projects and community maintenance committees who are responsible for carrying out the work.

D.33 Nicaragua has to strengthen management agreements with the SILAIS and introduce more incentives to make them work more effectively. In order to do this, further institutional strengthening at the local level is needed, as well as the political commitment to push it. Similarly, a major effort on building up more robust monitoring and evaluation systems is needed.

D.34 In spite of the limitations presented here, Nicaragua has been the most ambitious in planning to further decentralize services to SILAIS and municipalities, compared to neighboring countries, such as El Salvador, Honduras and Guatemala. It also has the longest experience with decentralization. The data on decentralized funding suggest that those municipalities in SILAIS with higher levels of decentralized budgets showed better health coverage rates. A key next step is to assess the performance of the management agreements with SILAIS.

Conclusions and Recommendations

D.35 Nicaragua has made progress in a number of key performance indicators including the reduction of child mortality rates and under-nutrition, as well as improvements in key maternal health indicators. Nevertheless, Nicaragua is still slightly off-track in reaching its infant and child mortality MDGs. In terms of maternal health, while the MOH-based estimates seem promising because they indicate a declining trend in maternal mortality rates, the MOH 2005 estimate of 86.5 per 100,000 is still very far from the 2015 MDG goal set by the Government of 20 per 100,000. It is also recommended that a nationally representative survey be conducted to make it comparable with the WHO 2000 estimates of 230 deaths per 100,000. If undertaking such a survey is infeasible then another option is to update the proxy-for MMR-indicator (percentage of women who deliver attended by a skilled health professional) in order to determine if Nicaragua is on track to reach the 2015 target of 100 percent, because the most recently available published data for Nicaragua is for 2000 (67 percent). Moreover while the percentage of children under 5 years of age who are stunted declined from 24.5 percent in 1998 to 18.1 percent in 2004 (WDI 2007) it is unclear whether Nicaragua is on track because of the absence of comparable 1990 data to adequately track progress; readily available Government documents also do appear to specify nutrition MDG targets.

D.36 Despite progress made in a number of key health indicators, inequities remain among income quintiles, urban/rural areas, and indigenous/non-indigenous populations. In addition, family coverage has declined by almost half from 2001 to 2005, as well as coverage of certain key vaccinations (DPT, MMR, and polio) for one year old children.

D.37 Total health expenditures have increased in real terms, with a significant emphasis on curative care and medical inputs and personnel costs. Preventive care and training and research receive substantially less (7.5 percent each) and spending on drugs has remained stable in nominal terms (US\$ 24 million) and declined as a percent of total expenses (2004: 19 percent; 2006: 15 percent). Efficiency gains could be made in terms of rationalizing health care and spending especially terms of (a) improving its focus on cost effective preventive care and health promotion measures –together with a corresponding increase in their budgetary shares in order to make a meaningful difference in basic health, nutrition, and population indicators especially for poor and disadvantaged children and women, (b) the INSS, (c) the allocation of personnel, and (d) procurement of drugs.

D.38 The Government has issued policy directives that focus on three main areas: (i) the role of the MOH as steward of the sector, (ii) actions on health services supply, and (iii) actions on health demand. The recommendations that follow take these directives as guides and build on them based on the analysis

undertaken. In addition, emphasis is placed on the inclusion of policies on sector financing and resource allocation.

Stewardship Role of the MOH

- All health sub-sectors are subject to MOH rules, supervision and control: MOH facilities, INSS, MPIs, private sector, NGOs, others. It follows that the MOH needs a comprehensive institutional strengthening program, to effectively address the challenges ahead.
- Adapt the model health care package to epidemiological, ethnic, cultural and local specifications. A team of specialized personnel is needed to reformulate existing definitions and protocols. Operations research has to be done, with an action and results oriented strategy.
- Implement quality assurance and assessment mechanisms at all levels and sub-systems. Strong technical support is required in this field, and verifiable targets need to be identified and met such as reduction of waiting lines, specific indicators of efficiency and equity improvements. Ensure that sectoral targets are well aligned and consistent across programs and strategies over a specific period of time (PRSP, National Health Plan, etc.).

Actions on health supply (with related technical and donor support)

- More equitable delivery of health services especially in the Atlantic Region, where the number of health care facilities is much lower while the needs are higher. This usually forgotten region is now an important focus of the new administration. The new government intends to invest more resources in this region to improve its health indicators and it would be important to closely monitor if actions are on track.
- Conduct a thorough inventory of health sector investments, both in terms of hospital equipment and infrastructure, in all sub-sectors, and assessment of future needs from a systems based approach.
- Establish a drug-purchasing and distributing agency. Assessment and support to its development, organization, implementation and operation.
- Assess traditional health practices, its effectiveness, and whether some of them can be integrated as part of health promotion and provision of services
- Establish health protocols at all levels (ambulatory and hospital care, by ailment).
- Ensure uniform quality standards for health services provided by MPIs for INSS.
- Standardize health information and management information systems, throughout the whole sector, for public and private facilities
- Develop MOH's capacity to provide adequate supervision, assessment, and follow up actions.
- Renew support to local participation. Assess decentralization issues and identify ways to address them. For example, Nicaragua has to strengthen management agreements with the SILAIS and introduce more incentives to make them work more effectively. A key next step is to also assess the performance of the management agreements with SILAIS.

Actions on health demand

- Review and revise current benefit packages and their proposed extension in terms of their impact on health financing needs, operational costs, physical investments, human resource needs and resource usage.
- Extend service coverage to more segments of the population under the Integrated Health Care Model (MAIS)

- Guarantee cost-free health assistance to the poor segments of the population. Economic and financial impact need to address possible adverse equity problems (subsidies to higher income groups), and other related issues.

Sector financing and resource allocation:

- Formulate budget requests and allocate resources in accordance with health needs at the local level. This underscores the need to consider local epidemiological profile and other location-specific factors.
- Allocate more budget to cost-effective preventive and health, nutrition, and family planning promotion services (this is key because about 30 percent of the population, based on the LSMS 2005, survey resort to self-medication which can potentially pose health risks if inappropriate), as well as to training/capacity building and research/M&E activities
- Calculate the fiscal implications of the policy directive, which states that all health technical staff and professionals will receive salary levels that are competitive to the rest of the Central American countries and its possible impact on other health-related expenditure categories such as drugs and training.
- Evaluate the impact of free services on service use and operation
- In the case of INSS, consider the feasibility of establishing different capitation payments that consider cost and risk by age and gender, and the inclusion of cost- and overuse- containment strategies, as well as improving public and private partnerships arrangements.
- Find and propose new financing sources to increase the national health budget from sustainable domestic sources, and reduce reliance on external funds.

Annex E

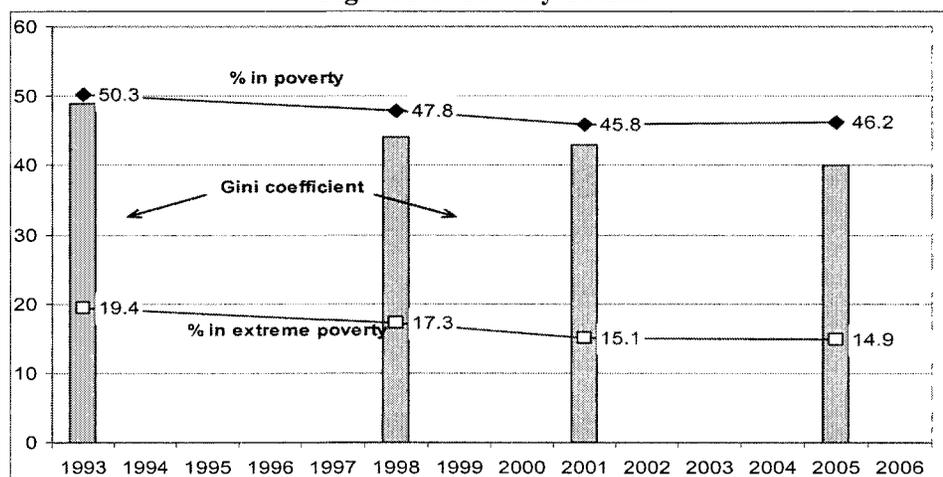
Review of Public Spending on Social Protection

Main Findings of Previous Reviews

E.1 The 2001 PER had found that the individual social protection programs are generally well targeted, particularly because beneficiary identification largely relies on targeting mechanisms (geographical targeting as well as means-testing). But as a group, the programs are fragmented and are not guided by a clear strategy. Clear priorities for social protection are lacking, both in how to best address vulnerabilities and in defining who the priority groups among the vulnerable are. The coverage of ongoing programs was very modest. If there were no overlap in the coverage of different programs, it was estimated that spending by the Ministry of the Family could in principle reach as many as 450,000 children and adolescents. This only represented around one-third of the total poor and extreme poor children aged 0-18. To the extent that there are significant overlaps, which is likely, coverage would be even smaller.

E.2 Given that the largest among the vulnerable population in Nicaragua are children, the focus of the social protection programs was considered appropriate. However, the 2001 PER also recommended that the overall social protection strategy be extended to encompass other important vulnerable groups. One of the most important is poor working-age adults affected by economic instabilities (e.g., coffee price declines), natural shocks (e.g., droughts) or individual shocks (e.g., health shocks), who need programs to protect them from wide income variations. There have been few programs in place that effectively address this group.

Figure E.1 Poverty Trends



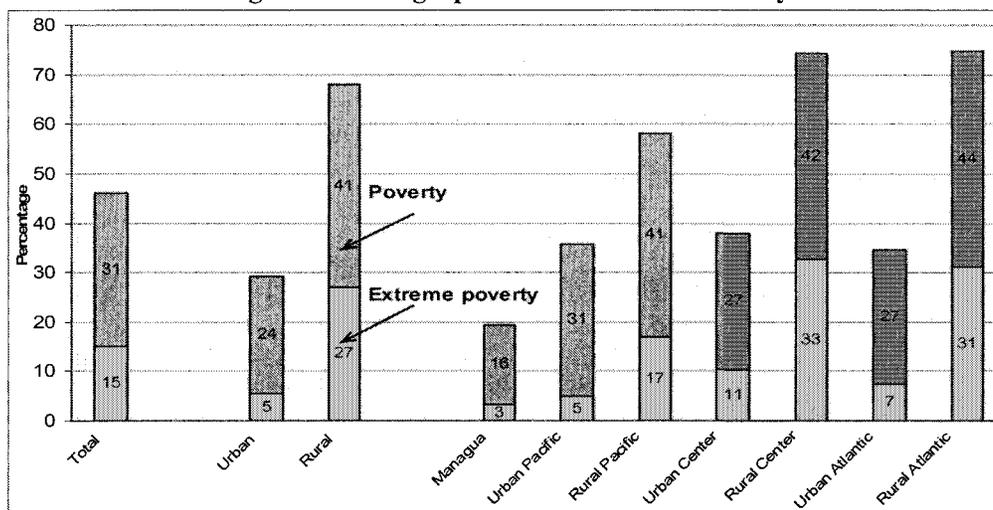
Source: INEC (2006).

Evolution of Key Sector Outcome Indicators since 2001

E.3 Progress in poverty reduction has been disappointing. Indeed, in spite of modest declines during the 1990s, poverty remains high and social indicators weak in Nicaragua. Recent poverty indicators from the 2005 Living Standards Measurement Survey show that progress in poverty reduction has slowed down further, with a headcount of 46.2 percent for the poor and 14.9 percent for the extremely poor. Nicaragua has experienced a reduction in inequality (from a Gini coefficient of 50.4 in 1993 to 41.0 in 2005) over the past decade, associated with a reduction in the depth of poverty. The poverty depth

(measure of the average distance of the poor's consumption to the poverty line) of the very poor has decreased by about 30% between 1998 and 2005. However, the actual number of poor has not shown improvements (even if they are less poor on average). Poverty in its many dimensions is particularly acute in rural areas and the Atlantic coast: in 2001, 62 percent of the poor and 76 percent of the extremely poor live in rural areas among which many are indigenous people.

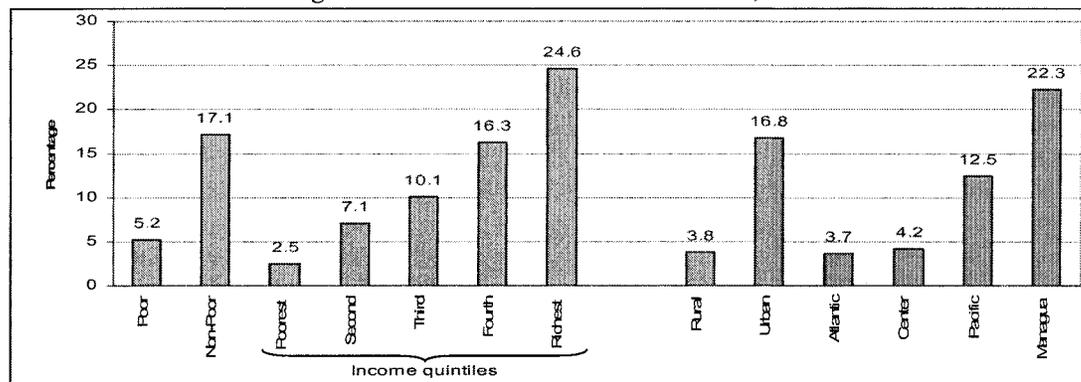
Figure E.2 Geographic Distribution of Poverty



Source: INEC (2006).

E.4 In addition, the poor in Nicaragua exhibit a relatively high vulnerability, linked to both the frequency of covariate shocks (including natural disasters and commodity price shocks) and to household-level shocks (including health shocks). Coverage mechanisms for these risks are underdeveloped in Nicaragua, leaving many household without means to insure against these risks. For instance, in terms of coverage for health care costs (National Social Security Institute), while 24 and 13 percent of the population in Managua and the Pacific have health insurance, respectively, coverage is only 4 percent in the Center and the Atlantic, only 3.4 percent in rural areas and as little as 2.5 percent for the poorest quintile

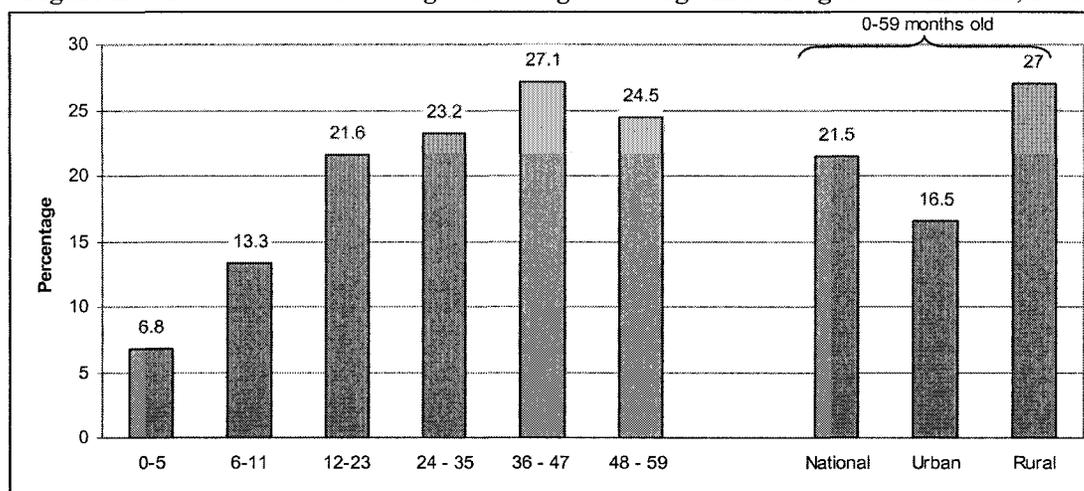
Figure E.3: Access to health insurance, 2005



Source: Poverty Assessment, on basis of LSMS 2005

E.5 The high level of poverty and vulnerability is reflected in very poor outcomes in terms of nutrition in the country. Despite improvements, more than one child under the age of 5 out of every five children is chronically malnourished. The situation is particularly dire in rural areas (27 percent prevalence) and amongst the very poor (37 percent amongst the poorest quintile)²¹⁶.

Figure E.4 Prevalence of Stunting in Nicaragua among children aged 0-59 months, 2005



E.6 Many social indicators also are strongly correlated with poverty status and vulnerability. For instance, the level of maternal care is lower in rural areas, indigenous areas and among the poorest. The level of preventive health care for the highest quintile is three times higher than the poorest. Similarly, literacy, enrolment, attendance and completion remain low in particular amongst the poor and in rural and Atlantic areas: at age 17 enrollment rates for boys in richest quintile are 4 times larger than for boys in the poorest quintiles; net secondary enrollment in rural areas is half of that in urban areas (28.1 vs. 61.1 percent); and one out of four young people between the ages of 15 and 24 years is illiterate in extremely poor households (vs. 4 percent for the non-poor)²¹⁷.

C. Evolution of Sector Expenditures

E.7 Unlike education or health, social protection is generally not defined as its own sector, but rather as a "strategy" that involves most sectors. Since it cuts across sectors and is integrated into a wide variety of types of programs and projects, it is often difficult to disaggregate how much budget is specific to social protection. In this chapter, we have aggregated expenditure from the programs and institutions fully dedicated to social protection. This includes five main actors: the President's offices, the Ministry of the Family, the Ministry for Labor, the Social Emergency Investment Fund (FISE), and the National Social Security Institute (INSS)²¹⁸. The total allocated to social protection programs in these institutions varies greatly from year to year, fluctuating between less than 0.5 percent of GDP to almost 2.0 percent of GDP. After exhibiting large fluctuations, the share of various institutions in this total has stabilized since 2002, with the Ministry of the Family and FISE representing about 30 percent and over 60 percent of the

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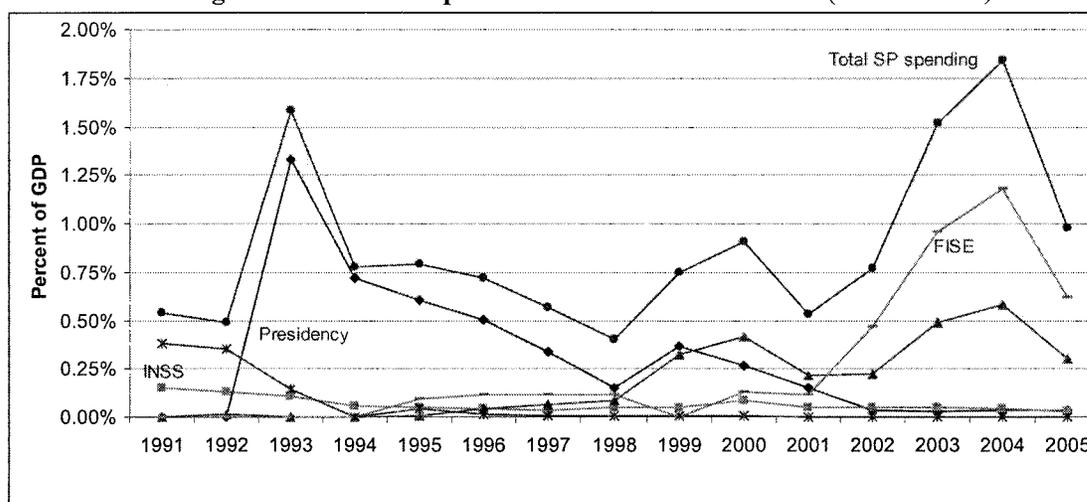
²¹⁶ Poverty Assessment (on basis of LSMS data for 2005)

²¹⁷ Poverty Assessment (on basis of LSMS data for 2005).

²¹⁸ As defined here, public spending on social insurance only includes central government transfers to the Nicaraguan Social Security Institute (INNS) as a co-financier of health and pension benefits for its affiliates. INSS budgeted approximately US\$120 million in expenditures for 2001, of which only about US\$1.7 million are central government transfers (approximately 1.2% of overall financing).

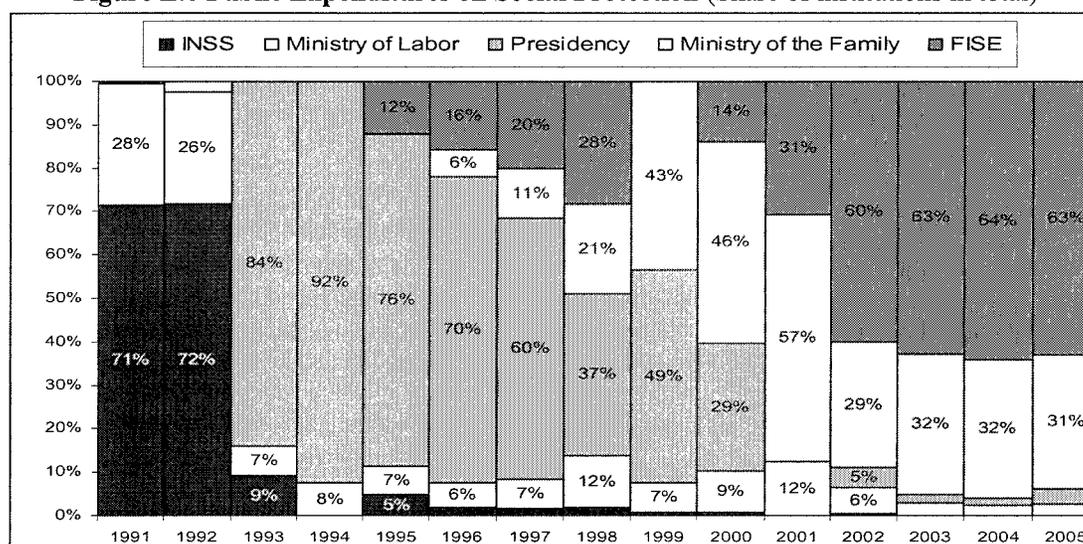
expenditure on average, respectively. A very large share of the social protection budget as defined here is financed with external resources (around 75 percent in the case of the Ministry of the Family and FISE).

Figure E.5 Public Expenditures on Social Protection (as % of GDP)



	1991	1995	2000	2001	2002	2003	2004	2005
Presidency (Social Action Secretariat and Social Emergency Fund)	0.00%	0.60%	0.27%	n/a	0.04%	0.03%	0.03%	0.04%
Ministry of Labor (w/o INATEC)	0.15%	0.05%	0.09%	0.05%	0.05%	0.05%	0.04%	0.03%
Ministry of the Family	0.00%	0.00%	0.42%	0.22%	0.22%	0.49%	0.58%	0.30%
Social Emergency Investment Fund (FISE)	0.00%	0.09%	0.13%	0.12%	0.46%	0.95%	1.18%	0.62%
National Social Security Institute (INSS)	0.38%	0.04%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%
TOTAL	0.54%	0.79%	0.91%	0.53%	0.77%	1.52%	1.84%	0.98%

Figure E.6 Public Expenditures on Social Protection (Share of institutions in total)



E.8 Social protection programs and activities are typically undertaken by a myriad of actors, often within their regular operations, which are not included in the sector expenditure totals reported in the Figures above. For instance, the Ministry of Education might have a program of scholarships for poor

high-achieving students, which could be considered a social protection program, as it helps the poorest by releasing some of their constraints to access services. In addition, the spectrum of activities which could be considered as part of social protection is very broad.

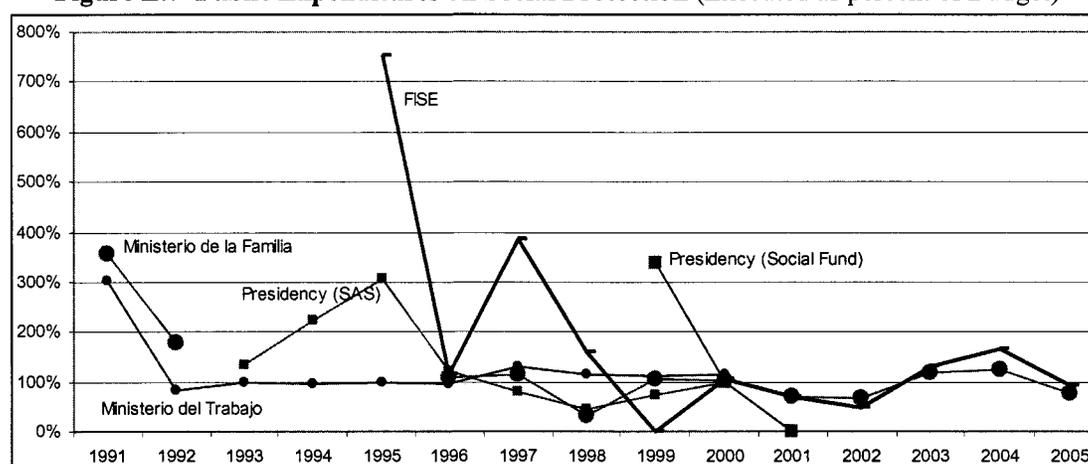
E.9 The GON has developed and adopted a Social Protection Strategy, which uses a rather broad framework to define the national social protection “system”. It encompasses activities and programs of “*Atencion Inmediata y directa para recuperar bienestar mínimo*”, other activities geared towards the “*Entrega de beneficios para atender causas directas de vulnerabilidad*”, and finally a broader set of “*acciones de desarrollo economico y social para las causas indirectas de vulnerabilidad*”. In Nicaragua, the first set of activities would involve institutions like the Ministry of the Family, MINSA, MECD and INIFOM, the second would involve FISE, INVUL and INATEC in addition to the core agencies, while the last set would involve MAGFOR, INTA, IDR, and MIFIC. This makes the analysis of the “sector” rather difficult and subjective. In view of the large number of institutions involved, the articulation of a Social Protection Strategy represents an important step in the rationalization and coordination of actors in the area of social protection. However, its implementation has been rather limited to this date.

E.10 Patterns and trends. Expenditures on social protection programs exhibit a very erratic pattern – with large fluctuations in the total amounts devoted to the various programs and institutions and large fluctuations in the share of specific programs and institutions in the total. In terms of percentage of GDP, the two extremes were 2.3 percent in 1993 and 0.64 percent in 1998. Even from one year to the next, changes can be dramatic – For instance, the sector went from 2.12 percent of GDP in 2004 to 1.14 percent in 2005, a reduction by 46 percent. These fluctuations are partly linked to particular emergency relief operations, but, more generally, they reflect a lack of adequate planning and budgeting capacity for social protection programs. This has an important adverse impact on their effectiveness and continuity.

E.11 One of the challenges of social protection is that it typically requires counter-cyclical funding – larger resources are needed in times of lower economic growth and/or disasters. On the other hand, social protection programs typically involve lower fixed costs (e.g. salaries) than other ministries (e.g. health or education) and hence face less resistance to budget cuts in times of fiscal consolidation. This particular aspect of the sector makes it a prime candidate for large cuts or shifts. This is illustrated above, in Figure E.6, which shows the share of different programs in the total. It is also a sector where administrations typically attempt to develop flagship programs that are strongly identified with a particular administration and hence have lower chances of being continued after political transitions.

E.12 Executed versus planned expenditures: When focusing on the differences between planned expenditure and actual expenditure, a few programs – namely the programs run from the Presidency and the FISE – appear particularly erratic. FISE executed over 700 percent of its planned expenditure in 1995 and almost 400 percent in 1997. The variability seems to have decreased over the years, although large discrepancies still persist (e.g. FISE spent 1.65 times its planned expenditure in 2004).

E.13 Sources of Funding: One of the weaknesses of the programs in the social protection area is their uncertainty and erratic nature (in addition to fact that small, pilot-type, uncoordinated, gaps, duplication, etc.). Part of that uncertainty is linked to the sources of funding for these programs. To illustrate the situation, Table E.1 presents the sources of funding for the Ministry of the Family’s and FISE’s capital expenditure. The dependency on external funding for the two institutions has improved over time. For instance, for the Ministry of the Family, the share of external financing decreased from 90 percent in 2004 and 2005, to 74 percent in 2006 and a planned 75 percent in 2007. However, this share remains very large and the dependency still results in disruptions in programs – programs stopping before being completed, programs on hold for short periods of time, etc. – which limit their effectiveness and sustainability.

Figure E.7 Public Expenditures on Social Protection (Executed as percent of Budget)

E.14 The Nicaraguan Social Security Institute (INSS) covers a relatively small number of (mostly non-poor) Nicaraguans, as illustrated in Figure E.3, but had a large impact on the budget in the early 1990s – and accounted for almost 0.4 percent of GDP. Since 1994, however, the institute has had a surplus and has not been a burden on the budget. This might be related to the efforts in increasing the number of insured workers – from 200,000 in 1993 to 430,000 in 2006 – and to the current demographic structure of the INSS’s participants. Indeed, the current system has a significant actuarial deficit (estimated at C\$ 271,573 millions) which represents a significant contingent liability. As a result, the Government is studying alternative options for reform. The initial reform proposal presented by the High Commission for the Reform of the Pension system (which adjusted the contribution rate, the age of pension, and the indexation of benefits) still involves a deficit starting in 2040 and reaching up to 6 percent of GDP by 2065. The Inter-institutional Technical Commission is currently studying alternative scenarios.

D. Assessment of Allocative and Operational Efficiency

E.15 The disappointing human development results described earlier occurred despite gains in GDP per capita growth and substantial resources dedicated to poverty reduction programs (about half of public spending, equivalent to about 15 percent of GDP). This suggests potentially large inefficiencies in public spending – both in terms of their allocation, in terms of their operational efficiency, and in terms of their quality. The multiplicity of programs and projects, lack of coordination, high operational costs, lack of targeting, and resulting gaps and duplications are often cited as keys to understanding the limited impact on poverty.

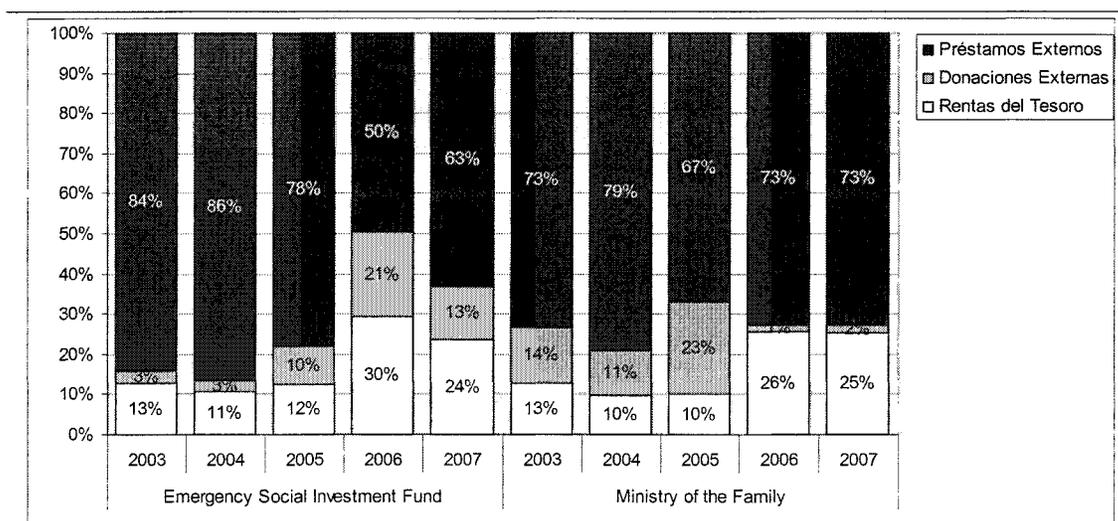
E.16 One of the most critical issues noted in the area of social protection is the low level of allocational efficiency. Two important factors contributing to this are the poorly targeted social security system and program fragmentation:

- *Limited access to insurance mechanisms.* Access to health insurance is very limited, as described above, with only 17 percent of urban households and 4 percent of rural households affiliated. Similarly, pension coverage is relatively low, with only 20 percent of urban elderly and 3 percent of rural elderly receiving pension benefits. For both these elements, there is a strong bias towards the richer segment of the population: 40 percent of the pension benefits are received by workers in the

richest quintile versus 4 percent for the poorest quintile. Health insurance covers only about 2.5 percent of households in the lowest quintile²¹⁹.

E.17 *Fragmentation of programs.* Nicaragua suffers from a fragmentation of its programs across social sectors and within each sector by levels, as well as duplication of efforts and overlap of programs. For example, MINSA and the Ministry of the Family both manage nutrition programs that use the same protocols, but are not coordinated. Overlaps and lack of coordination are also perverse within institutions and agencies. For instance, the operations of the *Red de Proteccion Social* and of PAININ, both in the Ministry of the Family, were not coordinated and led to duplication in particular areas of implementation. There have been some efforts to foster local coordination of projects (the Ministry of the Family started reorganizing its programs in 2006 but coordination at the local-level remains an issue, overlaps amongst food programs and early childhood development interventions). The recently developed Social Protection Strategy provides an opportunity to work on this issue.

Figure E.8: Sources of funding for the Ministry of the Family and FISE – 2003-2007



Capital expenditure	2003 (actual)	2004 (actual)	2005 (actual)	2006 (actual)	2007 (planned)
Ministry of the Family					
Treasury Resources	13%	10%	10%	26%	25%
External grants	14%	11%	23%	1%	2%
External credits	73%	79%	67%	73%	73%
FISE					
Treasury Resources	13%	11%	12%	30%	24%
External grants	3%	3%	10%	21%	13%
External credits	84%	86%	78%	50%	63%

Source: Ministerio de Hacienda. Debt relief funding and earmarked taxes are included in the “Treasury Resources” category.

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²¹⁹ These figures only refer to the distribution of benefits from health insurance and pensions. They do not take into consideration the contributions made by workers and households towards these systems. The analysis of the funding and contributions is necessary for a full analysis of their distributional impacts.

Another critical issue is the poor quality of services and outcomes:

- Targeting and coverage. Most programs in social protection are of a “pilot” nature, covering very small groups in the country. This raises two issues in terms of effectiveness of public expenditure – the targeting of these programs could often be improved with larger-scale interventions, and the resulting services provided to different communities vary largely across the country, limiting the horizontal equity of the programs. Coverage of the population is a key issue in Nicaragua’s social protection programs, as mentioned earlier.
- Quality of services: The social protection services also suffer limitations in terms of their quality, partly due to the erratic nature of financing for programs and their uncertain continuity (which prevents from the establishment of strong, effective structures) and partly due to the inability of the social protection programs to coordinate with other programs and service providers (for instance, the Ministry of the Family and MINSA have not managed to enter into service provision contracts for beneficiaries of the *Red de Proteccion Social*). In addition, the efficiency of social protection programs depends by nature on complementary investments in the sectors of health, education, and other sectors such as rural development, water, or credit. As a result, lack of coordination is more than a missed opportunity for increased efficiency/quality, it is actually a cause for lower efficiency.

E.18 Finally, the other critical issue for social protection programs in Nicaragua is their limited operational efficiency. This is attributable to,

- Large fluctuations in financing (see above) limits stability and continuity of programs,
- High variability in the cost/benefits of different programs,
- Large overhead costs of central activities: One of the issues with multiple, small, programs is the resulting high central activity costs. Some efforts have been made to reduce these costs, in particular in the Ministry of the Family, which has reorganized to centralize some of the financial management and procurement activities for all its programs (GON, 2006);
- Weak institutions,
- Absence of monitoring and evaluation mechanisms to monitor inputs, outputs, processes, outcomes and impact using a sector-wide framework. This is associated with a relative lack of transparency in the operations (partly linked to small-scale nature of programs and to erratic implementation); and
- Human resource bottlenecks (poor salaries, skewed incentives, inadequate skills/qualifications, not focused on results, high turnover).

E. Main Conclusions and Recommendations

E.19 Greater planning and coordination of social protection programs and social programs in general is a key element to increased impacts. Rationalizing some of the existing programs would help reduce their implementation costs. The main actions recommended to improve program coordination and effectiveness are presented below:

- Program Consolidation. The consolidation of the programs could start with a few programs, and gradually integrate projects and programs in a coherent way, avoiding overlapping between agencies and filling gaps, while rationalizing a large amount of interventions with little demonstrated impact. The social cabinet can play a role in providing guidance and coordinating these activities.
- Strengthened analytical foundations. Develop a map of the social protection sector that includes an inventory of existing programs and services provided by all stakeholders in the country (public, private, civil society), an analysis of the existing gaps in supply of services, social spending analysis, an analysis of targeting mechanisms used in service provision and service allocation in the recent past, and an analysis of impacts, strengths and weaknesses of selected programs.

- Strategic Planning and Monitoring. Stronger central strategy, planning mechanisms, and M&E systems would help implement the coordination, improve the design of program, and develop a sector-wide approach. Unified and integrated mechanisms would provide a basis for a more programmatic support by the international partners, which could contribute to reducing the fragmentation and duplication of programs. Stronger social accountability mechanisms are fundamental parts of this effort, and experiences have shown how they can contribute to increased impact on the ground, in particular at the municipal level.
- Regional Coordination. Develop mechanisms to centrally coordinate the allocation of programs across geographic zones. This would result in improved targeting of resources, and to greater synergies between programs. This would cut across all human development programs. Central coordination is an important element to ensure the targeting of central expenditure to the areas most in need, in particular in the context of decentralization. Strong central institutional arrangements would be required, which are not currently in place. In addition, some central agencies would need institutional strengthening to play their roles effectively. Propose a national approach rather than an approach where each program decides where to intervene – leading to some municipalities receiving no program while other similar municipalities receive 3 or 4 programs.
- Local Coordination. Consolidate initial efforts to foster local coordination of projects. This could include developing mechanisms to harmonize eligibility criteria for households/individuals, mechanisms to propose a unique window for social services, and mechanisms to provide accompaniment to families and individuals in accessing services.

Annex F

Review of Public Spending on Transport

Summary of Findings from Previous Sector Reviews

F.1 The 2001 PER and 2004 DPR reported that Nicaragua's economic performance was being restrained by an inadequate level of transport infrastructure and services. The country no longer has a railroad, domestic air transport is in its infancy and its seaports were run down. Over 95 percent of freight and passenger transport moves by road, however, so that this represents the most important transport infrastructure sector – for both domestic and international traffic – and the greatest source of potential bottlenecks. The PER also argued that the inadequate transport infrastructure represented an important obstacle for the poor trying to escape poverty. Given the need at the time to recover from the extensive damages to the road network that had been inflicted by hurricane Mitch in 1998, the Ministry of Transport and Infrastructure (MTI) had at one point been assigned up to 18 percent of the total central government budget. The transport investment program was also reoriented to play a stronger poverty reducing role by including investments beyond the trunk segments of the network and the start-up of the “adoquines” (small cement paving blocks) program for rural road stabilization, which offered a much higher level of service for rural roads than the traditional gravel alternative.

F.2 The main factors contributing to the inadequate level of transport infrastructure were diagnosed as the following:

- *Limited road network coverage.* Nicaragua has the largest territory in Central America and the smallest economy, and so it is not surprising that it should exhibit the lowest density of paved roads in the region. However, the 1995 transport sector review²²⁰ noted that the coverage of Nicaragua's transport infrastructure is generally adequate given the country's medium-term growth prospects, but that the existing infrastructure is in poor condition.
- *Unsuitable Road Design.* Inter-city roads in Nicaragua typically consist of shoulder-less two lane roads, with under dimensioned bus stops and parking areas alongside the pavement and wide variety of different users (e.g., cars, buses, trucks, cycles, pedestrians). Beyond the predominantly poor condition of the roads themselves, the mixed traffic and the general lack of complementary infrastructure adds a further burden to road transport.
- *Poor Rural Transport Infrastructure.* Access to paved roads is limited and very disparate: according to the LSMS, less than one-fourth of all Nicaraguans have access to paved roads. This proportion declines to 7 percent for the extreme poor and 11 percent for the poor. Many rural roads are simply impassable during much of the 6-month long rainy season.
- *Inadequate Maintenance, Planning, Funding and Implementation Arrangements.* Except for routine maintenance by micro-enterprises on selected links, the 2001 PER found that maintenance was not being carried out adequately, which resulted in premature road deterioration. Important factors contributing to poor maintenance were the inconsistent and untimely releases of budgetary allocations, and institutional limitations in the MTI that hampered the planning and implementation of maintenance. An important initiative to help address this problem was the creation of a Road Maintenance Fund (FOMAV). The absence of legislation to set up a dedicated fuel levy, however, limited the effectiveness and sustainability of the Road Fund.

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220. World Bank, 1995, “Nicaragua: Recovery in the Transport Sector”.

- *Weak Planning and Programming by the Transport Ministry.* The MTI had made significant progress by 2001 in ranking investments in terms of economic priority and the Government's strategic goals, while paying adequate attention to maintenance and to their environmental and social aspects. However, there remained a need to develop the MTI's basic capacity to carry out road condition inventories, to improve staff training, to seek least cost solutions to technical and engineering problems associated with road and bridge maintenance, as well as to foster the development of the local consulting and contracting industries. Furthermore, there was a need to strengthen the procurement and contracting management functions, which are crucial to fostering the participation of private contractors and timely completion of the road improvement program.
- *Limited Implementation Capacity and the Use of Parastatals.* In the mid-1990s, MTI's implementation capacity was limited to about 60 km of major road rehabilitation per year. This poor implementation record was partly due to the continued reliance on state construction companies (COERCOs) that lack dynamism and to a weak local construction industry. Both are linked: although the COERCOs represent a mechanism for rapid deployment, which proved useful after Hurricane Mitch, their existence inhibited the creation of efficient companies in the long run. Accordingly, the 2001 PER recommended that the COERCOs be downsized to the minimum needed for emergencies and remote areas, while making greater use of the private contractors. This is considered a more efficient way to develop the country's implementation capacity than trying to improve the performance of the COERCOs.
- *Inefficient Vehicle Fleet and Inadequate Regulatory Oversight.* Nicaragua had a fleet of about 230,000 vehicles in 2000 (an average of 0.05 vehicles/person – one of the lowest in the region), and it was estimated that about 50 percent of the freight transport fleet is more than 14 years old and a significant share is over 20 years old. Freight transport services are provided entirely by the private sector. Technical and safety regulations were found to be sufficiently developed, while MTI lacked adequate monitoring and enforcement capabilities.
- *Unclear Sector Management Roles.* While the MTI is responsible for managing the entire primary and rural road network and for regulating road, sea and air transport, the division of roles and responsibilities between the MTI, the rural development agency (IDR), and the municipalities, especially for the maintenance of rural infrastructure and the management of transport services, remained unclear. To address this problem, the 2001 PER recommended the preparation of (i) a study to help identify the appropriate roles and responsibilities of the key players, help foster efficient sector development, and avoid the duplication of efforts and (ii) a strategy for decentralizing the management of the road network and transferring most of the secondary and rural road segments of the network from MTI to the municipal governments.
- *Inefficient Urban Transportation Services.* About two-thirds of the traffic flow (veh/km. or ton/km.) in Nicaragua is concentrated in the urban areas. Past JICA and Bank-financed studies found that while there is adequate urban road space for the existing vehicle fleet and population, the cities showed deficiencies in all aspects of traffic and transit management.

Evolution of Key Sector Outcome Indicators

F.3 There has been considerable progress made in the road transport sector after 2001, with most of the trunk roads having been rehabilitated by 2006. However, Nicaragua still remains relatively under-endowed with road infrastructure, which could become a bottleneck to economic growth if it is not addressed adequately.

F.4 Size of Road Network. The size of Nicaragua's road network has remained more or less the same since 1999, totaling around 19,000 kms. The proportion of paved roads has increased modestly, however,

from 10 percent in 1999 to 11 percent in 2003, resulting in slight increases in the territorial density and population density of paved road coverage; Table F.1.

Table F.1 Paved Road Infrastructure in Latin America

	Territorial Density (meters road/Km ² area)			Population Density (meters road/capita)		
	1992	1999	2003	1992	1999	2003
Costa Rica	109.8	154.5	161.9	1.75	2.20	1.98
El Salvador	82.8	94.4	--	0.32	0.32	--
Guatemala	32.0	44.7	--	0.36	0.44	--
Honduras	21.4	24.8	--	0.44	0.44	--
Nicaragua	13.2	14.0	15.8	0.44	0.37	0.39
Panamá	30.7	52.2	--	0.94	1.40	--
<i>Central America Ave.</i>	<i>48.3</i>	<i>64.1</i>	<i>--</i>	<i>0.71</i>	<i>0.86</i>	<i>--</i>
Bolivia	1.6	2.5	3.9	0.24	0.33	0.48
Ecuador	22.3	28.8	25.9	0.58	0.66	0.57
Paraguay	7.4	6.9	--	0.67	0.52	--
Peru	5.8	7.8	8.0	0.34	0.40	0.38
Uruguay	55.3	45.6	--	3.16	2.44	--

Source: World Bank, World Development Indicators.

F.5 **Condition of Road Network.** In the absence of any resurfacing or reconstruction during the 1980s, Nicaragua's road network had deteriorated to the point where only about 12 percent of it was in good or fair condition. This improved significantly during the 1990s. In spite of the setback caused by hurricane Mitch toward the end of the decade, the proportion of roads in good or fair condition rose to 19 percent by 1999. Since then, this proportion has continued to improve at a more moderate pace, reaching 20 percent in 2006.

F.6 In spite of the gains made since 1999, the quality of road infrastructure still remains among the lowest in Central America. According to the Ministry of Transportation and Infrastructure (MTI), more than 75 percent of the total road network in Nicaragua is in poor condition. As detailed in Table F.2, the trunk and collector roads have now been mostly restored to good condition, and have been essential to the economic recovery.] However, the overall low share of the network in good condition is due mainly to the abysmal condition of the other categories (secondary, tertiary and unclassified roads), which together represent 87 percent of the total network. This largely reflects the low level of investments, coupled with an inadequate maintenance regime that has resulted in premature road deterioration. These findings suggest that the poor quality of roads, rather than their availability, is the principal bottleneck in this sub-sector.

Table F.2 Road Condition by Category

Road Category	Length (km)		Share in good/fair condition (1)	
	2000	2006	2000	2006
1. Trunk (asphalt)	1,752	1,752	71%	74%
2. Collector (asphalt and <i>adoquin</i>)	636	636	78%	88%
3. Rural axes (gravel and <i>adoquin</i>)	5,015	2,052	38%	40%
4. Rural all-weather (gravel/other)		3,071		16%
5. Unpaved and seasonal	11,544	11,525	0%	6%
Total		19,036	19%	20%

Note: (1) Roads with a Roughness Index (IRI) <7.

Evolution of Expenditures in the Transport Sector

F.7 Sector expenditures rose in the hurricane Mitch year (1998) and for two years thereafter, responding to the need for emergency reconstruction of the road network. Since then, MTI's expenditures have declined sharply, such that by 2005, MTI's spending had fallen below the level of 1996 in real terms; Table F.3. In general, annual budgetary allocations for MTI appear somewhat low for a country at Nicaragua's stage of economic recovery.

Table F.3. Evolution of Transport Sector Expenditures; 1998-2006

	1998	1999	2000	2001	2002	2003	2004	2005	2006 ^b
	<i>in millions US Dollars</i>								
Total Central Gov. Expend.	635.9	856.4	862.7	842.1	821.3	1000.1	1015.1	1117.3	1204.2
Sector Budget (Const. & Transp.)	169.6	253.9	213.1	196.3	146.8	159.2	191.0	124.5	-
MTI Budget	70.2	124.6	107.4	91.3	65.8	70.7	85.2	87.4	101.5
	<i>As % of GDP</i>								
Total Central Gov. Expend.	17.8%	22.9%	21.9%	20.5%	20.4%	24.1%	22.3%	22.3%	22.4%
Sector Budget (Const. & Transp.)	4.7%	6.8%	5.4%	4.8%	3.6%	3.8%	4.2%	2.5%	-
MTI Budget	2.0%	3.3%	2.7%	2.2%	1.6%	1.7%	1.9%	1.7%	1.9%
	<i>As % of Total Central Government Expenditures.</i>								
Total Central Gov. Expend.	100%	100%	100%	100%	100%	100%	100%	100%	100%
Sector Budget (Const. & Transp.)	27%	30%	25%	23%	18%	16%	19%	11%	-
MTI Budget	11%	15%	12%	11%	8%	7%	8%	8%	8%
Memo: exchange rate (C\$/US\$)	10.58	11.81	12.68	13.44	14.25	14.94	15.73	16.41	17.57

Source: Statistical Annex Tables. Note: All figures refer to actual expenditures, except for 2006, which refers to the budget.

F.8 At the post-Mitch peak in 1999, the MTI executed 15 percent of the total central government budget, which was appropriate in view of the massive reconstruction needs. However, this could not be maintained and even though the overall budget increased, MTI has been assigned a decreasing share since then, reaching a low of 8 percent of total budget in 2005. Details on the initial, revised and executed budgets follow in Table F.4. During 2002-2006, the MTI initial budgets tended to be unrealistically small, given the emergency road restoration needs and hence the executed budget in general exceeded it by a significant margin. Still, the executed budgets were moderate and, except for 2001, were always less than 10 percent of the total Central government executed budget. This is quite an impressive achievement for the MTI to have managed such a major recovery program in this period with a relatively small share of the budget. The decline in budget execution ratios in 2005 and 2006, however, are cause for concern.

Assessment of Allocative and Operational Efficiency

F.9 The overall road sector performance has been good in terms of the allocation and use of resources and is improving continually. Investments are still set by the budget but users pay directly for an increasing share of the maintenance of the most trafficked roads via the road maintenance fund. The use of least-cost construction techniques, such as *adoquines*, represent an efficient allocation of resources and result in the provision of higher than traditional service levels for rural traffic, as the alternative to gravel-surfaced roads. The balance between recurrent and capital expenditures reflect a focus on reconstruction needs during the period 2001-2006, and was warranted at the time, but is not expected to continue. The fact that road improvements are selected largely on the basis of their economic justification (using the Bank's HDM model) provides further comfort in that allocations are being made on an efficient basis.

F.10 In terms of operational efficiency, most transport services for roads, ports and airports are concessioned or owned and operated by the private sector. Anecdotally, the level of operational efficiency varies highly. The most efficient is probably the Managua airport which, following its modernization program, now offers facilities and levels of service that are better than its Central

American neighbors and compare well with international airports elsewhere. Although domestic air travel has not been improved much, it is still quite adequate. The airports modernization has been financed largely by passenger user charges and does not have much public sector budget implications. There is more of a public sector expenditure implication in the port sector, but this again is very small. The concessioned operations at Corinto and other ports are operating reasonably well.

Table F.4 Budgeted and Executed MTI Expenditures
(in US\$ millions)

Item	Initial Budget			Modified Budget			Executed			% Executed / Initial		
	Current	Capital	Total	Current	Capital	Total	Current	Capital	Total	Current	Capital	Total
2001												
CG Budget	478.4	450.6	929	318.5	319.9	946.7	374.5	214.2	754.6	78%	48%	81%
MTI	5.5	105	110.4	5.5	105	110.4	3.7	87.6	91.3	68%	84%	83%
<i>MTI Share of tptal budget</i>			11.90%				1.00%	40.90%	12.10%			
2002												
CG Budget	447.8	290.2	738	13.9	0	761.7	441.3	264.8	706.1	99%	91%	96%
MTI	4.3	58.5	62.8	0	0	73.7	3.9	61.8	65.8	92%	106%	105%
<i>MTI Share of tptal budget</i>			8.50%				0.90%	23.30%	9.30%			
2003												
CG Budget	434	276.2	710.1	434	276.2	710.1	452.8	356.3	809.1	104%	129%	114%
MTI	3.1	53.9	57	3.1	53.9	57	3.7	67	70.7	118%	124%	124%
<i>MTI Share of tptal budget</i>			8.00%				0.80%	18.80%	8.70%			
2004												
CG Budget	455.6	353.7	809.3	455.6	353.7	809.3	486.1	436.4	922.5	107%	123%	114%
MTI	2.8	67	69.8	2.8	67	69.8	3.7	81.5	85.2	130%	122%	122%
<i>MTI Share of tptal budget</i>			8.60%				0.80%	18.70%	9.20%			
2005												
CG Budget	534.3	376.2	910.4	534.3	376.2	910.4	391	285.8	676.8	73%	76%	74%
MTI	3.7	69.4	73.1	3.7	69.4	73.1	3.1	54.1	57.2	83%	78%	78%
<i>MTI Share of tptal budget</i>			8.00%				0.80%	18.90%	8.40%			
2006												
CG Budget	679.1	443.6	1,122.70			1,200.70			1,102.6			92%
MTI	4.8	96.8	101.5			80.6			51.0			63%
<i>MTI Share of tptal budget</i>			9.00%									

Source: Statistical Annex Tables.

F.11 For road transport, there is a subsidy for urban passenger transport that is not completely transparent and is justified by the operators because the government supposedly sets bus fares too low. This subsidy needs to be examined carefully. Given the low income levels of bus users, it may be justified, but this needs to be demonstrated. Freight transport is not subsidized, but operators need to be licensed by the MTI. Freight services are reasonably efficient and there are indications that operator revenues are better than in the past as modest fleet renovation activities seem to be taking place. The improvement of the trunk road network has been a major boon to the efficiency of freight transport operations.

F.12 In terms of the supply of road infrastructure, the use of adoquines has also contributed to an increase in technical efficiency since it minimizes the consumption of economic resources in its construction and maintenance. Road users also realize increased savings over the gravel surfaced alternative. In most low traffic volume situations, gravelling has long been the preferred option for surfacing when upgrading earth roads because it is less costly than asphalt. However, Nicaragua is ahead of many countries in addressing the paradox of sustainably improving low traffic volume by using the non-traditional *adoquinado* option, which provides an all weather service quality similar to asphalt but

has a lower life cycle cost than gravel. To understand why, one must examine how gravel roads are built, the highly variable level of user service they provide and their highly demanding maintenance regimes.²²¹

The Case for Adoquines

F.13 There are major concerns about the efficacy of rural road gravelling/ re-gravelling, both from a financial and economic viewpoint as well as from a social and environmental viewpoints. The main concerns from the financial and economic viewpoint can be summarized as follows:

- Gravel is depleted rapidly by heavy vehicle traffic. Gravel loss rates per annum are typically on the order of 30-50 mm, depending on such factors as traffic, vehicle type, climate and terrain. The top 30-50 mm wearing layer can be lost annually and hence, without frequent re-gravelling, the entire 100-120mm of gravel can be lost within 3-5 years.
- The cost of periodic re-gravelling and routine maintenance of gravel roads can be very high. Re-gravelling costs are typically in the range of US\$5000-30,000 per km per year depending on factors such as the thickness of the gravel layer, gravel quality, haulage distance, haul conditions, intensity of equipment technology used, location, increasing scarcity of high quality gravel supplies and the resultant rising unit costs, plus budgetary, planning and organizational requirements. In addition routine maintenance costs related to grading/reshaping, patching and off-carriageway operations require a further US\$2000 – 3000 per km per year. The required timely annual provision of the financing, logistical and managerial arrangements for such maintenance programs are not usually met even in developed countries.
- Very often, spot improvement gravelling may be the optimum solution for unpaved road maintenance. However selective gravelling in practice is difficult to implement and resources are wasted.
- The attendant equipment intensive technology of using graders for re-gravelling purposes is not sustainable in a number of countries where it would be preferable to employ alternative methods of maintaining unpaved roads involving local communities to a greater extent and utilizing local resources and management more extensively. Moreover, in many countries, the number of graders required to maintain a large network of gravel roads in reasonable condition is simply not available.
- Technically also, even with such a high consumption of resources, gravel roads usually have an International roughness index (IRI) considerably greater than 5 m/km and hence may not represent an optimal solution from the user standpoint for vehicular traffic. Neither do they facilitate non-motorized modes such as bicycle traffic.

F.14 The main concerns from the social and environmental viewpoints are the following:

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221. As part of the construction and maintenance cycle, natural gravel materials are usually excavated from borrow pits or quarries placed on a carefully engineered roadbed to a thickness of typically 150-200mm to form an all weather running surface. A gravel road surface can be appropriate and cost effective in many circumstances. These include situations where (i) sufficient quantities of gravel are available that meet the required surfacing specifications. Also, gravel extraction should be managed in a way to minimize adverse environmental damages from the usually open pit mining approach used; (ii) haul distances from the quarries to the roadbed are relatively short; (iii) the terrain is not steep and longitudinal road gradients are less than about 6 percent; (iv) rainfall is low or moderate and the seasons do not extend continually for many months. Some drying time is needed between rains; (v) traffic is relatively low or about less than 150 vpd; (vi) dust generation in the dry season is not severe; (vii) financing and other resources will be available timely and adequately for annual and periodic maintenance. However, increasingly these criteria are not being met and the concept of managing efficiently more than 75 percent of a national network as gravel roads is being questioned from both the provider and the user side.

- There is a continuous demand associated with gravel roads (and to large extent asphalt roads) for the use of a non-renewable wasting layer, derived from a natural resource which is being depleted seriously in many countries;
- Gravel roads require a continuous cycle of mining or extracting rocks from mountainsides, rivers or pits, crushing, sorting and placing the resultant gravel in a roadbed for it to be worn away by traffic, or washed away by rain, or ground into very fine particles by passing traffic which leads to the generation of excessive dust, etc. Environmentally, this cycle is becoming less and less desirable.
- Dust generation causes adverse impacts in terms of being a health hazard for communities living adjacent to the road as well as causing pedestrian, animal and vehicle safety problems related to visibility and overtaking movements. In addition, dust emissions cause damage to crops and natural habitats.
- Gravel roads are too often slippery and dangerous in wet weather, especially in steep terrain, causing access problems for communities.

F.15 In sum, gravel in the long run may not be an appropriate or sustainable solution for many road locations in developing countries. This has long been recognized, but the standard alternative option of the asphaltting of rural roads is usually very difficult to justify economically, given their high investment costs and the low traffic volumes usually prevailing on such roads. Still, the main alternative to gravel in many countries has been low cost asphalt surface dressings for roads with sufficient traffic volumes (>250vpd) and other characteristics but they remain difficult to justify, even when ‘social appraisal’ approaches are considered. These low cost asphalt techniques still actually cost more than *adoquines* and mostly serve to keep the gravel in place and provide a smoother riding surface for a few years before becoming extensively potholed and requiring costly overlays. These overlays mean that good quality gravels will need to be extracted from the quarries or borrow pits once again.

F.16 In the case of *adoquines*, the roadbed (also gravel) needs to be built only once in 30 years. → A finished surface of IRI <4 can then be maintained indefinitely via basic routine maintenance that can be carried out by local labor units (better organized as micro-enterprises). No more recourse is needed to the gravel quarries for periodic maintenance as is the case for gravel and to a lesser extent asphalt roads. The users can also expect to enjoy a continued high level of service and reduction in vehicle operating costs. From all considerations, *adoquines* are probably the most cost effective solution for many roads of traffic levels from 40 -2000 vpd.²²²

Sector Expenditure Framework

F.17 Both the provision and maintenance of infrastructure leave a lot to be desired in Nicaragua. This was due to various factors in the recent past, especially inadequate maintenance funding levels, a weak construction industry and poor operations of service companies. In recent years, IDA has maintained a high level dialogue with the Authorities on these issues, especially on the budgetary and other funding mechanisms for maintenance, the need to improve the institutional framework, and on the advantages of increased private sector participation in infrastructure construction, operation and maintenance to the extent feasible. The poorly maintained road network places the major investments of the past 5 years at risk and prevents the development of least-cost transport services, especially in rural areas. Full establishment of the Road Maintenance Fund (FOMAV) and the use of private contractors that are awarded contracts via a public bid process could be a major part of an efficient solution to this problem.

F.18 The increased regional competitiveness that is expected to arise from the Central America Free Trade Agreement (CAFTA) also heightens the urgency to address the road infrastructure deficit. A well developed and maintained road network is essential to maximizing Nicaragua’s potential for dynamic,
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222. More information on the low traffic volume roads paradox in low income countries is available from the report by the SSATP on the Roads Economic Decision Model (RED) Sept 2006 workshop.

export led economic growth. To improve its prospects for competing under CAFTA, Nicaragua must overcome the huge backlog of maintenance and investment in road infrastructure. The allied agenda of policy and institutional change in this sector will involve: (i) improving the quality of rural roads and ensuring year-round rural accessibility. Such road improvements should be part of a strategy aimed to strengthen rural-urban linkages and to foster commerce and agricultural development; (ii) designing mechanisms to protect infrastructure investments from bearing a disproportionate share of the burden of periodic fiscal adjustments and, conversely, to increase investments if fiscal space allows it; (iii) promoting a suitable regulatory framework for private sector participation in the construction, operation and maintenance of transport infrastructure, and (iv) improving urban transportation systems.

F.19 The previous government had set certain targets in the Plan Nacional de Desarrollo (PND) 2005-2009 for the road sector, the most important of which calls for improving the quality of 1200km of the secondary and rural road network by adoquin stabilization. About 300 km of this goal has been met, and a further 300km is being financed under the Fourth IDA Roads project. However, it seems that it will be difficult to achieve the 2009 goal unless a major redirection of investment resources is done by the government.

Conclusions and Recommendations

F.20 Sector performance has improved considerably as evidenced by the increased length of the road network in good or fair condition and the first true extensions in last 20 years in the lengths of high quality roads as a result of the *adoquin* program. A related benefit arises from the fact that these extensions were obtained at least cost both in terms of investment and maintenance. Furthermore, they feature a higher domestic content than other technologies.

F.21 There has been a sharp reduction in MTI's budget share in the post-hurricane Mitch period. Government needs to take advantage of the current window of opportunity to make what are essentially once-in-30-years investments to extend the *adoquin* roads network, as rising prices for petroleum products and other raw materials will soon make other approaches even less attractive. A budget increase for MTI may be needed for this purpose. However, the fall in budget execution ratios during 2005 and 2006 trigger concerns about MTI's absorption capacity. This decline needs to be reversed before contemplating budget increases.

F.22 Emphasis needs to be placed on efficient planning, especially with regards to the application of design standards that are appropriate for road traffic levels and normal rates of growth. There has been a growing tendency to design roads to meet excessively high administrative standards (e.g. insisting that all collector roads must be 7 meters wide) rather than adhere to much less costly standards that would be appropriate to meet the requirements of the prevailing traffic volumes and likely growth rates.

F.23 The key message, then, is one of continuity and expansion of the policies and programs that have been carried out fairly well by the MTI during 2001-2006. In the context of that strategy, the PER recommends that particular attention be devoted to the following measures:

- Investments to improve and expand the paved road network to the levels of other low income comparator countries. Given the success of the trunk road rehabilitation program so far, the next order of priority is to improve the grid of secondary and major rural roads (the distributor network) that link to the trunk roads and serve the productive zones. The scaling up of existing *adoquinado* programs represents a cost-effective alternative to asphalt or gravel paving of roads, especially for the secondary network.
- Emphasizing maintenance. It will be essential that the roads that have been rehabilitated are not left to deteriorate (as in the past) and once again allowed to become bottlenecks. A comprehensive program of maintenance, including the guaranteeing of funding arrangements via the FOMAV and the use of

least-cost public bid contractual approaches for works implementation represent an indispensable part of the strategy to increase paved road coverage. Even then, it will be many years before Nicaragua can close the gap in paved roads vis-à-vis other countries in the region;

- Clarifying and strengthening sub-sector institutional arrangements: Although the IDA project supported institutional restructuring has produced significant positive results, MTI is still affected by overall weaknesses in planning and programming. There is still a need to develop MTI's basic capacity to carry out road condition inventories, to fully install the Pavement Management system, to seek least cost solutions to technical and engineering problems associated with road and bridge maintenance, as well as to help foster the development of the local consulting and contracting industries. Aside from MTI, the FOMAV needs appropriate technical assistance, particularly in contracting and procurement procedures so that it can develop the capacity eventually to manage the maintenance of the entire core road network. For overall sustainability and efficient road management, further analytical work is needed to identify the appropriate roles and responsibilities of the key players (both at central and local level, and including INIFOM, IDR and the municipalities) and to promote synergies while avoiding a duplication of efforts
- Improving urban mobility by restructuring public transportation services and developing improved mass transit corridor management in Managua. This could be designed as part of an integrated bus routes development and improved traffic demand management program.

Annex G

Review of Public Spending on Water and Sanitation

Sector Organization and Governance

G.1 The water and sanitation sector comprises the following institutions: the national water utility (ENACAL), the regulator (INAA), the Social Investment Funds (FISE), the rural water committees (CAPs) and the policy body CONAPAS which itself is a commission with a small executive secretariat including the Presidential Secretariat (SETEC), the Health Ministry (MINSA), the Environment Ministry (MARENA), the Institute for Territorial Studies (INETER), ENACAL, INAA and FISE. ENACAL serves about 60 percent of all water users, the CAPs about 30 percent, and the remaining 10 percent is served by the departmental water companies in Matagalpa and Jinotega, as well as a few small municipalities.

G.2 CONAPAS is responsible for the formulation of sector policies. Under the Bolaños Government, CONAPAS approved a sector strategy in October 2005 that is oriented towards reaching the sector MDGs and is in line with the National Development Plan. The sector strategy identifies five areas of attention: improving the legal and institutional framework; expanding the access to water and to sanitation; implementing efficient, participative and decentralized operational models; financial sustainability; and improving environmental conditions. The elaboration of the sector strategy also gave rise to the sector round table as a coordination forum between Government, donors and NGOs. In October 2006 Government and donors agreed on a road map to complete a SWAp, and in December 2006 signed a Code of Conduct on Alignment and Harmonization. In order to implement the sector strategy, pending issues include the elaboration of strategic and annual operation plans of the key sector institutions, a sector medium-term expenditure framework as well as a monitoring system. This, in turn, may allow agreement on a Memorandum of Understanding with interested donors on a common financing mechanism.

G.3 The Ortega administration is still in the process of defining its sector strategy and deciding on the future of CONAPAS. Nevertheless, it has clearly voiced its opposition to privatization measures in the sector and indicated that, in the framework of the recently approved water law, a new “National Water Authority” may assume political leadership in the sector.

G.4 ENACAL operates water supply and sanitation systems in urban areas, defined as localities with more than 500 households. ENACAL’s performance has been severely hampered by both inefficiency and politicization. An IDB-financed service contract for ENACAL started in early 2006 after several years of intense discussions. The business consultant presented a restructuring proposal in December 2006 and is supposed to follow-up on its implementation for another two years, based on a fee structure providing incentives to effectively improve operational efficiency in the commercial, administrative and technical areas. The new administration has questioned the service contract claiming that it is a “veiled privatization”, and recently decided to cancel the modernization program. Apart from ENACAL, the *departmental water companies in Matagalpa and Jinotega* are the only operators in urban areas. The experience in terms of decentralization and private sector participation (a five year management contract) has triggered promising results in terms of service quality, especially for the poor. The new administration views this model with scepticism, and the ENACAL President recently dissolved the Boards (*Junta Directiva*) of both water companies and subordinated them to the Board of ENACAL.

G.5 INAA is responsible for the regulation of service quality and tariff adjustments. Ad hoc political interference has up to now prevented INAA (just as the regulators for the energy and telecom sectors) from exercising these functions. It is not clear how the constitutional reforms that among other things

include the creation of a supra-sectoral regulator SISEP under parliamentary control and that were suspended until January 2008 may affect this limitation. The new Government has stated that it will tackle ENACAL's inefficiencies and try to improve service quality first before taking any decisions on tariff adjustments.

G.6 *FISE, inter alia*, is in charge of promoting access to water supply and sanitation in rural areas. The operation of these systems is delegated to CAPs. While the municipal law – in contradiction to sector laws - does assign competences for the water sector to municipalities, their involvement has been limited in the past, apart from some support to the CAPs.

Sector Expenditure Structure and Trends

G.7 Investments in the sector during the 2002-6 period totaled USD 178 millions, or an average of US\$ 35 millions per year. This is equivalent to 0.75 percent of GDP, which is about four times the average in the LAC region during 1991-2000. Of this total, 37 percent has been assigned to urban water supply projects, 31 percent to urban sanitation projects and 32 percent to rural water and sanitation projects (the latter includes ENACAL and FISE). To allow for a correct interpretation of these numbers, especially on urban sanitation, one has to take into account that the Sanitation of Lake Managua Program that is being implemented since 2004 alone is worth about US\$65 millions.

G.8 Currently, decisions on expenditure priorities, particularly investments, are basically driven by emergency and political considerations, very rudimentary planning by ENACAL and FISE, and donor offers of grants and concessionary loan financing. Donor contributions cover almost all investment financing. The Government's and ENACAL's counterpart financing is limited, reflecting the latter's very modest cost recovery capacity. In contrast, the sector strategy developed earlier by CONAPAS provides the basis for a more systematic planning process. It estimates the investments necessary to reach sector MDGs at US\$ 592 millions during the 2005-15 period, of which US\$ 286 millions is needed in the first five years.

G.9 ENACAL is a loss-making public enterprise whose *financial situation* has deteriorated further in the last three years to the verge of illiquidity. Structural factors include a high percentage (56 percent) of unaccounted-for water (half of which is supposedly due to illegal connections) and low labor productivity (7.6 employees per 1000 water connections). The collection rate (88 percent) and the micro metering (some 40 percent) also clearly lag behind regional standards. Combined with the dramatic increase in the energy bill (which makes up to 40 percent of operating costs) and given the tariff freeze (see below), the cost coverage ratio has fluctuated between 0.69 and 0.86. As a consequence, the operative cash flow before financing has been negative in the last three years.

Table G.1 Investments in the Water and Sanitation Sector

Year	Category	Cost (1000 USD)
2002	Urban Water	10.970,2
	Urban Sewage	10.756,5
	Rural W&S	8.722,9
	Total	30.449,5
2003	Urban Water	12.684,5
	Urban Sewage	2.868,0
	Rural W&S	12.313,5
	Total	27.866,1
2004	Urban Water	14.736,6
	Urban Sewage	9.127,2
	Rural W&S	16.347,6
	Total	40.211,4
2005	Urban Water	10.695,4
	Urban Sewage	12.683,5
	Rural W&S	12.494,8
	Total	35.873,6
2006	Urban Water	15.881,3
	Urban Sewage	20.273,0
	Rural W&S	7.559,3
	Total	43.713,7
2002-06	Urban Water	64.968,0
	Urban Sewage	55.708,2
	Rural W&S	57.438,1
	Total	178.114,3

Table G.2 Summary Balance Sheet, Income Statement, and Cash Flow

Category	2003	2004	2005
Current assets	25.847	36.172	31.488
Fixed assets	235.096	234.947	212.670
Accumulated depreciacion	-88.579	-127.923	-120.690
Undepreciable assets	41.807	51.753	68.996
Total net fixed assets	188.324	158.777	160.976
Other assets	175	4	4
Total assets	214.346	194.953	192.468
Current liabilities	31.030	33.481	36.746
Long term liabilities	76.877	92.384	86.337
Total liabilities	107.907	125.865	123.083
Equity	106.439	69.088	69.385
Total liabilities and equity	214.346	194.953	192.468
Exchange rate: C\$ to USD	15,5515	16,3291	17,1455

Category	2003	2004	2005
Operational income	45.493	44.724	43.850
Water	42.457	42.899	39.823
Sewage	6.096	4.988	6.182
Discounts	-3.060	-3.163	-2.155
Operational expenses	46.321	40.812	40.193
Operation and Maintenance	29.477	27.751	27.733
Administration and Commercial Area	16.844	13.061	12.460
Operational margin	-828	3.912	3.657
Other income and expenses	1.116	4.682	2.695
Provision for doubtful claims	-6.381	-3.348	-5.570
Internal generation of resources	-6.093	5.246	782
Financial income	645	1.579	916
Financial expenses	-9.597	8.046	-4.637
Result before depreciacion, provisions and adjustments	-15.045	14.871	-2.939
Depreciacion	-7.974	-9.162	-7.548
adjustments for last years	14.298	-25.421	-907
other provisions	-3.299	-1.174	-2.344
Result (Loss)	-12.020	-20.886	-13.738
Exchange rate: C\$ to USD	15,5515	16,3291	17,1455

Category	2002	2003	2004	2005
Operational cost	16.729	22.663	24.888	24.714
Maintenance cost	12.196	6.814	2.863	3.019
Registration and Collection cost	5.798	5.858	6.455	6.759
Administration cost	7.325	10.987	6.605	5.701
Financial cost	6.828	9.597	8.046	4.637
Total cost	48.876	55.919	48.857	44.830
Collection	41.660	38.832	38.801	38.577
Deficit	-7.216	-17.087	-10.056	-6.253
Cost coverage ratio	0,85	0,69	0,79	0,86
Exchange rate: C\$ to US\$				17,1455

G.10 Legislation establishes that tariffs be calculated on the basis of an efficiency model of long run marginal costs and self-financing capacity of the operators. After some adjustments that followed the 1998 sector reform, average tariffs reached a high level by regional standards in 2001, but have steadily declined in real terms since then. In 2003 tariffs were frozen in nominal Córdoba terms. In 2006 the average water tariff was USD 0.32/m³ and the average sanitation tariff USD 0.10/m³. These average tariffs only represent between 27 percent and 70 percent of the break-even levels.

Table G.3 Current Tariffs and Break-Even-Tariffs

	rank of consumption (m3)	(C\$ February 2002)			US\$		
		basic charge per customer	variable charge per m3		basic charge per customer	variable charge per m3	
			Water	Sewage		Water	Sewage
Managua							
Subsidised Customers	0 a 20	1,06	1,99	0,77	0,059	0,111	0,043
	+	1,06	2,50	0,99	0,059	0,139	0,055
Residential Customers I	0 a 20	4,24	3,54	1,06	0,236	0,197	0,059
	21 a 50	4,24	5,88	1,46	0,236	0,327	0,081
	+	4,24	10,48	3,45	0,236	0,582	0,192
Residential Customers II	0 a 50	8,56	5,88	1,69	0,475	0,327	0,094
	+	8,56	13,20	4,27	0,475	0,733	0,237
Institutions	0 a 50	8,56	6,76	1,69	0,475	0,375	0,094
	+	8,56	14,49	4,27	0,475	0,805	0,237
Rest of the Country							
Subsidised Customers	0 a 20	1,06	2,13	0,64	0,059	0,118	0,036
	+	1,06	2,83	0,86	0,059	0,157	0,048
Residential Customers I	0 a 20	4,24	4,85	1,45	0,236	0,269	0,081
	21 a 50	4,24	6,20	1,78	0,236	0,344	0,099
	+	4,24	13,04	3,57	0,236	0,724	0,198
Residential Customers II	0 a 50	9,46	7,72	2,38	0,525	0,429	0,132
	+	9,46	14,68	4,00	0,525	0,815	0,222

Exchange rate C\$ to US\$ on 12/31/06 18.0028

Service	Average Tar. (A)	Break-even Tariff (B)	A / B (%)	Average Tariff in US\$
Water				
Managua	5.78	8.26	69.95	0.321
Rest of the country	5.76	11.08	52.00	0.320
Sewage				
Managua	1.82	5.72	31.80	0.101
Rest of the country	1.84	6.70	27.47	0.102

Exchange rate C\$ to US\$ on 12/31/06 18.0028

G.11 The sector features a complex mix of badly targeted indirect and hidden subsidies described below:

- The Government transfers all donor funds, both loans and grants, to ENACAL by way of grants. While this is a common practice in other countries, it constitutes a substantial subsidy for the company and indirectly to all water users irrespective of their living standards. By the same token, the Government since 2005 transfers subsidies to ENACAL to cover operational losses without any specific obligations regarding service quality or focalization of investments.
- The block tariff system includes significant cross subsidies between user and consumption categories that in principle do provide for a redistribution from higher to lower income segments but are still poorly targeted due to a lack of clear classification of users to these categories and due to the high volume of the first consumption block (20m³ instead of 10m³ per month necessary to cover basic water needs).
- Fixed rate tariffs are applied to a high proportion of water users because of low micro metering rates, mostly without regard to poverty considerations.
- Retirees are offered a 30 percent discount on their respective tariffs. Being retirees implies that the users had worked in the formal economy and, therefore, are unlikely to belong to the poorest income quintiles.
- So called poor districts (“*asentamientos*”) do not pay at all for water services. Again, the classification of users is too rough to allow for a pro-poor targeting.

G.12 There are no exact data available to calculate the amount of these subsidies. Overall, however, they tend to benefit the affluent consumers, who generally consume more water than the poor and who are more likely to be connected to sewage systems. This comes at the expense of those not connected, particularly in rural areas, who are predominantly poor and who have been penalized by low levels of investment.

Sector Outcomes

G.13 According to the 2005 census, coverage ratios for urban and rural water facilities are 94.2 percent (of which 87.5 percent are connected to piped systems) and 64.1 percent, and those for urban and rural sanitation are 95.7 percent (of which 31.1 percent are connected to sewage systems) and 69.5 percent, respectively. These data indicate an increase of coverage for sanitation, but a stagnation of coverage for water in the last 10 years.

G.14 More importantly with regard to sustainability, these quantitative indicators merely concentrate on access to infrastructure, but do not reflect effective water and sanitation use. Therefore reaching the MDGs linked to the sector, i.e. effective access to water and to sanitation, as well as for reducing infant, under-five mortality and malnutrition, all of which are partly caused by water related diseases, remains a major challenge. Effective use is primarily affected by the following factors:

- ENACAL suffers from a high degree of inefficiency in terms of water losses, lack of domestic metering, low collection rates as well as labor and energy cost (see above). These performance indicators have basically remained unchanged in the last decade. As a consequence ENACAL continues to be totally dependant on donor financing for its investments.
- The lack of financial resources has produced significant water rationing because of the absence or delay of reparation and rehabilitation works and also due to programmed rationing in order to save

energy costs. Overall service quality is low and has sparked frequent user protests in the last two years.

- Poor water quality is a serious issue, especially in rural areas.

Table G.4 Water and Sanitation coverage

Category	National		Urban		Rural	
	1995	2005	1995	2005	1995	2005
Water	81.4	81.8	94.3	94.2	64.9	64.1
Piped Systems	55.5	62.7	83.8	87.5	18.4	27.4
Sanitation	77.6	84.8	94.3	95.7	55.6	69.5
Sewage Systems	17.2	19.4	29.9	31.1	0.6	0.0

Table G.5 MDGs Related to the Water Sector

PRSP Goals (MDGs)	Base	Actual 2001	Forecast 2015	PRSP 2015 Target	Target for 2015 will be Achieved?
Infant Mortality (per 1,000 live births)	58 (1993)	31	27 ^b	20	Possible
Under-Five Mortality (per 1,000 live births)	72 (1993)	40	35 ^b	24	Possible
Chronic Malnutrition (%)	19.7 (1998)	17.8	12.3	7	Unlikely
Access to Water (%)	...	70	85	100 ^c	Unlikely
Access to Sanitation (%)	...	85	88	95 ^c	Possible

G.15 The described outcomes have been disappointing when viewed against the relatively high level of sector spending. (This applies even when we exclude the Lake Managua Program, which has absorbed a significant amount of investment, but has not yet been completed.) Donor-financed infrastructure investments have mainly concentrated on rehabilitation of existing systems that fail prematurely due to inappropriate management and have merely kept up with population growth to maintain coverage ratios. Investments, however, did not lead to improvements in service provision and quality. The reasons for this low spending efficiency predominantly relate to the political and institutional shortcomings in the sector. Underlying factors are the discretionary political interference in regulatory and operational matters, limited institutional capacities in the case of ENACAL, CONAPAS and INAA, and an inconsistent legal framework.

Main Sector Issues and Policy Recommendations

G.16 *Planning:* The previous sector strategy developed by CONAPAS provided a sound basis for future sector planning and the allocation of resources. While the sector policy vision of the new administration may differ from the one of its predecessor, there appears to be room for forging a consensus on the key sector outcomes that are desired and on adequate policies for reaching them. Designating a policy body (such as CONAPAS) with sufficient political weight and institutional capacity will be a key decision. As long as the sector strategy is operational and backed by the necessary political leadership, a SWAp approach would be the mode of cooperation preferred by donors.

G.17 *Regulation:* It is important that INAA be given full autonomy in tariff setting. In terms of political timing, the Government/ENACAL may have to restore user's confidence first by improving efficiency

and service before adjusting tariffs - although there is probably no perfect timing for tariff increases. Furthermore, INAA's power of supervision needs to be strengthened by systematically linking any subsidies from the general budget to improvements in performance indicators, to be defined in the concession contract between ENACAL and INAA. Moreover, the current subsidy system needs to be reviewed and revised in order to create a more effective pro-poor targeting of direct and indirect subsidies.

G.18 *Urban areas*: Improving service quality and efficiency of ENACAL is one of the most urgent priorities in the sector. It is recommended that ENACAL take substantial measures in the commercial area (reduction of non-technical losses, increase of metering and collection) and in terms of reduction of personal and energy cost. The presented deconcentration alternatives should be considered, balancing economies of scale and proximity to clients. The Matagalpa-Jinotega experience should be carefully evaluated.

G.19 *Rural areas*: In the past, FISE focused primarily on small social infrastructure investments, and less on sustainable operation of water systems. Subsequently, however, FISE has been strongly involved in local development cooperating with municipalities and communities, and developed considerable experience in this area. That is why the responsibility for the rural sub-sector should stay with FISE (rather than be reverted to ENACAL). Municipalities should be given a more determinate role in supporting CAPs in their communities. Alternatively, a group of CAPs could consider to jointly contract micro-businesses to share the cost of qualified administrative and technical support. Additionally CAPs need to be given a legal status to effectively manage the operation and maintenance of their systems.

G.20 *Integrated approach to sanitation*: Hygienic behavior is critical to achieving the envisaged health outcomes. Given the past focus on water and sanitation infrastructure, a more integrated approach to sanitation, particularly in rural areas, is required to successfully tackle the pattern of existing water related diseases.

Annex H

A Note on the Energy Sector

H.1 In contrast to the Transport and Water/Sanitation Sectors, the Energy sector has a modest direct fiscal impact relative to the overall economic and social impact of this sector. Since the power sector is largely in private hands, attention focuses mainly on the development of a sound sector policy and regulatory framework, rather than on undertaking public investments. This Section highlights the main sector developments since 2001, and summarizes the main policy recommendations that emerge from the World Bank's recently prepared Nicaragua Energy Sector Policy Note.

Summary of Findings from Previous Reviews

H.2 Electricity generation had become a significant development bottleneck in Nicaragua by the mid-1990s, resulting in regular blackouts and prompting efforts to transform the sector from a public monopoly to a competitive, market oriented system with significant private participation. Energy distribution functions were mostly privatized, transmission activities remained in public hands and generation activities were split between the public and private sectors. The sector reforms initially succeeded in improving sector efficiency levels and in mobilizing private investments, and by 2001, nominal electricity production capacity had grown to over 600MW, while maximum demand had grown more gradually to 400MW. As noted in the World Bank's 2004 Nicaragua Development Policy Review (DPR), electricity production capacity was not expected to become a constraint in the medium term.

H.3 The 2004 Nicaragua DPR also identified several important shortcomings in the sector:

- Nicaragua's electricity consumption is the lowest in the region – even lower than what would be predicted by its level of development.
- Nicaragua relies predominantly on thermal generation: 82 percent of the country's electricity production is based on oil products. This is the highest ratio in the region. (A major bottleneck to the diversification of energy sources was the legal prohibition against private investment in hydro-electric power plants with greater than 5MW capacity.)
- Less than half of Nicaragua's population had access to electricity, giving it the lowest coverage ratio in the region
- Distribution-related losses for the entire system were very high, amounting to 30 percent of net electricity production
- The cost of electricity was among the highest in Central America, especially for commercial and industrial consumers, while residential users benefited from cross-subsidies
- The combination of a weak regulatory framework and deficient pricing policies, limited the attractiveness of Nicaragua's energy market for potential private investors and was considered one of the strongest barriers to the expansion of electricity coverage.

H.4 To overcome these shortcomings, the DPR recommended, (i) increasing access to electricity services, especially in rural areas, by taking advantage of off-grid technologies, (ii) developing the regional electricity market to take advantage of economies of scale, (iii) strengthening the regulatory framework, and (iv) encouraging greater private sector participation by removing prohibitions against private investment in hydroelectric plants, correcting the asymmetric fiscal treatment of different technologies, and fostering a more competitive market environment.

Evolution of Key Sector Indicators since 2001

Supply and Demand

H.5 Electricity supply did not increase as expected, so that the energy sector is once again threatening to become a major development bottleneck in Nicaragua. Although the installed nominal generation capacity increased from 638MW in 2001 to 751MW in 2006, effective capacity (i.e., power that is actually available) only increased from 536MW to 589MW. The difference between nominal and effective installed capacity appears to have increased since 2002, and is due mainly to the operation of older thermal power plants that require overhaul or replacement, and the exhaustion of the existing geothermal reservoir.

Table H.1 Nicaragua: Installed Power Generation Capacity (MW)

	2001	2002	2003	2004	2005	2006
Total Nominal Installed Capacity	638.1	655.2	679.7	742.2	757.2	751.2
Total Effective Installed Capacity	535.9	574.3	595.8	607.7	627.0	588.6
Difference	102.2	80.9	83.9	134.5	130.2	162.6

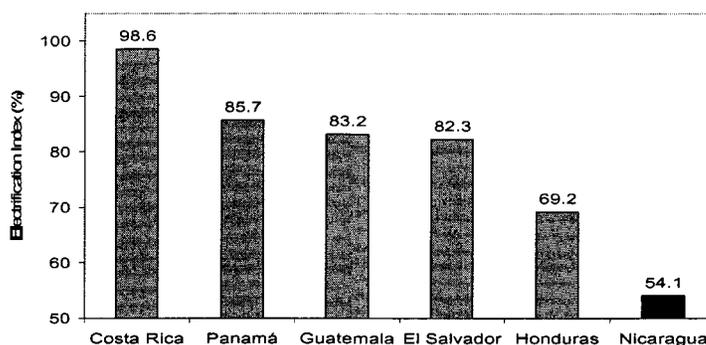
Source: World Bank (2007), "Nicaragua: Energy Sector Policy Note"

H.6 While effective capacity increased by less than 2 percent per annum from 2001 to 2006, electricity demand has increased at roughly 4 percent. By mid-2006, the reserve margin was only 30 MW (or 6 percent of total demand), which is inadequate and resulted in the recurrence of system-wide blackouts and power rationing. The situation improved in 2007 with the installation of thermal plants sponsored by the Venezuelan government, which is projected to add up to 60MW in new (albeit expensive) generation capacity.

Access and Electrification

H.7 According to data from the United Nations Economic Commission for Latin America and the Caribbean (ECLAC), electrification in Nicaragua was around 47 percent in 2001 and 54 percent in 2005, which shows impressive progress during the last five years. This is due in good measure to the organization of *Fondo de Desarrollo de la Industria Eléctrica Nacional* (FODIEN) and its electrification programs, which have benefited from the support of donors and multilateral organizations. Nevertheless, Nicaragua's electrification rate remains the lowest among the Central American countries; Figure H.1.

Figure H.1: Electrification Rates in Central America, 2005



Source: ECLAC.

H.8 The data in Figure 6.1 may be under-estimating Nicaragua's electrification rate: according to the 2005 Census, around 68 percent of all dwellings have electricity service. Unlike the ECLAC figures, which are based on data from the utilities, the Census figures ignore whether residential connections are legal or not. Even with the higher coverage figures from the Census, however, Nicaragua still exhibits the lowest electrification rate in the region, behind Honduras. The Census figures also show a great dispersion in access to electricity, with the electrification rate averaging around 92 percent in urban areas, but only 36 percent in rural areas.

Distribution Losses

H.9 Distribution losses have continued to be very high, in spite of privatization. Energy losses currently amount to around 28 percent of total energy injected into the distribution system; barely lower than the 30 percent losses estimated in 2001. These losses should be no more than 14 percent under moderately efficient conditions. Of the 28 percent in total electricity losses, about half corresponds to "technical losses" which are within the control of the distribution company, though they may require additional investments to be undertaken. (Systems similar to Nicaragua's operating with an average level of efficiency should exhibit technical losses below 10 percent.) The other half of total electricity losses corresponds to "commercial losses"; un-metered consumption and electricity theft. It is estimated that these commercial losses are due in equal part to illegal connections in poor neighborhoods (and the distribution company's inability to enforce payments), and to faulty meters and electricity theft by large companies. These losses should be reduced to practically zero, but require, both, more concerted cost recovery efforts by the distribution company and greater cooperation by the Authorities.

Pricing Policies

H.10 The basic tariff scheme in Nicaragua is similar to others in the region, with final consumer prices consisting of various elements, including an allowed "pass-through" component to account for changing generation costs and a value-added component to finance investments in distribution. However, the tariff structure is overly complex, involving an excess of categories and different charges, which complicates the commercial process and confuses customers. There is also a significant cross-subsidization in the structure of electricity tariffs, with industrial, pumping and irrigation prices well below the average tariff, while commercial prices are well above. Residential prices are near the average electricity tariff in Nicaragua, which also happens to be close to the average in the region – below those observed in El Salvador, Guatemala and Panama, but above those in Costa Rica and Honduras. The price of industrial energy in Nicaragua, however, is among the highest in the region, which means that other countries have been cross-subsidizing this market segment even more than Nicaragua.

Regulatory and Policy Framework

H.11 A cornerstone of the sector reforms introduced in the late 1990s was the implementation of phased tariff changes to ensure cost-reflecting tariffs and focused subsidies. These measures were never systematically implemented by the regulator, however, in part because of the unpopular consequences that the tariff increases mandated by sharply higher oil-based generation costs would have among consumers. Another reason has been the increased political confrontation between the Executive and Legislative branches of government that developed since 2002. Failure by the regulator to apply the cost-reflective tariff rule meant that tariffs lagged and the distribution company's financial performance suffered, which in turn, had adverse repercussions on the finances of the generators. The absence of predictable regulation and stable tariff policies, in turn, created uncertainties that discouraged private investors, and the hoped-for private investment in new generation never took place.

H.12 The absence of predictable regulatory and policy framework arguably represents the main factor responsible for the energy crisis that has been building since 2002. Not surprisingly, energy policy figures prominently in the Government's agenda. Among the first steps taken by the Ortega Administration upon taking office has been the creation of a new Ministry of Energy and Mines (MEM) in January 2007, replacing the previously low profile National Energy Commission (CNE) and taking over some of the functions from the energy regulator, INE. Hopefully, this institutional reform can help to reduce the frictions that previously existed between CNE and INE, and to lift the ensuing policy stalemate.

The Fiscal Impact of the Energy Sector's Performance

H.13 Despite recent performance shortcomings, the power sector has not been a major burden on the government's finances. The main source of financial losses in the energy sector has been the gap between the tariff level mandated by the sector pricing rules and the actual price allowed by the regulator. Until August 2006, the actual price had been consistently below the mandated price, resulting in an estimated loss of US\$1.2 million per month during the year ending in September 2006. (The accumulated losses from October 2003 and September 2005 amounted to an estimated US\$36 million.). While it would appear that this financial loss was largely privatized – effectively borne by the private distribution company – the eventual payment of the accumulated losses by the public sector, suggests that the burden eventually does fall on the public sector. Starting in September 2006, the actual price was aligned with the mandated tariff level, so that there should no longer be any the financial losses arising from this source.

H.14 With the elimination of the tariff gap, the direct fiscal costs associated with the power sector currently are limited to three sources: (i) losses incurred by the government-owned electric utility, ENEL, from supplying small and isolated loads, (ii) losses incurred by the public transmission company, ENATREL, for failing to charge transmission fees that cover all transmission costs, including capital depreciation, and (iii) the foregone revenues from waiving the value-added tax for consumers below 150kwh/month, which represents the main direct subsidy granted in the sector. These fiscal costs add up to an estimated US\$15 million per year, of which the largest component is the direct subsidy; Table H.2.

Table H.2: Direct Fiscal Costs from the Energy Sector

ENATREL Losses	US\$ 3.5 million (estimated for 2007)
ENEL losses attributable to isolated systems	US\$ 2.5 million (estimated for 2007)
Value-Added Tax waiver (cons. < 150 kwh)	US\$ 8.9 million (actual in 2006)
Total	US\$ 14.9 million

Source: World Bank (2007), "Nicaragua: Energy Sector Policy Note"

D. Concluding Summary and Recommendations

H.15 Except for the commendable progress made in expanding access to electricity since 2001, the energy sector reforms introduced in the latter half of the 1990s have not had their expected impact. In particular, there has been little progress made in diversifying power generation away from oil and distribution losses continue to be extremely high. Most importantly, there has been little new investment in electricity generation, so that the reserve margin has fallen to very low levels, once again resulting in system-wide blackouts and power rationing. While the recent installation of additional generation capacity with Venezuelan assistance offers a short-run remedy to this problem, additional actions are needed to ensure a long-run solution to the sector's shortcomings.

H.16 The Energy Sector Policy Note prepared by the World Bank focuses attention on the following four measures to improve sector performance:

- Defusing the confrontation with the private distribution company and seeking a common ground for improving service (based on the quantification of the losses incurred in the sector, quantification of the debts owed by the different actors in the sector, and an operational audit of the distribution company), with the ultimate aim of re-establishing investor confidence and encouraging sector investments.
- Simplifying the electricity pricing structure (and abiding by it), while reviewing the existing subsidization scheme, which represents the largest single fiscal cost emerging from the sector, but may not be reaching the poorest households.
- Extending electricity service by strengthening the rural electrification fund, FODIEN.
- Update existing studies for hydro-electric and geothermal projects to feed into a long-term sector expansion plan, giving priority to developing new projects within a regional context.

Annex I

Review of Public Spending on Agriculture and Rural Development

Key Findings from Previous Sector Reviews

I.1 The main finding of the 2001 Public Expenditure Review with respect to the Agricultural and Rural Sector (ARS) was to identify the absence of a clearly articulated rural sector strategy that outlined the Government's priorities for the sector and established indicators to monitor progress towards them. The absence of such a strategy was found to contribute to the wide fluctuations observed in sector public spending across years. Also reflecting the lack of strategic guidance was that many rural programs under the direction of MAGFOR either (i) were poorly targeted, (ii) lacked data to confirm the effectiveness of targeting where it existed, or (iii) were beyond the scope and mandate of MAGFOR, while programs that provided compensatory assistance in response to emergencies (e.g., Hurricane Mitch) did not define an exit strategy through which beneficiaries would eventually "graduate" from such assistance. Moreover, some public programs appeared not to provide a public service at all and, as such, had no reason for existing.

I.2 A related finding of the 2001 PER was that the project selection process and donor coordination were very deficient. Relative to its population, Nicaragua ranks among the countries with the highest donors' contributions for public spending in the rural sector. Yet, the lack of focus, variability over time and space, and ever-changing agendas strongly affected the effectiveness of these investments during the 1990s and early 2000s. To address these issues, a two-pronged approach was recommended: (i) that the role of the Technical Investment Committee (consistent with Decree 61 of 2001) be strengthened to ensure that projects financed through external sources demonstrate their compatibility with expressed Government priorities; and (ii) that eligibility requirements be explicit in order for public sector projects to access external finance.²²³ A separate World Bank Agriculture Sector Report (2002) also concluded that, in order to improve the effectiveness of public spending in agriculture, government needed to prioritize the strategic coordination and effective use of donor resources.

I.3 Other key sector recommendations included the need to strengthen property rights and public policies in the ARS. An intensification of rural titling was recommended, coupled with the modernization of the property registry. Various fiscal incentives were also flagged for review, namely: (i) agricultural input and machinery imports, (ii) export distortions and (iii) Government intervention in factor markets (e.g., financial and marketing services).

B. Agricultural Performance, 2001-2006

I.4 The Agriculture and Forestry sector accounts for about 18 percent of GDP and 38 percent of total employment, and generates some 65 percent of total exports. Agriculture occupies a total area of almost one million hectares, of which 80 percent is dedicated to crops for internal consumption, with the remaining 20 percent going for traditional export crops (e.g., coffee, bananas). From 2000 to 2005, agricultural GDP grew at an annual rate of 8 percent, almost double that of total GDP.

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223. In this context, the PER also argued in favor of narrowing the definition of poverty-reducing expenditures in the Nicaragua PRSP. In 2001, some 80 percent of the capital budget for the ARS was registered as poverty-reducing, yet the linkages between such spending and poverty reduction were weak in many cases and non-existent in others. The Government was encouraged to prioritize those programs with proven track records in raising rural workers' capacity to increase incomes, as well as those programs which indirectly reduced rural poverty (e.g., technology transfer, productive infrastructure investments).

I.5 Of the total population of some 5.2 million, 45 percent live in rural areas. In Nicaragua, both poverty and rural are intertwined: 64 percent of the rural population is poor (1.5 million people, World Bank 2003), and 40 percent of these live in extreme poverty. For these families, agriculture provides about two-thirds of their income.

I.6 Since 2001, yields for the major commodities have been fairly constant and, in some cases, have actually declined; Table D.1. While total production has trended upward over the period, this increase is almost exclusively a result of an extension of the agricultural frontier, with little evidence of an intensification having occurred. Achieving increased yields – a desirable outcome in order to enhance competitiveness of the sector – is a function of both the application of technological packages (e.g., improved seeds, fertilizers, etc.) and the know-how to effectively do so. The data indicate that Nicaragua may be lagging on both fronts. In addition, when compared to other Latin American countries, yields for Nicaraguan commodities are consistently below the regional mean yields; Table D.2. Conversely, the data indicate that Nicaragua is the leader in banana yields, achieving almost twice the regional mean yield.

Table D.1 Indicators for Key Export and Domestic Crops, Nicaragua 2001-2006

Crop	2001-2			2003-4			2005-6		
	Area	Production	Yield	Area	Production	Yield	Area	Production	Yield
Export									
Coffee	156.1	1,469.6	9.4	165.2	1,820.0	11.0	182.0	2,100.0	11.5
Sesame Seed	11.8	92.0	7.8	11.8	118.0	10.0	16.5	129.3	7.8
Sugar Cane	58.2	3,459.1	59.4	62.8	4,510.6	71.8	66.5	4,198.2	63.1
Banana	2.7	3,349.1	1,240.4	1.4	3,089.6	2,206.9	1.6	2,614.6	1,634.1
Tobacco	1.9	40.3	21.2	2.2	49.9	22.7	2.7	65.9	24.4
Peanut	30.8	1,774.2	57.6	33.0	2,065.0	62.6	44.1	2,672.3	60.6
Domestic									
Rice (Gold)	120.6	3,520.7	29.2	133.3	3,826.8	28.7	137.2	4,528.5	33.0
Rice (Secano)	78.5	1,587.1	20.2	85.0	1,782.7	21.0	82.0	2,016.8	24.6
Rice (Irrigated)	42.1	1,933.6	45.9	48.3	2,044.1	42.3	55.2	2,511.7	45.5
Beans	330.1	3,890.3	11.8	414.6	5,067.4	12.2	303.8	4,632.3	15.2
Corn	454.8	9,237.0	20.3	564.3	12,949.2	22.9	556.0	12,069.9	21.7
Sorghum	64.2	1,955.4	30.5	80.6	2,549.3	31.6	62.3	1,800.4	28.9
Soybean	3.0	91.5	30.5	5.5	160.0	29.1	3.8	123.7	32.6

Note: Area in '000 manzanas; Production in '000 quintales; 2005-6 figures estimated through 10/31/2006

Source: MAGFOR Dept. of Statistics

C. Overview of Public Expenditures in the Agriculture and Rural Sector

I.7 The agricultural and rural public sector (SPAR) comprises four agencies: (i) the Ministry of Agriculture, Livestock and Forestry (MAGFOR), (ii) the National Institute for Agricultural Technology (INTA), (iii) the National Forestry Institute (INAFOR); and (iv) the semi-autonomous Rural Development Institute (IDR). Additionally, the Ministry of the Environment and Natural Resources (MARENA) has responsibility for environmental oversight and regulation, natural resource management and protected areas.²²⁴ Law 2901, promulgated in 1998, defines the roles and responsibilities of the agricultural public sector institutions: MAGFOR is the lead agency, formulating agricultural, rural and forestry policies and strategies. INTA generates and transfers agricultural technology. INAFOR manages the forestry sector and maintains the National Forest Registry and Inventory. Both INTA and INAFOR are under the overall direction of MAGFOR. IDR executes strategies, programs and projects in

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224. MARENA is not included in the SPAR budget.

sustainable rural development with an emphasis on productive rural investments and answers directly to the Executive under the policy guidance of MAGFOR.

Table D.2 Yield comparisons, selected countries and commodities, 2005 (in '000 kg/ha)

Country	Tobacco	Bananas	Coffee	Corn	Rice	Sesame Seed	Sorghum	Soybean	Sugar Cane
Argentina	2.48	21.18	-	7.36	6.34	-	5.19	2.73	63.28
Bolivia	0.92	10.29	0.98	2.42	2.54	0.63	3.07	1.80	47.20
Brazil	1.78	13.56	0.94	3.04	3.34	0.78	2.02	2.32	72.85
Chile	3.19	-	-	11.23	4.67	-	-	-	-
Colombia	1.99	27.23	1.24	2.81	5.32	-	3.70	2.00	93.60
Costa Rica	1.98	53.95	1.11	2.08	3.97	0.60	-	-	73.05
Ecuador	1.92	27.67	0.42	2.06	3.90	0.87	1.49	1.96	72.76
El Salvador	1.83	10.83	0.55	2.94	7.21	0.75	1.59	2.27	81.16
Guatemala	2.22	52.52	0.88	1.78	2.41	0.63	1.23	2.69	97.37
Honduras	1.48	43.20	0.80	1.53	2.43	0.79	0.96	2.11	74.16
Mexico	1.88	29.23	0.41	2.73	5.07	0.64	3.45	1.77	69.53
Nicaragua	1.57	59.66	0.67	1.47	3.17	0.62	2.01	2.15	89.08
Panama	1.85	36.60	0.78	1.35	2.15	0.49	3.36	0.77	50.59
Mean Yield	1.93	32.16	0.80	3.29	4.04	0.68	2.55	2.05	73.72

Note: Yield leaders in bold

Source: FAOSTAT

I.8 Total annual SPAR expenditures over the period 2001-2005 averaged US\$41.3 million; Table D.3. Capital expenditures accounted for about 84 percent of total expenditures, somewhat high relative to the other sectors.²²⁵ A significant decline in public spending took place in 2005, with capital expenditures falling by 41 percent from the previous year.²²⁶ There appears to be little correlation between the trend lines for both current and capital expenditures: while capital expenditures grew substantially through 2004, current expenditure growth was flat, and actually turned negative from 2003-2005. This calls into question whether adequate budgetary resources are being assigned for maintenance and upkeep of capital acquisitions and remains an issue for further analysis.

Table D.3: The Agriculture and Rural Sector (SPAR) Budget; 2001-2006

	2001	2002	2003	2004	2005	2006
Planned:						
Current	10.0	7.4	6.0	5.7	8.0	9.1
Capital	68.2	45.4	43.9	47.8	46.6	53.6
Total Budget	78.2	52.8	49.9	53.6	54.7	62.7
Executed:						
Current	7.0	7.2	6.4	6.3	6.0	0.0
Capital	19.0	39.2	43.2	45.3	26.7	0.0
Total Executed	26.0	46.4	49.6	51.6	32.7	0.0
Executed/Budgeted	33.2%	87.9%	99.3%	96.4%	59.8%	
Capital/Total (Executed)	73.1%	84.5%	87.1%	87.8%	81.6%^a	
Annual Variation:						
Capital	106.2%	10.1%	5.0%	-41.2%	15.0%	
Total	78.5%	6.8%	4.1%	-36.7%	14.6%	

Note: ^a Figures are for Programmed Source: PER Dataset, includes MAGFOR, INTA and IDR

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225. This is likely due to the assignment of all external loans and donations as Capital Expenditures.

226. During 2005, the country suffered a setback, reflecting in part the oil price shock and an increased political polarization which put a strain on relations between the legislative and executive branches.

I.9 After a lackluster budget performance in 2001, primarily in regard to capital expenditures, execution remained quite strong through 2004, with minimal overshooting in 2003 and 2004. The downturn in capital expenditures in 2005 was accompanied by a nearly 50 percent reduction in budget execution.

The SPAR Budget

I.10 The combined SPAR budget for 2007 totals US\$72.8 million. MAGFOR (along with INTA and INAFOR as dependent agencies) represents 60 percent of the total budget, while IDR comprises the remaining 40 percent; Table D.4. Since 2004, the total SPAR budget has grown (in dollar terms) by 50 percent. From 2006 to 2007, the budget grew by 16 percent (in dollars terms) despite a devaluing currency,

I.11 Several issues stand out in assessing the 2004-07 SPAR budget allocations, namely: (i) capital expenditures are consistently the bulk of expenditures, ranging from 83 to 88 percent of total; (ii) there has been a shift away from IDR and toward MAGFOR in resource allocations; and (iii) provision for recurrent expenditures varies widely among SPAR institutions, with IDR having virtually no recurrent budget. Two factors combine to explain the bias toward capital expenditures. Close to two-thirds of the SPAR budget is financed through external sources (i.e., international cooperation); these resources, under Nicaragua's budget policies, are required to be channeled via the capital expenditure budget, even though a portion of these resources may actually have been allocated for recurrent expenditures. Finally, budget weaknesses on the side of recurrent expenditures can translate into spotty coverage or the virtual absence of a field presence for the SPAR institutions, which makes technological uptake and progress on the part of the rural producers more difficult to achieve.

Table D.4 The SPAR Budget 2004-2007

		(US\$ million)			% TOTAL		
		Current	Capital	Total	Current	Capital	Total
2007	MAGFOR	11.60	32.46	44.06	15.9%	44.6%	60.5%
	<i>INTA</i>	2.68	8.76	11.44	3.7%	12.0%	15.7%
	<i>INAFOR</i>	1.65	2.42	4.07	2.3%	3.3%	5.6%
	IDR	0.12	28.62	28.74	0.2%	39.3%	39.5%
	TOTAL	11.72	61.08	72.80	16.1%	83.9%	100.0%
2006	MAGFOR	8.97	21.99	30.96	14.3%	35.0%	49.2%
	<i>INTA</i>	1.98	6.41	8.40	3.2%	10.2%	13.3%
	<i>INAFOR</i>	1.64	2.24	3.88	2.6%	3.6%	6.2%
	IDR	0.12	31.82	31.94	0.2%	50.6%	50.8%
	TOTAL	9.09	53.81	62.90	14.5%	85.5%	100.0%
2005	MAGFOR	7.78	17.25	25.03	13.8%	30.7%	44.6%
	<i>INTA</i>	1.87	4.40	6.27	3.3%	7.8%	11.2%
	<i>INAFOR</i>	1.62	0.15	1.77	2.9%	0.3%	3.1%
	IDR	0.13	31.02	31.14	0.2%	55.2%	55.4%
	TOTAL	7.90	48.27	56.17	14.1%	85.9%	100.0%
2004	MAGFOR	5.56	18.05	23.61	11.5%	37.2%	48.7%
	<i>INTA</i>	1.85	4.72	6.58	3.8%	9.8%	13.6%
	<i>INAFOR</i>	1.22	0.31	1.53	2.5%	0.6%	3.2%
	IDR	0.13	24.71	24.84	0.3%	51.0%	51.3%
	TOTAL	5.70	42.76	48.46	11.8%	88.2%	100.0%

Source: MHCP.

D. The National Program for Agricultural and Rural Development (PRORURAL)

I.12 In 2005, the SPAR, in conjunction with international aid agencies, joined in a Sector-wide Approach (SWAp) known as PRORURAL, in the context of the National Development Plan (2005-09), which seeks three overarching objectives: (i) higher incomes and reduced poverty; (ii) higher and better employment; and (iii) increased investment and exports.²²⁷ Additionally, PRORURAL was intended to provide support for improved aid coordination and to complement the assistance from international cooperation agencies in sustainable agriculture and forestry. The estimated cost of the seven components that comprise PRORURAL for the period 2005-2009 is US\$411.5 million; Table D.5. This implies an average annual spending under PRORURAL of US\$82.3 million, or almost double the historical average of the annual SPAR budgets. It will be crucial to carefully accompany the absorptive capacity of the SPAR institutions vis-à-vis these budget allocation, particularly given the wide variations in budget execution since 2004; see Table D.3.

I.13 Two overarching goals frame the activities undertaken by PRORURAL, namely (i) annualized Agricultural GDP growth of 6.24 percent over the period 2005-09, and (ii) annual agricultural exports growth of 20 percent. A driving element of PRORURAL is the promotion of a more efficient use of available resources, before accessing new, additional resources. More specifically, budget allocations for MAGFOR (and their subordinate agencies: INTA and INAFOR) and IDR and the various programs already considered under the budgeting process with MHCP, would be reoriented toward the activities and objectives set forth under PRORURAL. Nonetheless, the financial resources being brought to bear on the rural sector under PRORURAL represent a substantial increment to historical SPAR budgets. While efficiency gains may be expected and, in fact, envisioned under the Program, just how the SPAR institutions will be able to effectively deploy such large budgets remains to be seen.

Table D.5 PRORURAL Budget by Components (Planned & Committed) 2005-09 (US\$ million)

PRORURAL Component	Institution	Planned					Total	Commitments		
		2005	2006	2007	2008	2009		Total	%	Planned
(1) Technical Innovation	INTA/FUNICA/ INAFOR	6.2	9.5	10.7	11.7	9.5	47.6	12%	10.6	22%
(2) Food Safety/ Animal Health	DGPSA/ MAGFOR	9.4	6.9	7.0	7.3	7.5	38.1	9%	23.7	62%
(3) Sustainable Forest Dev.	INAFOR/ MAGFOR	0.4	7.9	6.2	5.1	3.7	23.3	6%	7.1	30%
(4) Prod. Support Services	IDR	16.5	41.1	38.6	24.0	25.0	145.2	35%	112.9	78%
(5) Infrastructure	IDR	3.0	14.0	14.0	19.0	20.0	70.0	17%	14.6	21%
(6) Inst. Mod. and Strengthening	MAGFOR/IDR INAFOR/INTA	10.3	18.7	18.8	17.4	16.4	81.6	20%	29.1	36%
(7) Forest/ Ag. Policy and Strategy	MAGFOR/ IDR INAFOR/ INTA	1.2	1.4	1.1	1.0	1.0	5.7	1%	2.2	39%
Total		47.0	99.5	96.4	85.5	83.1	411.5	100%	200.2	49%

Source: Multi-annual budget 2005-09, MAGFOR

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227. The World Bank initially sought to take part in the SWAp through which PRORURAL is funded; however, the Bank withdrew and instead financed the stand-alone Second Agricultural Technology Project (ATP-II).

I.14 Yet concerns of absorptive capacity may prove to be moot, since actual financial commitments to PRORURAL – at about US\$200 million – so far only account for about one-half of the Program's planned budget. Commitments vary substantially by component, with Component 2 (Food Safety and Animal Health) and Component 4 (Financial Support Services) already at funding levels of 62 percent and 78 percent, respectively, whereas the remaining five components show commitment levels of 22-39 percent only.²²⁸

I.15 By institution, the largest financing gap lies with IDR: only about one-half of its budget is fully funded; Table D.6 Core commitments to MAGFOR under PRORURAL approach 80 percent, while its ancillary agencies – DGPSA, INTA and INAFOR – show commitments of 62 percent, 27 percent, and 23 percent, respectively. In 2005, PRORURAL was virtually fully funded; actual performance for 2006 is still being determined, yet the collective SPAR-PRORURAL budget was, at this writing, far in excess of financial commitments. A similar scenario could play itself out in 2007-09.

Table D.6 PRORURAL Budget by Institution (Planned and Committed) 2005-09 (US\$ million)

Planned							
Implementing Agencies	2005	2006	2007	2008	2009	Total	% Total
MAGFOR	8.7	16.2	14.3	5.7	5.7	50.6	43%
<i>DGPSA</i>	9.9	7.2	7.4	7.6	7.9	40.0	10%
<i>INTA</i>	7.9	10.4	10.7	9.9	9.2	48.1	12%
<i>INAFOR</i>	2.2	12.7	9.9	8.3	6.7	39.8	10%
IDR	17.5	49.5	50.0	49.0	51.0	217.0	53%
Competitive Funds (FUNICA)	0.8	3.5	4.1	4.8	2.8	16.0	4%
TOTAL	47.0	99.5	96.4	85.3	83.3	411.5	100%

Committed							
Implementing Agencies	2005	2006	2007	2008	2009	Total	% Total
MAGFOR	11.9	13.6	11	2.3	2.1	40.9	20%
<i>DGPSA</i>	9	4.7	4.1	4.1	3	24.9	12%
<i>INTA</i>	3.7	2.4	2.4	2.3	2.1	12.9	6%
<i>INAFOR</i>	2.6	1.7	1.6	1.6	1.6	9.1	5%
IDR	18.3	23.3	23.2	23.2	16.6	104.6	52%
Competitive Funds (FUNICA)	0.8	1.8	1.8	1.8	1.2	7.4	4%
TOTAL	46.3	47.5	44.1	35.3	26.6	199.8	100%

Financing Gap							
Implementing Agencies	2005	2006	2007	2008	2009	Total	% Total
MAGFOR	-3.2	2.6	3.3	3.4	3.6	9.7	5%
<i>DGPSA</i>	0.9	2.5	3.3	3.5	4.9	15.1	7%
<i>INTA</i>	4.2	8.0	8.3	7.6	7.1	35.2	17%
<i>INAFOR</i>	-0.4	11.0	8.3	6.7	5.1	30.7	15%
IDR	-0.8	26.2	26.8	25.8	34.4	112.4	53%
Competitive Funds (FUNICA)	0.0	1.7	2.3	3.0	1.6	8.6	4%
TOTAL	0.7	52.0	52.3	50.0	56.7	211.7	100%

Note: Slight differences vis-à-vis Table D.5 due to rounding error.

Source: Multi-annual Budget (MAGFOR)

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228. While not including the multi-annual budget, there appear to be other commitments (either in process or actual) that, when confirmed, could reduce the financing gap to as little as US\$83.2 million.

Preliminary Outcomes – PRORURAL

I.16 The SPAR institutions have made positive strides in tracking outcomes under PRORURAL. A monitoring, evaluation and learning system is in place (SISEVA) to document results across both components and institutions; while still a work in progress, the SISEVA will ultimately bring together and unify results monitoring across the institutions that comprise the SPAR. For 2006, budget execution totaled US\$57.45, or about 77 percent of planned; Table D.7.

I.17 In a sector-wide program like PRORURAL that cuts across a large number of institutions and is funded by a various sources, developing relevant summary indicators is a challenge. Figure 7.1 represents a first attempt by the SPAR institutions to gauge physical progress. The physical execution of PRORURAL was commensurate with the financial outcomes for 2006. Nearly 75 percent of the programmed products were achieved. Across the components, achievement of physical outcomes ranged from a low of 56 percent (Technological Innovation) to nearly 90 percent (Production Support Services).

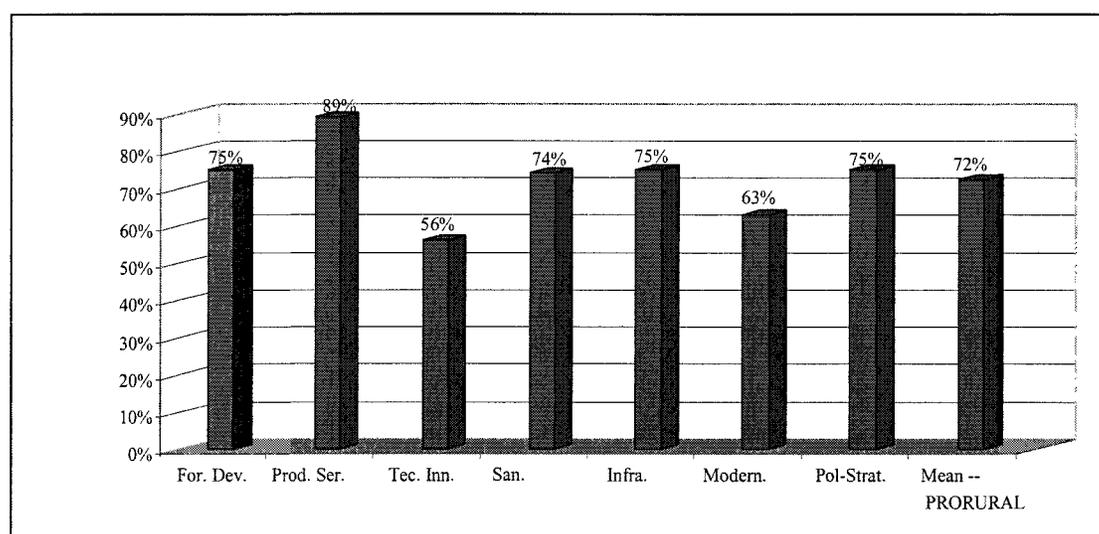
Table D.7 Budget Performance – PRORURAL (US\$ million)

Component – PRORURAL	2006			
	Budgeted	Executed	%Executed	% total
(1) Technical Innovation	5.59	4.74	85%	8%
(2) Food Safety and Animal Health	5.85	5.07	87%	9%
(3) Sustainable Forest Development	1.61	1.31	81%	2%
(4) Production Support Services	33.13	24.52	74%	43%
(5) Infrastructure	10.49	8.32	79%	14%
(6) Inst. Modernization and Strengthening	16.94	12.84	76%	22%
(7) Forest and Agricultural Policy and Strategy	0.84	0.64	76%	1%
TOTAL	74.45	57.45	77%	100%

Note: exchange rate – 18 Cordobas=US\$1

Source: MAGFOR – Annual Report PRORURAL

Figure 7.1 Physical Performance – PRORURAL, by Component (2006)



Source: MAGFOR.

I.18 A major expected outcome of the PRORURAL exercise is greater coordination of aid delivery, both among the SPAR institutions and among external donor agencies. Evidence of such coordination is the Memorandum of Understanding that serves as a consensus statement (signed by all parties involved) laying out the objectives, scope and intended outcomes of PRORURAL. An agreed set of performance indicators are included in the Memorandum, monitoring of which would be undertaken under the SISEVA, both annually and bi-annually, depending on the indicator in question. Table D.8 reports progress on these agreed indicators during 2006 across the seven components of PRORURAL. In all, 25 indicators are followed, of which 12 are provided with benchmarks for 2006. For the twelve indicators with complete information, the performance of PRORURAL is quite strong, with actual performance in most case significantly exceeding the benchmark. Component 1 (Technological Innovation) and Component 2 (Food Safety and Animal Health) show the most complete data among the seven components.

E. Main Findings and Recommendations

I.19 Agricultural output has been growing almost twice as fast as overall GDP during 2000-2005, but most of that growth is attributable to extensions of the agricultural frontier, rather than increases in agricultural productivity. This continues a pattern that was already observed in the 1990s and that is ultimately unsustainable. It also suggests that at least some of the more important problems that had been undermining sector productivity in the 1990s must still be present today. Two such problems identified in earlier sector reviews were the absence of a clear and prioritized rural sector strategy to guide public sector interventions, and the lack of adequate donor coordination. These were held largely responsible for the very inefficient public spending that has taken place in the sector and the uneven program execution. Moreover, the issue of donor coordination retains its paramount importance, considering that two-thirds of the sector budget is financed with external resources.)

I.20 A major step forward toward addressing these two problems was taken in 2005 with the establishment of a Sector-Wide Approach for the Agriculture and Rural Sector in the overall context of the National Development Plan. This approach, named PRORURAL, commits the sector's public institutions and the main international aid agencies to following a single, common and coordinated strategy, focusing on raising sector output and export growth levels. Two major outcomes expected from PRORURAL are (i) greater coordination of aid delivery, both among sector institutions and donor agencies, and (ii) agreement on a set of performance indicators that will serve to monitor sector performance and guide corrective interventions. PRORURAL aims to improve the efficiency of resource allocation in the sector, before seeking to access additional resources. Nevertheless, budget plans through 2009 envisage a doubling of annual financial resources in the sector, which draws attention to the need for raising absorptive capacities and maintaining steady program execution levels.

Table D.8 Performance Indicators—PRORURAL, by Component (2006)

Performance Indicators	Responsible Institution	Benchmark 2006	Actual 2006
1. Technological Innovation			
# producers receiving technical assistance	INTA, FUNICA, INAFOR	29,800	31,132
INTA's innovation technology, portfolio increases # validated technologies supporting export commodities, food safety and food security, and environmental sustainability .	INTA	134	188
Annual foundation and registered seed production of food grains exceeds 230 metric tons, while vegetable, pasture and tuber seed production covers more than 230 ha.	INTA	228 TM 230 ha.	147.5 TM 135 ha.
# producers trained in food processing, and/or business administration and marketing.	INTA	1,000	2,709
#service providers certified by INTA according to accepted standards (INTA established an operational system for accreditation).	INTA	-	-
% producer organizations that participate in TA activities through FAT with access to finance and linked to product markets.	INTA, FUNICA	8%	34%
% INTA's indigenous people clients are women.	INTA	20%	24%
National forest inventory and valuation exercise/ information available for planning/mgt of forestry sector (% completed)	INAFOR	100%	5%
2. Food Safety and Animal Health			
% ag/forest exports not rejected	DGPSA	99.9%	99.9%
#export companies HAACP-certified	DGPSA	100	121
3. Sustainable Forest Development			
Variation rate in value of forestry exports	INAFOR		-0.54
4. Production Support Services			
#small and medium producers receiving finance (by gender)	IDR	-	12,070
Finance received by small- medium scale producers (by gender)	IDR	-	CS 168.6m.
5. Infrastructure			
# direct beneficiaries from infrastructure investments	IDR	-	104,700
6. Inst. Modernization and Strengthening			
Human and financial resources deploy by territory and institution.	MAGFOR	-	H:263; F: CS101 m
	INTA	-	H: ___; F: ___
	DGPSA	-	H:485; F:23 m.
	INAFOR	-	H: ___; F: ___
	FUNICA	-	H: ___; F: ___
	IDR	-	H: ___; F: ___
Distribution of PRORURAL budget financing between national and external cooperation sources (by institution and territory)	MAGFOR	-	N: ___; Ext: ___
	INTA	-	N: ___; Ext: ___
	IDR	-	N: ___; Ext: ___
	INAFOR	-	N:37 m; Ext: 38 m.
	FUNICA	-	N: ___; Ext: ___
# Territorial Delegations of SPAR Institutions created to implement PRORURAL.	MAGFOR	-	16
	INTA	-	-
	IDR	-	-
	INAFOR	-	10
	FUNICA	-	-
%Government institutions involved and participating donors rate PRORURAL'S implementation and monitoring arrangements as satisfactory..	MAGFOR	80%	-

Performance Indicators	Responsible Institution	Benchmark 2006	Actual 2006
The Planning, Monitoring and Evaluation unit of MAGFOR is fully operational and producing regular reports.	SPAR	6	2
The technical-technical staff ratio of MAGFOR, INTA, INAFOR and FUNICA has increased.	MAGFAOR	45/55	45/55
	INTA	49/51	68/32
	INAFOR	63/37	75/25
	FUNICA	54/46	59/41
10 additional forest management plans are approved.	INAFOR	3	41
The Government budget integrates 75 percent of MAGFOR, INAFOR and INTA's salaries and operating costs (partially financed under the project).	MAGFOR, INTA	0	0
7. Forest and Agricultural Policy and Strategy			
% National Council of Production members satisfied with their participation in the formulation/implementation of PRORURAL.	MAGFOR	-	-
% international cooperation in DRP Sub Table that have aligned cooperation strategies to the sector-wide policy.	MAGFOR	-	64%
% spending of the institutions implementing PRORURAL that correspond to MPMP.	MAGFOR	-	-

Source: MAGFOR – Memorandum of Understanding, PRORURAL (2005).

Annex J
Budget Transfer Allocation by Municipality, 2006-2007

2007 Allocation	(millions of córdobas)
Tax Revenue (Proyecto de PGR 2007)	18,291.08
7% allotted to Transfers 2007	1,280.38
Managua share (2.5%)	32.01
Total to distribute among 152 municipalities	1,248.37

Cat. 2007	Municipality	Cat. Δ 2006-2007*	2006 Total Budget Transfer (revised)*	2007 Budget Transfer ** (millions of córdobas)					% dif. 2006-2007
				Pop.	Fiscal equity	Tax collection efficiency	Execution of transfer	2007 TOTAL	
A	Managua		26.11	0.00	0.00	0.00	0.00	32.01	23%
B	Bluefields	++	6.73	3.38	0.00	3.96	2.16	9.50	41%
B	Chichigalpa		7.31	3.32	0.00	3.36	1.97	8.66	18%
B	Chinandega		11.83	9.04	0.00	1.56	2.16	12.76	8%
B	Ciudad Sandino	+	9.00	5.57	0.00	2.44	2.17	10.19	13%
B	Corinto	+	5.04	1.23	0.00	3.47	2.17	6.87	36%
B	El Viejo	+	8.04	5.70	0.00	1.05	2.17	8.92	11%
B	Estelí		9.50	8.32	0.00	0.93	2.12	11.38	20%
B	Granada		10.62	7.81	0.00	1.46	1.94	11.21	6%
B	Jinotega		7.73	7.38	0.00	1.32	2.16	10.86	41%
B	Jinotepe	+	5.54	3.13	0.00	1.09	1.59	5.81	5%
B	Juigalpa	+	6.73	3.85	0.00	1.15	2.17	7.17	7%
B	León		13.99	12.92	0.00	1.79	1.75	16.46	18%
B	Masaya		10.75	10.36	0.00	0.62	1.88	12.86	20%
B	Matagalpa		11.34	9.90	0.00	0.95	1.97	12.82	13%
B	Nagarote		7.29	2.40	0.00	2.38	1.77	6.54	-10%
B	Nindiri		6.26	2.85	0.00	3.95	2.17	8.97	43%
B	Nueva Guinea	+	12.59	4.97	0.41	4.75	2.09	12.22	-3%
B	Puerto Cabezas	+	7.08	4.91	1.36	4.22	1.78	12.27	73%
B	Rivas	+	5.48	3.05	0.00	1.09	1.53	5.67	3%
B	San Rafael d.Sur		8.03	3.15	0.00	3.83	1.30	8.28	3%
B	Tipitapa		11.34	7.55	0.00	0.52	2.09	10.16	-10%
C	Boaco		5.24	3.70	0.00	1.02	1.99	6.70	28%
C	El Rama	+	8.96	3.90	3.84	4.99	2.17	14.90	66%
C	Jalapa	+	12.09	4.04	0.04	2.86	1.87	8.82	-27%
C	Ocotal	+	5.56	2.57	0.00	1.13	1.94	5.64	1%
C	San Juan del Sur	+	3.86	1.09	0.00	5.66	2.17	8.93	131%
C	Sebaco	+	6.51	2.39	0.00	1.79	1.59	5.77	-11%
C	Ticuantepe	+	7.21	2.00	0.00	3.25	2.17	7.43	3%
C	Villa el Carmen	n/a	9.57	2.04	0.00	2.71	2.17	6.92	-28%
D	Acoyapa	+	5.70	1.26	0.00	1.15	2.17	4.58	-20%
D	Bonanza	+	6.63	1.38	0.52	4.86	1.96	8.72	31%
D	Camoapa		7.36	2.60	0.00	0.78	2.17	5.54	-25%
D	Cardenas		4.63	0.52	0.00	4.29	2.17	6.98	51%
D	Ciudad Dario	+	7.58	3.04	7.24	1.01	2.08	13.38	77%
D	Corn Island		3.46	0.49	0.00	5.20	2.17	7.87	128%
D	El Ayote	+	5.94	0.92	0.00	5.35	1.35	7.62	28%

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				Pop.	Fiscal equity	Tax collection efficiency	Execution of transfer	2007 TOTAL	
D	El Crucero	+	6.77	1.01	0.00	7.34	2.17	10.53	55%
D	El Tuma - La Dalia		16.56	4.21	10.89	1.00	2.08	18.18	10%
D	La Libertad	+	3.19	0.85	0.00	1.21	2.17	4.23	33%
D	La Paz Centro		4.78	2.09	0.00	1.87	1.62	5.57	17%
D	Larreynaga-Malpaisillo		5.94	2.07	0.63	1.27	2.04	6.01	1%
D	Masatepe	+	9.02	2.34	4.12	0.99	2.17	9.63	7%
D	Mateare		6.16	2.14	0.00	1.53	1.14	4.81	-22%
D	Matiguas		10.25	3.05	3.57	1.13	1.85	9.60	-6%
D	Muelle de los Bueyes	+	7.83	1.64	2.14	4.33	2.17	10.28	31%
D	Muy Muy	+	5.71	1.09	0.00	3.70	2.17	6.97	22%
D	Nandaime		6.90	2.55	0.51	1.92	2.02	6.99	1%
D	Paiwas	n/a	15.05	2.36	1.12	4.80	2.17	10.45	-31%
D	Potosi	+	4.34	0.88	0.00	1.27	2.17	4.33	0%
D	Rio Blanco	+	10.36	2.29	1.74	1.13	2.17	7.33	-29%
D	Rosita	++	7.07	1.69	2.23	4.70	2.17	10.79	53%
D	San Carlos		9.47	2.78	2.75	2.05	2.17	9.76	3%
D	San Marcos	+	10.03	2.15	1.57	1.43	2.17	7.32	-27%
D	Santo Domingo	+	3.47	0.90	0.00	2.25	2.09	5.24	51%
D	Sto. Tomas Chontales	+	6.74	1.22	0.00	2.04	2.15	5.41	-20%
D	Siuna	+	15.71	4.76	12.08	3.05	2.13	22.02	40%
D	Somotillo	+	7.38	2.15	3.16	1.09	2.17	8.57	16%
D	Somoto	+	9.48	2.51	2.55	1.05	2.02	8.13	-14%
D	Telica		3.93	1.73	3.20	6.26	2.10	13.29	238%
D	Tola	+	8.35	1.63	0.43	1.58	2.11	5.76	-31%
D	Villa Sandino	+	3.91	0.98	0.00	3.38	2.17	6.53	67%
D	Villanueva		5.44	1.90	0.00	0.97	2.08	4.96	-9%
D	Waslala	+	13.62	3.66	12.30	3.08	2.17	21.22	56%
E	Altagracia	++	7.36	1.48	4.34	1.83	2.17	9.83	34%
E	Buenos Aires	++	3.04	0.40	0.00	2.38	2.11	4.89	61%
E	Catarina		5.98	0.56	0.00	6.30	1.53	8.39	40%
E	Comalapa		2.20	0.87	1.20	1.13	2.16	5.36	144%
E	Condega		9.41	2.11	5.27	0.99	1.95	10.32	10%
E	Desemboc. Cruz de Rio Grande	+++	5.79	0.27	0.00	6.13	2.17	8.57	48%
E	Dipilto	+	4.07	0.39	0.00	2.14	2.17	4.70	16%
E	Diriomo	+	8.75	1.66	4.64	2.14	2.17	10.61	21%
E	Dolores		4.06	0.50	0.00	3.73	2.03	6.27	54%
E	El Almendro		5.94	0.99	0.00	1.57	2.17	4.73	-20%
E	El Castillo		5.03	1.47	1.05	2.04	1.76	6.33	26%
E	El Coral		4.19	3.21	6.32	0.89	2.17	12.59	201%
E	El Cuá		11.11	0.52	0.00	2.77	2.10	5.40	-51%
E	El Jicaral		6.53	0.77	0.97	4.13	2.17	8.04	23%
E	El Jicaro		6.96	1.92	5.58	1.10	2.17	10.78	55%
E	El Realejo		5.42	0.66	0.42	2.53	2.17	5.78	7%
E	El Sauce		7.60	2.07	0.84	0.97	1.54	5.41	-29%
E	El Tortuguero	+++	8.90	1.66	5.30	3.37	2.17	12.49	40%
E	Esquipulas	++	5.90	1.18	2.69	2.16	2.08	8.11	38%

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				Pop.	Fiscal equity	Tax collection efficiency	Execution of transfer	2007 TOTAL	
E	Kukra Hill	+++	7.38	0.65	0.18	4.94	2.17	7.94	8%
E	La Concepcion	+	9.56	2.37	8.76	0.91	2.16	14.20	49%
E	La Cruz de Rio Grande	+++	13.64	1.73	3.41	4.08	2.13	11.36	-17%
E	La Trinidad		3.65	1.49	1.25	0.72	2.17	5.64	55%
E	Laguna de Perlas	+	4.08	0.79	1.92	5.63	1.48	9.82	141%
E	Moyogalpa	+	3.49	0.72	0.37	0.83	2.13	4.05	16%
E	Mulukukú		3.91	2.21	7.75	2.48	2.05	14.50	271%
E	Posoltega		7.52	1.24	2.37	2.37	2.17	8.16	8%
E	Pueblo Nuevo	++	6.76	1.53	3.70	0.64	2.07	7.94	18%
E	Puerto Morazan		5.85	0.99	1.31	5.50	2.17	9.97	70%
E	Quilali	++	8.24	1.96	4.51	1.08	2.16	9.71	18%
E	Rancho Grande	++	7.42	1.95	4.25	1.17	2.01	9.38	26%
E	San Fernando	+	4.15	0.63	0.00	1.75	2.17	4.56	10%
E	San Fran. Libre	++	3.91	0.70	0.56	1.53	2.16	4.96	27%
E	San Isidro	+	3.98	1.29	1.77	1.48	2.00	6.54	64%
E	San Jorge	+	4.19	0.60	0.00	1.23	1.96	3.78	-10%
E	San José de Bocay	+	7.95	3.12	9.75	0.76	1.73	15.36	93%
E	San Juan de Rio Coco	++	4.04	1.57	2.52	1.10	2.17	7.36	82%
E	San Lorenzo	n/a	6.73	1.76	4.11	1.32	2.17	9.36	39%
E	San Miguelito		7.54	1.26	0.37	1.63	2.11	5.37	-29%
E	San Pedro de Lovago	+	2.64	0.57	0.00	1.66	2.08	4.31	63%
E	San Ramon		5.16	2.28	6.15	1.54	2.17	12.14	135%
E	San Sebastian de Yali		6.84	2.00	4.04	1.03	2.17	9.25	35%
E	Sta. Maria de Pantasma		10.66	2.81	6.31	0.94	1.94	12.00	13%
E	Teustepe		7.99	1.95	4.18	0.36	2.17	8.66	8%
E	Tisma	++	5.35	0.79	1.56	3.20	2.17	7.72	44%
E	Waspan	+	14.55	3.51	14.05	4.01	2.10	23.67	63%
E	Wiwili de Jinotega		13.18	4.27	15.20	0.63	2.07	22.16	68%
E	Wiwili de Nueva Segovia	+++	7.55	1.21	1.57	0.64	2.17	5.60	-26%
F	Achuapa	+	4.94	1.02	1.88	0.29	1.85	5.04	2%
F	Cuapa	+	5.23	0.41	0.00	4.61	2.17	7.19	38%
F	Macuelizo	++	4.19	0.45	0.22	0.82	2.17	3.66	-13%
F	Morrito	+	3.82	0.49	0.00	1.51	2.17	4.17	9%
F	Quezalguaque	++	5.68	0.64	1.68	5.91	2.06	10.29	81%
F	San José de los Remates	++	3.71	0.57	0.15	0.83	2.11	3.66	-1%
F	San Lucas	++	5.39	0.96	3.34	1.36	2.11	7.78	44%
F	San Rafael del Norte	+	6.19	1.32	3.77	1.00	2.17	8.26	33%
F	Santa Teresa	+	7.37	1.25	2.55	0.69	1.96	6.46	-12%
F	Telpaneca	++	5.49	1.41	6.06	1.91	2.17	11.55	110%
G	Belén		8.16	1.22	2.02	0.84	2.17	6.25	-23%
G	Diria	+	4.30	4.27	0.57	0.69	2.10	7.63	77%
G	Diriamba	---	6.51	0.47	1.11	1.95	1.99	5.52	-15%
G	El Rosario	+	3.72	0.39	0.67	1.05	1.87	3.98	7%
G	La Concordia	+	3.91	0.48	1.13	1.01	2.17	4.79	23%

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				Pop.	Fiscal equity	Tax collection efficiency	Execution of transfer	2007 TOTAL	
G	Mozonte		3.77	0.50	1.38	1.65	2.17	5.70	51%
G	Nandasmo	+	7.58	0.80	2.40	0.48	2.17	5.85	-23%
G	Niquinohomo		5.20	1.10	3.08	0.81	2.17	7.16	38%
G	Palacaguina		4.69	0.95	2.76	1.16	1.87	6.75	44%
G	San Juan de Limay		5.07	1.00	2.42	0.59	1.80	5.81	15%
G	Santa Lucia	+	5.41	0.61	1.64	0.89	2.17	5.32	-2%
G	Yalaguina		6.43	0.71	2.91	2.81	2.17	8.60	34%
H	Cinco Pinos		3.89	0.50	1.94	0.32	2.05	4.81	24%
H	Ciudad Antigua		4.02	0.36	1.05	1.64	2.04	5.10	27%
H	La Conquista		2.41	0.28	0.76	0.81	2.17	4.03	67%
H	La Paz de Carazo		4.74	0.35	1.11	1.12	2.17	4.75	0%
H	Las Sabanas		4.12	0.31	1.23	0.22	2.17	3.93	-5%
H	Murra		6.42	1.10	3.80	0.49	2.07	7.47	16%
H	Prinzapolka		7.73	1.20	5.61	1.58	1.95	10.34	34%
H	San Dionisio		7.02	1.21	5.19	0.47	2.07	8.94	27%
H	San Fran. del Norte		3.68	0.50	1.82	0.43	2.17	4.92	34%
H	San José de Cusmapa		3.65	0.52	2.38	0.00	2.17	5.08	39%
H	San Juan de Nic.	n/a	1.85	0.10	0.00	0.00	2.17	2.27	23%
H	San Juan de Oriente		5.12	0.35	0.98	1.19	2.17	4.69	-8%
H	San Nicolas		3.38	0.50	1.54	1.74	1.88	5.67	67%
H	San Pedro del Norte		3.72	0.35	1.23	1.27	2.17	5.03	35%
H	Santa Maria		4.69	0.33	0.82	1.92	2.17	5.24	12%
H	Santa Rosa del Peñon		4.24	0.71	2.37	0.41	2.12	5.61	32%
H	Sto. Tomas del Norte		3.99	0.53	2.06	0.84	2.17	5.60	40%
H	Terrabona		5.45	0.95	3.44	0.76	2.17	7.31	34%
H	Totogalpa		5.46	0.89	4.08	2.16	1.66	8.79	61%
	TOTAL		1,044.54	312.09	312.09	312.09	312.09	1,280.38	--
	Standard Deviation (exc. Managua)		2.90	2.09	2.86	1.57	0.20	3.74	--
	Max. (exc. Managua)		16.56	12.92	15.20	7.34	2.17	23.67	271%
	Min.		1.85	0.00	0.00	0.00	0.00	2.27	-51%
	Mean (exc. Managua)		6.70	2.05	2.05	2.05	2.05	8.21	29%
	Median		6.19	1.32	1.11	1.48	2.16	7.43	22%

Source:

* Municipal categories for 2006 from AMUNIC, for 2007 from TRANSMUNI (MHCP)

** 2007 budget proposal

Annex K

Implementation Status of CFAA Action Plan, January 2006

CFAA Action Plan (January, 2004)	Status as of January, 2006
1. Implementation arrangements	
1a. The Government, IDA and IDB agree on a Memorandum of Understanding for the implementation of the Government action plan for improving PFM	Completed.
1b. Sign Government interagency accord for the implementation of the Government Action Plan (GAP)	Completed.
1c. Fully identify financing sources for GAP	Completed.
2. Legal framework	
2a. Complete inventory of PFM laws and regulations, determine duplications and or inconsistencies	Completed.
2b. Present draft Financial Administration Law to National Assembly	Completed.
2c. The National Assembly approves Financial Administration Law	Completed.
3. Budget Development	
3a. Calculate recurrent cost implications of the Public Investment Program <i>[In the context of the PRSC, the action was agreed as follows: SECEP has initiated the routine calculation of the recurrent cost implication of PIP and MCHP has initiated plans to create MTEF on this basis.]</i>	Completed (i.e., in terms of initiating the actions).
3b. Prepare medium term projections of fiscal revenues and expenditures	Completed.
3c. Identify and disclose all public funds in the 2005 national budget document	Substantially completed with the 2006 national budget document.
3d. Complement the budget document with explanations of the underlying macroeconomic framework and fiscal policy	Completed with the 2006 national budget document.
3e. Initiate adequate classification of capital and recurrent expenditures	Completed (i.e., in terms of initiating the actions).
3f. Identify and disclose all public funds, and consolidate them, in the 2006 national budget document	Substantially completed with the 2006 national budget document.
3g. Break-down composition of current and capital transfers, and institutional and functional classifications	Substantially completed. Sub-functional classification has not been adopted, but programmatic classification is used.
3h. Relate specific outputs to budgeted costs in sector development plans, to serve as a basis for ex-ante feasibility and ex-post execution	Not completed. In retrospect, the initial timetable for this action was too optimistic.
3i. Prepare fiscal budget under a Medium-Term Expenditure Framework	Partially completed with the 2006 national budget document.
3j. Classify capital and recurrent expenditures adequately	Not completed. Underlying work started, see No. 11, but there are important political economy obstacles to this action.
4. Integrated Financial Management System	
4a. Continue implementing SIGFA's treasury module in the central government	Completed (i.e., in terms of continuing implementation).
4b. Start implementation of the human resources modules consistent with the Civil Services Law	Completed (i.e., in terms of starting implementation).
4c. Complete design and integration of SIGFA's procurement and physical assets module in the central Government	Not completed. Work in progress.
4d. Appraise and enhance the security system and procedures	Not completed. Systems and procedures have been enhanced, but the formal audit has not yet been undertaken.

CFAA Action Plan (January, 2004)	Status as of January, 2006
4e. Prepare a strategy for extending SIGFA/CUT coverage at individual transaction level to noncommercial autonomous and decentralized entities	Not completed.
4f. Increase third level coverage, particularly in large implementation units such as hospitals	Completed (i.e., in terms of increasing coverage).
4g. Initiate implementation of SIGFA to INIFOM, IDR, FISE and ENACAL	Substantially completed. Initiated in INFOM, IDR, FISE and other entities, but not ENACAL.
4h. Implement SIGFA's human resource , procurement and physical assets module in the central Government	Not completed (work in progress). In retrospect, the initial timetable for this action was too optimistic.
4i. Increase coverage of other public sector entities and local governments	Completed (i.e., in terms of increasing coverage).
5. Treasury	
5a. Prepare detailed cash flow programs for budget releases, disaggregated by institution, to allow for planning and managing availabilities	Substantially completed. Cash flow programs are produced, but need to be improved.
5b. Agree and document reconciliation procedures with DGI, DGA, BCN and other banks	Substantially completed. Reconciliation procedures have been implemented, but need to be improved.
5c. Eliminate decision-making in scheduling individual expenses and payments at the central level, except for salaries and internal and external debt services	Not completed. Work in progress.
5d. Initiate treasury Single Account coverage at individual transaction level to INIFOM, IDR, FISE and ENACAL.	Not completed. These entities fall under the single treasury account system, but not at the level of individual payments.
6. Internal Control & Internal Audit	
6a. Prepare and fund action plan to strengthen internal controls and internal audits in at least 10 central government institutions, including MTI, MECD and MINSA.	Completed. A training action plan (six events, 240 internal auditors of 17 entities) was implemented by MHCP.
6b. Initiate execution of Government-led public expenditure tracking surveys	Not completed.
6c. Implement action plan to strengthen internal controls and internal audits, and incorporate feedback from continued execution of expenditure tracking surveys	Partially completed. Work in progress, through the introduction of the new internal control norms (NTCI) and correlated training by CGR (41 events in 2005, with 920 public sector officers attending).
6d. Clarify roles among internal audit units, MHCP, the Office of Public Ethic and the CGR	Completed.
6e. Start implementation of national internal audit coordination office	Dropped.
6f. Set up committees for control and follow up to internal and external audit reports in all executive branch entities	Completed (in certain entities, though effort was not sustained).
7. Deconcentrated Budget Execution	
7a. Evaluate the effectiveness of financial management and audit arrangements under the: (i) programs for education participation (school autonomy) and de-concentration of MECD's territorial delegations; and (ii) MINSA's basic health care units and deconcentrated hospitals, and their relation to SIGFA	Not completed.
7b. Accordingly, design program of recommended actions	Not completed.
7c. Implement program of actions	Not completed.
8. Monitoring and evaluation	

CFAA Action Plan (January, 2004)	Status as of January, 2006
8a. Implement an effective monitoring and evaluation system, yielding periodic reports	Completed (as monitored under instruments other than the CFAA).
8b. Systematically take effective actions on the basis of the M&E reports	Dropped (action to be monitored under instruments other than the CFAA).
9. Accounting and financial reporting	
9a. Restructure the government accounting function to focus on analysis and reporting, and less on transactional work. Segregate government asset administration from accounting function	Partially completed. The accounting directorate participates more on reporting and reconciliations, but the asset administration was not separated.
9b. Complete review and determination of 2002 initial balances of central government	Not completed officially.
9c. Prepare enhanced budget execution report for 2003 including a cash balance reconciliation, historical revenue/expenditure trends, and level of payment arrears	Not completed.
9d. Ensure budget transfers are documented by proper accountability reports on use of funds according to respective legal and normative framework	Not completed. Work in progress under new FM Law.
9e. Present enhanced budget execution report for 2004 to the same detail as the budget document	Not completed. The report has been enhanced, but the items mentioned in No. 42 have not been incorporated yet.
9f. Initiate reporting of output indicators in key programs	Not completed (work in progress under new FM Law). In retrospect, the initial timetable for this action was too optimistic.
9g. Cover all central government entities and consolidate them in the budget execution report	Not completed. Work in progress under new FM Law.
9h. Enforce audit and publication of financial statements of all public sector decentralized and autonomous entities and state enterprises	Not completed. Work in progress.
9i. Implement plan for issuance of government financial statements compatible with international practice	Not completed (work in progress under new FM Law). In retrospect, the initial timetable for this action was too optimistic.
10. External Audit	
10a. Make satisfactory progress per the indicators of the program for modernization of CGR	Dropped. It was agreed with the MOF that actions under the control of the CGR -an independent body- would not be part of the agreed FM Action Plan. Other donors support the CGR.
10b. Endorse a realistic plan for, and show progress toward, producing a compliance, financial audit report of government accounts	Not completed (additionally see No. 49).
10c. Issue annual audit on the government's budget execution report	Not completed (additionally see No. 49).
10d. Implement plan for audit of government financial statements	Not completed (additionally see No. 49).
10e. Independent audit firm to issue audit report of CGR's financial statements	Not completed (additionally see No. 49).
11. Public Participation	
11a. Prepare a draft law on public access to information after broad participatory process	Completed (i.e., in terms of preparing the draft law).
11b. The National Assembly approves law on public access to information	Not completed.
11c. Establish arrangements for access to information on public finances	Completed.
11d. Provide training to civil servants- and awareness for the general public- on the rights of access to government information	Completed, in terms of the Voluntary Strategy for Access to Information (EVA).

CFAA Action Plan (January, 2004)	Status as of January, 2006
11e. Enhance quality, clarity and usefulness of financial information available to public	Completed.
11f. Improve dissemination media, including posting in the internet and other means where such access is unavailable	Partially completed.
12. External aid coordination	
12a. Put in place efficient procedures to channel multilateral loan disbursements through treasury single account (CUT)	Partially completed. Loan accounts are part of the CUT, but the direct payment procedure is not yet efficient.
12b. Develop internal control and accountability procedures for the use of funds transferred from central implementation agencies	Completed through new FM Law and annual budget execution norms.
12c. Put in place efficient procedures to channel grants disbursements through the CUT	Partially completed. Budgeted grant accounts are part of the CUT, but the direct payment procedure is not yet efficient.
12d. Incorporate all public investment projects/ programs into the official registry of public investments and reconcile systematically against government accounting records	Partially completed. Incorporation has been increasingly fulfilled, but systematic reconciliations are pending.
12e. Agree on specific financial management arrangements for SWaps for Education For All fast track initiative strategy and the agriculture/forestry development program	Completed (FONSALUD and PRORURAL, not education).
12f. Collaborate in the organization of WB/IDB assessment and training of audit firms	Dropped.
12g. Record all external aid funds channeled through public sector entities in the SIGFA/CUT, in coordination with signatory agencies and donors.	Completed.
13. Human Resources	
13a. The National Assembly approves Civil Service Law	Completed.
13b. Execute training programs for financial managers and internal auditors in spending entities	Completed.
13c. Begin implementation of merit-based system for civil servants in the executive branch	Completed (in terms of beginning implementation). To be monitored under instruments other than the CFAA.
13d. Prepare proposals to include public administration and public audit in the universities program	Dropped.
13e. The CCPA strengthens accreditation framework for authorized public accountants	Dropped. It was agreed with the MOF that actions under the control of the CCPA -an independent body- would not be part of the agreed FM Action Plan. Other organizations support the CCPA.
14. Debt management	
14a. The National Assembly approves Public Debt Law	Completed.
14b. Enact Public Debt Law's regulations, including the procedures for extension of loans to autonomous and state-owned entities and for issuance of government guarantees	Completed.
14c. Clean up the debt databases and fully load domestic debt loans in SIGADE, including general information and individual transactions	Partially completed. MHCP uses a debt management information system different from and, in addition to, SIGADE.
14d. The MCHP and BCN effectively coordinate public debt management including the consolidation of SIGADE database and its automatic integration to SIGFA	Partially completed. Coordination has been enhanced, though under separate systems. Automatic links to SICOIN pending.
14e. Report debt and contingent liabilities information in the government financial statements	Not completed. Debt is reported, though not through financial statements (see No. 48).

CFAA Action Plan (January, 2004)	Status as of January, 2006
15. Revenue systems	
15a. Make satisfactory progress per the indicators of the program for strengthening of the tax and customs administration	Partially completed.
15b. Put in place integrated collections reporting procedures agreed with TGR	Substantially completed. Automatic collection reporting forms –MURs– operating in most agencies.
15c. DGI: Analyze the feasibility to transfer the tax collection function to the banking system	Completed.
15d. DGA: Analyze and initiate implementation of actions to deal with effects of customs integration project	
15e. Include calculation and explanation of tax expenditures in the agencies' monitoring reports	Partially completed. Study undertaken in 2005, but is not systematic yet.
15f. Put in place effective data-crossing mechanisms between DGI, DGA, the banking system and other institutions	Partially completed. Internal data cross-checks initiated, but checks against external data pending.
15g. DGI: Transfer tax collection to banking system if feasible	Partially completed. Filing and payment through the banking system to be initiated in 2006 with major taxpayers.

Annex L

Model Outline for Sector Expenditure Reviews

This Annex presents a generic outline for Sector Expenditure Reviews that seeks to cover most of the topics that are generally treated in such reviews. The data required to cover many of these topics may not always be available for each sector, however, and the relevance of each topic is likely to vary depending on the individual sector being analyzed. The model outline is therefore better treated as a checklist of possible ideas to pursue in an expenditure review, rather than as a rigid blueprint that all reviews must follow.

I. Introduction and Sector Overview.

- Strategic Context of the Sector Expenditure Review
 - Role of government versus private enterprise in the sector
- Definition of the sector institutions to be covered by the sector review
- Summary of the main findings from previous expenditure reviews
 - Key sector issues to look out for in this review

II. Level and Evolution of Sector Finances

A. Analysis of Sector Expenditures

- Summarize the major trends in sector resource allocation
- Analysis by institutional classification
 - a. Sector expenditures by level of government (i.e., central government, department level, provincial levels, local levels)
 - i. Comparison with spending allocations/trends in other countries
 - b. Evolution of sector expenditures by ministries/agencies.
 - c. Evolution of sector expenditures by programs
 - i. Intra-sectoral spending allocations (e.g., Administration versus Service Delivery within ministries)
- Analysis by economic classification (personnel, operations and maintenance, capital expenditures, interest)
 - d. Staff remunerations and incentives, evolution of sector employment, personnel management issues
 - i. Comparison of wage/employment levels in other countries with similar per-capita income levels
 - ii. Comparison of wage/performance indicators with comparable private sector entities
 - e. Investment expenditures versus current expenditures
 - i. Balance between capital and maintenance expenditures
 - a. Comparisons with capital/maintenance balance in other countries and sectors
 - ii. Recurrent cost implications of sector investment program
- The targeting of sector expenditures
 - a. Incidence of sector expenditures by geographic location
 - i. Urban versus rural
 - b. Incidence of sector expenditures by income quintile

- c. Incidence of sector expenditures by gender/age

B. Analysis of Sector Financing

- Sources of financing (gov't. budget, donor resources, local/state level resources)
- Cost recovery (payment for services)
 - a. Sector subsidization policies
 - b. Incidence analysis of subsidies

III. Analysis of Sector Outcomes and Performance

- A. Analysis of sector outcomes: patterns and trends of interest or concern, impact of sector performance on economic development
 - Comparisons with sector performance indicators in other comparator countries.
- B. Provision of sector services by
 - Region
 - Type of beneficiary (income group, gender group or age group)
 - i. Effects of user fees/cost recovery on use of services
- C. Alternative models for providing sector services
 - Opportunities for decentralizing service provision
 - Opportunities for private sector participation

IV. The Efficiency of Sector Expenditures

- A. Summary of findings from earlier cross-country efficiency analyses of public expenditures (e.g., based on data from Herrera and Pang (2004) or Machado (2006), as discussed in the World Bank's PER).
- B. Discussion of 'production function' linking sector expenditures with sector outcomes.
 - Comparison of sector-specific efficiency indexes with the indexes calculated for other countries, or across different periods.

V. Sector Expenditure Framework

- A. Present the sector policy and expenditure priorities identified by the government in the PRSP or other policy document.
 - a. Compare public priorities with the sector needs or service gaps identified earlier in the discussion on sector outcomes (Section III)
 - b. If possible, identify the specific short and medium-term sector outcome targets envisaged by the government
- B. Develop an expenditure framework for achieving the sector targets envisaged by the authorities, and estimate the total fiscal cost of achieving those targets with existing technologies and efficiency indexes.

- C. Alternatively, using the existing sector budget determine the most efficient intra-sectoral allocation of funds in terms of best responding to the sector priorities identified earlier without changing the overall sector expenditure amount.
- D. (The findings from this section should provide useful inputs for the annual planning exercises contemplated for the '*mesas sectoriales*' that were set up by the Nicaraguan authorities to advise on sector policies.)

VI. Sector Organization and Governance Arrangements

- A. Review of key findings from Nicaragua CFAA/CPAR
- B. Planning and budgeting processes, including procedures for allocating resources across different sector programs and activities.
 - a. Prioritization of policies/programs in sector plan and review of methodology for prioritization.
 - i. Is reference made to national plans?
 - ii. Is there a role for civil society in the prioritization process?
 - b. Preparation of the sector investment program
 - i. Are sector investment plans coordinated with recurrent expenditure plans?
 - c. Correspondence between plans and budgets
 - d. Budget preparation process; estimation of unit costs (if any?) and existence of a Medium Term Expenditure Framework within sector
 - e. Engagement of line personnel and decentralized agencies in budgeting process
- C. Budget execution and fiscal transparency
 - a. Timeliness and predictability of disbursements to Ministry, and from Ministry to agencies and local entities, and from local entities to beneficiaries
 - b. Adequacy of expenditure control mechanisms, including procurement
 - i. Importance of internal and external audits
 - ii. Estimates of the extent of 'expenditure leakages'
- D. Monitoring and evaluation arrangements
 - a. Are arrangements in place to systematically monitor sector outcomes and evaluate sector performance?
 - b. Do new projects systematically develop baseline indicators?
- E. Donor coordination mechanisms
 - a. How well are donor funds integrated into the budget process?
 - b. Is a SWAP arrangement in place?
 - i. What further reforms are needed to enable SWAP arrangements?

VII. Recommendations

- On the strategic role of the State in the sector
- On expenditure allocations
- On sector finances (including cost recovery)
- On efficiency-raising measures
- On sector prioritization processes
- On sector organization

Nicaragua: Key Macroeconomic Indicators
(% of GDP unless otherwise indicated)

	1998	1999	2000	2001	2002	2003	2004	2005	2006
	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Preliminary
Output and Prices									
Real GDP (% change)	3.7	7.0	4.1	3.0	0.8	2.5	5.1	4.0	3.7
Real GDP per capita (US\$)	746.0	760.0	779.0	788.0	753.0	748.0	799.0	850.0	908.0
Inflation Rate (cop CPI, % change)	18.5	7.2	9.9	4.6	4.0	6.6	8.9	9.7	8.6
CPI Index (1994 = 100)	158.3	169.6	186.4	195.0	202.7	216.1	235.4	258.2	280.4
GDP deflator (1996 = 100)	155.6	169.9	184.5	197.8	204.3	215.2	236.7	261.0	288.9
Real Exchange rate (2000=100)	98.9	96.9	100.0	100.9	96.9	91.2	88.6	87.7	88.2
Nominal Exchange rate (end of year)	11.2	12.3	13.1	13.8	14.7	15.6	16.3	17.1	18.0
Sector Composition of GDP^{1/}									
Agriculture	20.1	17.7	18.5	17.5	17.1	16.3	16.5	17.2	17.1
Industry	20.8	22.1	22.0	24.1	24.2	23.0	24.3	23.6	23.6
Services	49.7	51.4	51.3	51.4	51.7	53.5	52.6	51.8	51.8
Savings and investment									
Investment	25.2	33.3	28.8	26.8	24.9	24.8	28.3	29.3	28.1
Public	5.4	9.1	7.6	7.4	5.0	5.4	7.1	6.8	5.6
Private	19.8	24.2	21.2	19.4	19.9	19.4	21.2	22.5	22.5
Savings	10.7	13.5	10.8	8.8	7.0	7.6	11.6	13.4	13.9
Public	3.2	3.2	2.2	-0.2	-0.4	2.0	4.5	5.2	4.4
Private	7.5	10.3	8.6	9.0	7.4	5.6	7.1	8.2	9.5
Balance of Payments									
Trade Balance	-21.0	-28.6	-23.4	-22.2	-22.8	-23.7	-23.9	-26.7	-25.4
Exports, f.o.b.	21.3	20.0	22.4	21.8	22.8	25.6	30.3	31.6	36.2
o/w Zona Franca	5.3	5.4	6.0	7.5	8.8	10.9	13.5	14.1	-
Imports, f.o.b.	42.3	48.6	45.8	44.0	45.6	49.3	54.2	58.3	61.5
Income, services and transfers	1.7	3.8	3.3	2.8	3.7	5.4	8.4	10.9	11.1
Current Account balance	-19.3	-24.9	-20.1	-19.4	-19.1	-18.3	-15.5	-15.9	-14.2
Combined Public Sector^{2/}									
Primary Balance (after grants)	0.9	-1.2	-2.3	-2.8	-0.3	0.1	0.4	0.7	2.0
Overall Balance (after grants)	-2.0	-4.1	-5.1	-9.0	-5.4	-4.3	-2.8	-1.5	-0.3
Stock of Debt	212.5	207.2	204.0	193.5	197.7	215.8	93.5	90.3	68.9
Domestic	24.2	18.5	20.2	22.1	21.3	34.7	29.4	27.3	21.4
External	188.3	188.7	183.8	171.4	176.4	181.1	64.1	63.0	47.5
Memorandum Item									
Nominal GDP (C\$ millions)	37,805	44,198	49,952	55,155	57,376	61,959	71,661	82,162	94,318
GDP (US\$ millions)	3,572	3,742	3,936	4,103	4,026	4,102	4,498	4,911	5,369

Source: Ministry of Finance, Central Bank of Nicaragua, IMF and Bank calculations.

1/ at current prices.

2/ IMF

Cuadro A.1.1
NICARAGUA - Ingresos del Gobierno Central
(en millones de Cordobas)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Preliminar
Ingresos Corrientes	3,612.1	4,635.0	5,886.7	6,731.0	7,438.4	7,583.3	8,462.6	10,062.6	12,151.4	14,697.0	17,396.9
Ingresos Tributarios	-	-	5,408.0	6,144.7	6,801.4	6,923.1	7,695.0	9,378.6	11,206.3	13,556.7	16,000.4
Impuestos Directos	-	-	809.1	973.6	1,169.7	1,288.4	1,609.1	2,448.0	3,176.5	3,815.7	4,242.4
Impuestos Indirectos	-	-	4,598.9	5,171.1	5,631.7	5,634.7	6,085.9	6,930.6	8,029.8	9,741.0	11,758.0
Impuesto IVA	-	-	928.7	1,182.9	1,404.6	1,520.6	1,480.9	1,597.5	1,858.0	2,641.7	2,984.0
Sobre Determinado Consumo de Bienes	-	-	2,022.6	1,892.2	1,935.0	1,793.4	1,931.2	2,316.4	2,258.3	2,790.7	3,784.0
A la Importacion de Bienes	-	-	1,513.9	1,911.1	2,013.3	2,049.7	2,436.2	2,795.9	3,348.5	3,677.9	4,951.0
A las Transacciones y Actos Juridicos	-	-	16.9	13.0	11.1	11.8	12.3	13.1	14.8	20.6	18.5
35% a los B. y Serv. De Proc. Hondureno/Colo	-	-	0.0	4.6	71.7	69.6	39.4	3.6	6.7	19.3	20.5
Impuesto Especifico al Consumo a la Importacion	-	-	116.8	167.2	196.0	189.6	185.9	204.1	543.4	590.8	0.0
Ingresos no-Tributarios	-	-	245.7	248.7	273.1	266.9	348.7	193.4	331.6	447.1	599.8
Otros Ingresos Corrientes (destino especifico)	-	-	233.0	337.6	363.8	393.3	418.9	490.5	613.5	693.2	796.6
Destino Especifico	-	-	233.0	337.6	363.8	393.3	398.3	469.5	556.2	647.9	657.2
Transferencias corrientes	-	-	0.0	0.0	0.0	0.0	20.5	21.0	57.3	45.3	139.4
Ingresos de Capital	42.1	24.6	121.2	65.1	3.5	50.9	25.8	6.3	1.3	10.0	15.3
Ingresos Totales	3,654.2	4,659.6	6,008.0	6,796.1	7,441.9	7,634.2	8,488.4	10,068.9	12,152.7	14,707.0	17,412.1

Fuente: Ministerio de Hacienda y Credito Publico

Cuadro A.1.2
NICARAGUA - Ingresos del Gobierno Central
 (en porcentaje del PIB)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Preliminar
Ingresos Corrientes	12.9	14.5	15.6	15.2	14.9	13.7	14.7	16.2	17.0	17.9	18.4
Ingresos Tributarios	-	-	14.3	13.9	13.6	12.6	13.4	15.1	15.6	16.5	17.0
Impuestos Directos	-	-	2.1	2.2	2.3	2.3	2.8	4.0	4.4	4.6	4.5
Impuestos Indirectos	-	-	12.2	11.7	11.3	10.2	10.6	11.2	11.2	11.9	12.5
Impuesto IVA	-	-	2.5	2.7	2.8	2.8	2.6	2.6	2.6	3.2	3.2
Sobre Determinado Consumo de Bienes	-	-	5.4	4.3	3.9	3.3	3.4	3.7	3.2	3.4	4.0
A la Importación de Bienes	-	-	4.0	4.3	4.0	3.7	4.2	4.5	4.7	4.5	5.2
A las Transacciones y Actos Jurídicos	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35% a los B. y Serv. De Proc. Hondureno/Colo	-	-	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Impuesto Especifico al Consumo a la Importación	-	-	0.3	0.4	0.4	0.3	0.3	0.3	0.8	0.7	0.0
Ingresos no-Tributarios	-	-	0.6	0.6	0.5	0.5	0.6	0.3	0.5	0.5	0.6
Otros Ingresos Corrientes (destino específico)	-	-	0.6	0.8	0.7	0.7	0.7	0.8	0.9	0.8	0.8
Destino Especifico	-	-	0.6	0.8	0.7	0.7	0.7	0.8	0.8	0.8	0.7
Transferencias corrientes	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Ingresos de Capital	0.2	0.1	0.3	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Ingresos Totales	13.0	14.6	15.9	15.4	14.9	13.8	14.8	16.3	17.0	17.9	18.5

Fuente: Ministerio de Hacienda y Credito Publico

PIB nominal

28008.7 31967.1 37804.5 44197.8 49952 55155.3 57376 61958.5 71660.8 82161.8 94318

Cuadro A.1.3
NICARAGUA - Gasto del Gobierno Central por Institucion
 (en millones de Cordobas)

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		2006	
	Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual	Preliminar
Asamblea Nacional	65.0		87.6		110.9		143.2		150.1		174.5		196.4		228.8		243.9		283.1		283.1	307.7
Corte Suprema de Justicia	66.8		123.4		186.9		243.8		274.6		359.4		375.1		438.6		472.4		586.8		586.8	769.9
Consejo Supremo Electoral	305.0		54.3		72.5		66.7		73.4		622.7		208.2		98.0		312.6		233.5		233.5	886.9
Contraloria General de la Republica	15.6		29.2		38.1		38.9		38.9		63.9		73.0		73.7		79.0		89.0		89.0	106.8
Presidencia de la Republica	46.2		68.9		89.5		134.5		144.9		145.9		143.6		160.6		160.2		185.1		185.1	197.7
Ministerio de Gobernacion	236.1		239.7		315.2		384.7		360.8		511.0		627.3		699.3		737.4		858.2		858.2	1,017.2
Ministerio de Relaciones Exteriores	119.4		133.8		145.4		159.1		173.1		245.8		261.4		255.5		279.5		318.2		318.2	330.5
Ministerio de Defensa	232.0		256.2		269.5		312.7		311.4		357.3		450.7		499.9		481.0		532.8		532.8	619.4
Ministerio de Hacienda y Credito Publico	71.0		85.7		163.8		194.7		187.3		81.4		81.9		72.2		75.2		85.7		85.7	93.6
Ministerio de Fomento, Industria y Fomento	19.4		19.3		73.9		58.9		68.6		75.6		87.9		83.6		76.3		77.2		77.2	89.8
Ministerio de Educacion, Cultura y Deporte	396.4		425.5		544.8		716.3		829.2		877.7		1,085.9		1,167.1		1,416.0		1,787.5		1,787.5	2,334.3
Ministerio Agropecuarios y Forestal	43.5		51.5		79.3		82.9		83.8		93.9		100.4		93.5		96.6		143.7		143.7	155.4
Ministerio de Transporte e Infraestructura	27.2		23.8		35.6		40.0		39.7		50.0		56.1		55.4		57.9		73.2		73.2	79.2
Ministerio de Salud	535.4		624.0		784.8		1,168.3		1,236.8		1,229.4		1,287.3		1,465.8		1,476.3		2,015.9		2,015.9	2,544.7
Ministerio de Trabajo	27.1		15.6		22.6		27.9		26.9		32.8		28.2		26.0		27.1		40.4		40.4	43.2
Ministerio de Ambiente y Recursos Naturales	10.8		10.0		13.0		15.6		16.5		18.8		21.9		20.5		22.7		25.5		25.5	31.4
Ministerio de la Familia	7.1		13.1		19.3		69.7		95.1		59.3		63.4		54.4		73.5		86.5		86.5	86.7
Instituto Nicaraguense de Fomento Municipal	9.5		8.3		11.1		23.6		22.4		12.9		12.7		9.6		9.2		10.3		10.3	0.0
Procuraduria General	12.3		11.5		16.2		18.3		17.8		21.9		11.6		16.3		17.4		22.7		22.7	26.4
Servicio de la Deuda	485.5		904.5		1,053.0		859.4		1,431.0		1,173.0		1,638.2		2,853.9		1,461.1		951.2		951.2	1,699.5
Partidas no asignables a Organismos	472.1		629.8		687.1		632.8		710.8		892.4		1,116.9		1,246.3		1,527.6		2,178.8		2,178.8	2,955.3
Total Gasto Corriente	3,203.5		3,815.6		4,732.4		5,391.8		6,293.1		7,099.7		7,928.2		9,619.0		9,103.1		10,585.3		10,585.3	14,375.6

Fuente: Ministerio de Hacienda y Credito Publico

Cuadro A.1.3
NICARAGUA - Gasto del Gobierno Central por Institucion
(en millones de Cordobas)

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		2006	
	Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual	Preliminar
Asamblea Nacional	2.2		2.5		10.5		6.4		15.3		13.2		0.5		12.9		5.7		12.5		11.2	
Corte Suprema de Justicia	28.6		28.9		40.5		15.3		25.0		12.7		11.3		42.1		22.4		56.1		79.7	
Consejo Supremo Electoral	88.5		0.0		0.6		1.8		2.9		55.8		0.7		0.0		13.4		2.3		46.3	
Contraloria General de la Republica	0.5		0.1		1.6		0.0		0.0		0.2		1.8		3.6		10.7		10.5		16.9	
Presidencia de la Republica	152.5		107.2		43.0		298.8		148.5		77.9		99.2		61.9		46.6		47.2		66.7	
Ministerio de Gobernacion	72.7		23.8		16.2		21.2		33.3		31.4		21.0		45.3		50.1		72.2		40.3	
Ministerio de Relaciones Exteriores	0.0		0.6		0.3		17.2		32.9		4.8		0.8		10.7		1.8		2.2		23.9	
Ministerio de Defensa	34.0		30.1		8.3		5.6		8.2		19.8		45.7		33.4		39.0		37.7		35.7	
Ministerio de Hacienda y Credito Publico	38.0		52.8		38.7		28.1		33.8		14.8		9.3		7.4		9.9		11.3		22.7	
Ministerio de Fomento, Industria y Fomento	20.2		14.8		16.6		9.2		7.5		10.6		23.2		80.1		128.2		158.2		259.6	
Ministerio de Educacion, Cultura y Deporte	158.3		282.6		218.0		561.1		614.9		501.7		438.7		648.9		646.7		796.1		627.0	
Ministerio Agropecuarios y Forestal	69.6		172.6		171.7		366.9		269.1		255.6		244.5		301.7		322.7		305.4		389.6	
Ministerio de Transporte e Infraestructura	398.1		440.3		706.9		1,431.9		1,322.2		1,177.7		881.2		1,000.7		1,282.1		1,360.5		1,704.5	
Ministerio de Salud	179.2		142.1		43.6		251.5		521.9		319.5		370.4		567.0		657.1		643.7		593.6	
Ministerio de Trabajo	7.8		9.2		7.6		28.7		63.3		25.3		24.8		22.1		24.3		46.2		54.5	
Ministerio de Ambiente y Recursos Naturales	72.7		109.7		134.1		141.5		211.8		170.5		151.7		202.3		308.4		258.6		260.6	
Ministerio de la Familia	5.9		7.5		12.2		73.6		114.3		61.0		63.4		247.3		343.9		297.3		215.8	
Instituto Nicaraguense de Fomento Municipal	77.7		46.5		61.9		319.5		288.0		125.6		95.5		111.3		143.9		141.6		0.0	
Procuraduria General	1.0		0.5		2.6		0.2		0.0		0.9		1.5		2.2		3.9		3.1		3.7	
Partidas no asignables a Organismos	263.2		414.0		460.0		1,143.3		933.4		1,338.6		1,289.5		1,921.9		2,803.1		3,487.1		3,215.2	
Total Gasto de Capital	1,670.7		1,885.9		1,994.9		4,721.7		4,646.3		4,217.7		3,774.8		5,322.7		6,863.9		7,749.8		7,667.5	

Fuente: Ministerio de Hacienda y Credito Publico

Cuadro A.1.4
NICARAGUA - Gasto del Gobierno Central por Institucion
(en millones de Cordobas)

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		2006		
	Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual	Preliminar	
GASTO TOTAL	67.3	90.1	121.4	149.6	165.4	187.8	196.9	241.7	249.6	295.6	318.9	372.2	386.4	480.7	494.8	642.9	849.6	933.2	933.2	99.5	123.7	264.4	1,057.5
Asamblea Nacional	95.4	152.3	227.4	259.1	299.6	372.2	386.4	480.7	494.8	642.9	849.6	933.2	933.2	99.5	123.7	264.4	1,057.5	1,057.5	320.4	354.4	570.5	655.1	116.3
Corte Suprema de Justicia	393.5	54.4	73.1	68.5	76.2	678.5	208.9	98.0	326.0	235.8	933.2	235.8	235.8	77.3	89.7	99.5	123.7	264.4	232.3	930.4	320.4	570.5	655.1
Consejo Supremo Electoral	16.2	29.4	39.7	38.9	38.9	64.1	74.8	77.3	89.7	99.5	123.7	264.4	264.4	222.5	206.8	232.3	264.4	1,057.5	930.4	320.4	570.5	655.1	116.3
Contraloria General de la Republica	198.6	176.1	132.5	433.3	293.4	223.8	242.8	222.5	206.8	232.3	264.4	1,057.5	1,057.5	744.6	787.5	930.4	320.4	570.5	320.4	570.5	655.1	116.3	116.3
Presidencia de la Republica	308.8	263.5	331.3	405.9	394.1	542.4	648.4	744.6	787.5	930.4	320.4	570.5	655.1	262.1	281.3	320.4	570.5	655.1	570.5	655.1	116.3	116.3	116.3
Ministerio de Gobernacion	119.4	134.4	145.7	176.3	206.0	250.5	262.1	266.2	281.3	320.4	570.5	655.1	655.1	496.4	520.1	570.5	655.1	655.1	570.5	655.1	116.3	116.3	116.3
Ministerio de Relaciones Exteriores	265.9	286.3	277.8	318.3	319.6	377.1	496.4	533.3	520.1	570.5	655.1	655.1	655.1	91.2	85.1	97.0	116.3	116.3	97.0	116.3	116.3	116.3	116.3
Ministerio de Defensa	109.0	138.5	202.6	222.8	221.1	96.2	91.2	79.6	85.1	97.0	116.3	116.3	116.3	111.1	204.5	235.4	349.4	2,961.3	2,583.6	2,961.3	545.0	545.0	545.0
Ministerio de Hacienda y Credito Publico	39.6	34.1	90.4	68.1	76.1	86.3	111.1	163.6	204.5	235.4	349.4	349.4	349.4	1,524.6	2,062.7	2,583.6	2,961.3	2,961.3	2,583.6	2,961.3	545.0	545.0	545.0
Ministerio de Fomento, Industria y Fomento	554.7	708.1	762.9	1,277.4	1,444.0	1,379.4	1,524.6	1,816.0	2,062.7	2,583.6	2,961.3	2,961.3	2,961.3	395.2	419.3	449.1	545.0	545.0	449.1	545.0	545.0	545.0	545.0
Ministerio de Educacion, Cultura y Deporte	113.0	224.1	250.9	449.8	352.9	349.6	344.9	395.2	419.3	449.1	545.0	545.0	545.0	1,056.1	1,340.1	1,433.7	1,783.7	1,783.7	1,433.7	1,783.7	1,783.7	1,783.7	1,783.7
Ministerio de Transporte e Infraestructura	425.3	464.1	742.5	1,471.9	1,361.9	1,227.7	937.3	1,056.1	1,340.1	1,433.7	1,783.7	1,783.7	1,783.7	2,032.8	2,133.4	2,659.6	3,138.3	3,138.3	2,659.6	3,138.3	3,138.3	3,138.3	3,138.3
Ministerio de Agropecuarias y Forestal	714.6	766.1	828.4	1,419.7	1,758.7	1,548.9	1,657.7	2,032.8	2,133.4	2,659.6	3,138.3	3,138.3	3,138.3	48.1	51.5	86.6	97.7	97.7	86.6	97.7	97.7	97.7	97.7
Ministerio de Salud	34.9	24.8	30.3	56.6	90.2	58.0	53.0	48.1	51.5	86.6	97.7	97.7	97.7	331.1	311.1	284.1	292.0	292.0	284.1	292.0	292.0	292.0	292.0
Ministerio de Trabajo	83.5	119.7	147.1	157.0	228.3	189.3	173.7	222.8	331.1	311.1	284.1	292.0	292.0	301.7	417.4	383.8	302.5	302.5	383.8	302.5	302.5	302.5	302.5
Ministerio de Ambiente y Recursos Naturales	13.0	20.6	31.4	143.3	209.5	120.3	126.8	301.7	417.4	383.8	302.5	302.5	302.5	120.8	153.2	151.9	0.0	0.0	151.9	0.0	0.0	0.0	0.0
Ministerio de la Familia	87.3	54.7	73.0	343.1	310.4	138.5	108.2	120.8	153.2	151.9	0.0	0.0	0.0	18.6	21.3	25.8	30.1	30.1	25.8	30.1	30.1	30.1	30.1
Instituto Nicaraguense de Fomento Municipal	13.3	12.0	18.8	18.5	17.8	22.8	13.2	18.6	21.3	25.8	30.1	30.1	30.1	2,853.9	1,461.1	951.2	1,699.5	1,699.5	951.2	1,699.5	1,699.5	1,699.5	1,699.5
Procuraduria General	485.5	904.5	1,053.0	859.4	1,431.0	1,173.0	1,638.2	2,853.9	1,461.1	951.2	1,699.5	1,699.5	1,699.5	3,168.2	4,330.7	5,665.9	6,170.5	6,170.5	5,665.9	6,170.5	6,170.5	6,170.5	6,170.5
Servicio de la Deuda	735.4	1,043.8	1,147.1	1,776.0	1,644.3	2,231.0	2,406.4	3,168.2	4,330.7	5,665.9	6,170.5	6,170.5	6,170.5	14,941.7	15,967.0	18,335.1	22,043.1	22,043.1	18,335.1	22,043.1	22,043.1	22,043.1	22,043.1
Partidas no asignables a Organismos	4,874.1	5,701.4	6,727.4	10,113.5	10,939.5	11,317.4	11,703.0	14,941.7	15,967.0	18,335.1	22,043.1	22,043.1	22,043.1	15,967.0	18,335.1	22,043.1	22,043.1	22,043.1	18,335.1	22,043.1	22,043.1	22,043.1	22,043.1
Gasto Total	4,874.1	5,701.4	6,727.4	10,113.5	10,939.5	11,317.4	11,703.0	14,941.7	15,967.0	18,335.1	22,043.1	22,043.1	22,043.1	15,967.0	18,335.1	22,043.1	22,043.1	22,043.1	18,335.1	22,043.1	22,043.1	22,043.1	22,043.1

Fuente: Ministerio de Hacienda y Credito Publico

Cuadro A.1.5
NICARAGUA - Gasto del Gobierno Central por Institucion
(en porcentaje del Gasto Total)

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		2006			
	Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual	Preliminar		
GASTO TOTAL	1.4		1.6		1.8		1.5		1.5		1.5		1.7		1.7		1.6		1.6		1.6		1.6	
Asamblea Nacional	2.0		2.7		3.4		2.6		2.6		2.7		3.3		3.3		3.2		3.1		3.1		3.5	
Corte Suprema de Justicia	8.1		1.0		1.1		0.7		0.7		0.7		6.0		1.8		0.7		2.0		2.0		1.3	
Consejo Supremo Electoral	0.3		0.5		0.6		0.4		0.4		0.4		0.6		0.6		0.5		0.6		0.6		0.5	
Contraloria General de la Republica	4.1		3.1		2.0		4.3		2.7		2.7		2.0		2.1		1.5		1.3		1.3		1.3	
Presidencia de la Republica	6.3		4.6		4.9		4.0		3.6		3.6		4.8		5.5		5.0		4.9		4.9		5.1	
Ministerio de Gobernacion	2.4		2.4		2.2		1.7		1.9		1.9		2.2		2.2		1.8		1.8		1.8		1.7	
Ministerio de Relaciones Exteriores	5.5		5.0		4.1		3.1		3.1		2.9		3.3		4.2		3.6		3.3		3.3		3.1	
Ministerio de Defensa	2.2		2.4		3.0		2.2		2.0		2.0		0.9		0.8		0.5		0.5		0.5		0.5	
Ministerio de Hacienda y Credito Publico	0.8		0.6		1.3		0.7		0.7		0.7		0.8		0.9		1.1		1.3		1.3		1.3	
Ministerio de Fomento, Industria y Fomento	11.4		12.4		11.3		12.6		13.2		13.2		12.2		13.0		12.2		12.9		14.1		13.4	
Ministerio de Educacion, Cultura y Deporte	2.3		3.9		3.7		4.4		3.2		3.2		3.1		2.9		2.6		2.6		2.6		2.4	
Ministerio Agropecuarios y Forestal	8.7		8.1		11.0		14.6		12.4		12.4		10.8		8.0		7.1		8.4		8.4		7.8	
Ministerio de Transporte e Infraestructura	14.7		13.4		12.3		14.0		16.1		16.1		13.7		14.2		13.6		13.4		14.5		14.2	
Ministerio de Salud	0.7		0.4		0.4		0.6		0.8		0.8		0.5		0.5		0.3		0.3		0.3		0.5	
Ministerio de Trabajo	1.7		2.1		2.2		1.6		2.1		2.1		1.7		1.5		1.5		2.1		2.1		1.5	
Ministerio de Ambiente y Recursos Naturales	0.3		0.4		0.5		1.4		1.9		1.9		1.1		1.1		2.0		2.6		2.6		2.1	
Ministerio de la Familia	1.8		1.0		1.1		3.4		2.8		2.8		1.2		0.9		0.8		1.0		1.0		0.8	
Instituto Nicaraguense de Fomento Municipal	0.3		0.2		0.3		0.2		0.2		0.2		0.2		0.1		0.1		0.1		0.1		0.1	
Procuraduria General	10.0		15.9		15.7		8.5		13.1		13.1		10.4		14.0		19.1		9.2		9.2		5.2	
Servicio de la Deuda	15.1		18.3		17.1		17.6		15.0		15.0		19.7		20.6		21.2		27.1		30.9		28.0	
Partidas no asignables a Organismos	100		100		100		100		100		100		100		100		100		100		100		100	
Total Gasto Gobierno Central	100		100		100		100		100		100		100		100		100		100		100		100	

Fuente: Ministerio de Hacienda y Credito Publico

Cuadro A.1.6
NICARAGUA - Gasto del Gobierno Central por Institucion
(en porcentaje del PIB)

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		2006		
	Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual	Preliminar	
GASTO TOTAL	0.2		0.3		0.3		0.3		0.3		0.3		0.3		0.3		0.4		0.3		0.4		0.3
Asamblea Nacional	0.3		0.5		0.6		0.6		0.6		0.7		0.7		0.7		0.8		0.7		0.8		0.9
Corte Suprema de Justicia	1.4		0.2		0.2		0.2		0.2		1.2		0.4		0.2		0.2		0.5		0.3		1.0
Consejo Supremo Electoral	0.1		0.1		0.1		0.1		0.1		0.1		0.1		0.1		0.1		0.1		0.1		0.1
Contraloria General de la Republica	0.7		0.6		0.4		1.0		0.6		0.4		0.4		0.4		0.4		0.3		0.3		0.3
Presidencia de la Republica	1.1		0.8		0.9		0.9		0.8		1.0		1.1		1.1		1.2		1.1		1.1		1.1
Ministerio de Gobernacion	0.4		0.4		0.4		0.4		0.4		0.4		0.5		0.4		0.4		0.4		0.4		0.4
Ministerio de Relaciones Exteriores	0.9		0.9		0.7		0.7		0.6		0.7		0.7		0.9		0.9		0.7		0.7		0.7
Ministerio de Defensa	0.4		0.4		0.5		0.5		0.4		0.2		0.2		0.2		0.1		0.1		0.1		0.1
Ministerio de Hacienda y Credito Publico	0.1		0.1		0.2		0.2		0.2		0.2		0.2		0.2		0.3		0.3		0.3		0.4
Ministerio de Fomento, Industria y Fomento	2.0		2.2		2.0		2.9		2.9		2.5		2.5		2.7		2.9		2.9		3.1		3.1
Ministerio de Educacion, Cultura y Deporte	0.4		0.7		0.7		1.0		0.7		0.6		0.6		0.6		0.6		0.6		0.5		0.6
Ministerio Agropecuarios y Forestal	1.5		1.5		2.0		2.0		3.3		2.7		2.2		1.6		1.7		1.9		1.7		1.9
Ministerio de Transporte e Infraestructura	2.6		2.4		2.2		3.2		3.2		3.5		2.8		2.9		3.3		3.0		3.2		3.3
Ministerio de Salud	0.1		0.1		0.1		0.1		0.1		0.2		0.1		0.1		0.1		0.1		0.1		0.1
Ministerio de Trabajo	0.3		0.4		0.4		0.4		0.4		0.5		0.3		0.3		0.4		0.5		0.3		0.3
Ministerio de Ambiente y Recursos Naturales	0.0		0.1		0.1		0.1		0.3		0.4		0.2		0.2		0.5		0.6		0.5		0.3
Ministerio de la Familia	0.3		0.2		0.2		0.8		0.6		0.6		0.3		0.2		0.2		0.2		0.2		0.0
Instituto Nicaraguense de Fomento Municipal	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0
Procuraduria General	1.7		2.8		2.8		1.9		2.9		2.1		2.9		2.9		4.6		2.0		1.2		1.8
Servicio de la Deuda	2.6		3.3		3.0		4.0		3.3		4.0		4.0		4.2		5.1		6.0		6.9		6.5
Partidas no asignables a Organismos	17.4		17.8		17.8		22.9		21.9		20.5		20.4		24.1		22.3		22.3		22.3		23.4
Total Gasto Gobierno Central	28,008.7		31,967.1		37,804.5		44,197.8		49,952.0		55,155.3		57,376.0		61,958.5		71,660.8		82,161.8		82,161.8		94,318.0
PIB nominal (Millones de Cordobas)																							
Fuente: Ministerio de Hacienda y Credito Publico																							

Memo:

PIB nominal (Millones de Cordobas)

Fuente: Ministerio de Hacienda y Credito Publico

Cuadro A.1.7
NICARAGUA - Balance del Gobierno Central
(en millones de Cordobas)

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		2006	
	Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual	Preliminar
Ingresos Totales	3,654.2		4,659.6		6,008.0		6,796.1		7,441.9		7,634.2		8,488.4		10,068.9		12,152.7		14,707.0		17,412.1	
Ingresos Corrientes	3,612.1		4,635.0		5,886.7		6,731.0		7,438.4		7,583.3		8,462.6		10,062.6		12,151.4		14,697.0		17,396.9	
Ingresos de Capital	42.1		24.6		121.2		65.1		3.5		50.9		25.8		6.3		1.3		10.0		15.3	
Gastos Totales	4,874.1		5,701.4		6,727.4		10,113.5		10,939.5		11,317.4		11,703.0		14,941.7		15,966.9		18,336.9		21,157.8	
Gasto Corriente	3,203.5		3,815.6		4,679.7		5,391.8		6,193.2		7,234.5		7,928.2		9,619.0		9,103.0		10,593.6		14,375.5	
Sueldos y Salarios	1,031.7		1,208.6		1,669.6		2,008.0		2,297.8		2,691.2		2,909.1		3,259.3		3,454.7		4,017.9		4,878.4	
Bienes y Servicios	890.6		735.8		918.9		1,240.2		961.4		1,547.9		1,342.1		1,332.3		1,514.4		1,835.8		2,704.5	
Intereses sobre la Deuda	485.5		904.5		1,053.0		859.4		1,431.0		1,173.0		1,638.2		2,853.9		1,461.1		959.5		1,699.4	
Deuda Interna	48.8		95.0		324.3		319.4		495.1		406.8		950.2		1,598.2		1,256.6		575.9		-	
Deuda Externa	436.7		809.5		728.7		540.0		935.9		766.3		688.0		1,255.7		204.6		383.6		-	
Transferencias Corrientes	795.6		966.6		1,038.2		1,284.2		1,503.0		1,822.4		2,038.7		2,173.5		2,672.8		3,780.4		5,093.2	
al Sector Privado	403.6		466.5		509.2		572.0		599.4		723.3		835.8		846.6		1,062.6		1,314.6		994.2	
al Sector Publico	376.6		463.0		489.5		662.7		849.2		1,039.2		1,148.3		1,276.9		1,562.4		2,382.7		4,067.9	
al Sector Externo	15.4		37.1		39.5		49.5		54.4		59.9		54.7		50.0		47.9		83.2		31.1	
Gasto de Capital	1,670.7		1,885.9		2,047.6		4,721.7		4,746.3		4,082.8		3,774.8		5,322.7		6,863.9		7,743.2		6,782.3	
Inversion Real Directa	911.0		983.7		1,216.6		2,287.6		2,647.5		2,142.3		2,403.7		3,426.5		4,237.1		4,436.7		3,224.8	
Transferencias de Capital	695.3		902.2		831.0		2,176.9		2,081.8		1,940.5		1,371.1		1,896.1		2,626.8		3,286.5		3,557.5	
Balance Primario	-734.4		-137.4		333.6		-2,458.0		-2,066.6		-2,510.1		-1,576.4		-2,018.8		-2,353.1		-2,670.3		-2,046.3	
Balance General	-1,219.9		-1,041.8		-719.4		-3,317.4		-3,497.6		-3,683.2		-3,214.6		-4,872.7		-3,814.2		-3,629.8		-3,745.7	
Financiamiento Total	1,219.9		1,041.8		719.4		3,317.4		3,514.8		3,683.2		3,214.6		4,872.8		3,814.3		3,629.8		3,745.7	
Donaciones Externas	1,149.1		821.7		0.0		1,948.7		1,648.4		1,927.6		2,164.5		3,328.9		2,070.8		3,059.9		3,772.7	
Financiamiento Neto Externo	851.7		265.2		556.9		2,400.7		1,217.0		968.1		1,128.6		2,454.3		4,032.5		2,793.5		3,018.2	
Desembolsos	1,468.2		1,014.6		1,216.6		2,976.4		2,098.0		1,825.5		2,269.7		4,445.6		4,376.3		3,195.8		3,489.8	
- Amortizacion	-616.5		-749.4		-659.7		-575.7		-881.0		-857.3		-1,141.1		-1,991.3		-343.8		-402.3		-471.6	
Financiamiento Neto Interno	-780.9		-45.1		162.5		-1,032.0		649.4		787.4		-78.5		-910.4		-2,289.0		-2,223.6		-3,045.2	

Fuente: Ministerio de Hacienda y Credito Publico

Cuadro A.1.8
NICARAGUA - Balance del Gobierno Central
(en porcentaje del PIB)

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		2006		
	Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual		Preliminar		
Ingresos Totales	13.0		14.6		15.9		15.4		14.9		13.8		14.8		16.3		17.0		17.0		17.9		18.5
Ingresos Corrientes	12.9		14.5		15.6		15.2		14.9		13.7		14.7		16.2		17.0		17.0		17.9		18.4
Ingresos de Capital	0.2		0.1		0.3		0.1		0.0		0.1		0.0		0.0		0.0		0.0		0.0		0.0
Gastos Totales	17.4		17.8		17.8		22.9		21.9		20.5		20.4		24.1		22.3		22.3		22.3		22.4
Gasto Corriente	11.4		11.9		12.4		12.2		12.4		13.1		13.8		15.5		12.7		12.7		12.9		15.2
Sueldos y Salarios	3.7		3.8		4.4		4.5		4.6		4.9		5.1		5.3		4.8		4.8		4.9		5.2
Bienes y Servicios	3.2		2.3		2.4		2.8		1.9		2.8		2.3		2.2		2.1		2.1		2.2		2.9
Intereses sobre la Deuda	1.7		2.8		2.8		1.9		2.9		2.1		2.9		4.6		2.0		2.0		1.2		1.8
Deuda Interna	0.2		0.3		0.9		0.7		1.0		0.7		1.7		2.6		1.8		1.8		0.7		-
Deuda Externa	1.6		2.5		1.9		1.2		1.9		1.4		1.2		2.0		0.3		0.3		0.5		-
Transferencias Corrientes al Sector Privado	2.8		3.0		2.7		2.9		3.0		3.3		3.6		3.5		3.7		3.7		4.6		5.4
Transferencias Corrientes al Sector Público	1.4		1.5		1.3		1.3		1.2		1.3		1.5		1.4		1.5		1.5		1.6		1.1
Transferencias Corrientes al Sector Externo	1.3		1.4		1.3		1.5		1.7		1.9		2.0		2.1		2.2		2.2		2.9		4.3
Gasto de Capital	0.1		0.1		0.1		0.1		0.1		0.1		0.1		0.1		0.1		0.1		0.1		0.0
Gasto de Capital	6.0		5.9		5.4		10.7		9.5		7.4		6.6		8.6		9.6		9.6		9.4		7.2
Inversion Real Directa	3.3		3.1		3.2		5.2		5.3		3.9		4.2		5.5		5.9		5.9		5.4		3.4
Transferencias de Capital	2.5		2.8		2.2		4.9		4.2		3.5		2.4		3.1		3.7		3.7		4.0		3.8
Balance Primario	-2.6		-0.4		0.9		-5.6		-4.1		-4.6		-2.7		-3.3		-3.3		-3.3		-3.3		-2.2
Balance General	-4.4		-3.3		-1.9		-7.5		-7.0		-6.7		-5.6		-7.9		-5.3		-5.3		-4.4		-4.0
Financiamiento Total	4.4		3.3		1.9		7.5		7.0		6.7		5.6		7.9		5.3		5.3		4.4		4.0
Donaciones Externas	4.1		2.6		0.0		4.4		3.3		3.5		3.8		5.4		2.9		2.9		3.7		4.0
Financiamiento Neto Externo	3.0		0.8		1.5		5.4		2.4		1.8		2.0		4.0		5.6		5.6		3.4		3.2
Desembolsos	5.2		3.2		3.2		6.7		4.2		3.3		4.0		7.2		6.1		6.1		3.9		3.7
- Amortización	-2.2		-2.3		-1.7		-1.3		-1.8		-1.6		-2.0		-3.2		-0.5		-0.5		-0.5		-0.5
Financiamiento Neto Interno	-2.8		-0.1		0.4		-2.3		1.3		1.4		-0.1		-1.5		-3.2		-3.2		-2.7		-3.2
<i>Memo:</i>																							
PIB nominal (Millones de Cordobas)	28008.7		31967.1		37804.5		44197.8		49952		55155.3		57376		61958.5		71660.8		71660.8		82161.8		94318.0

Fuente: Ministerio de Hacienda y Credito Publico

Cuadro A.1.8
NICARAGUA - Gasto del Gobierno General por Sector
 (en millones de Córdoba)

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		2006		
	Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual		Preliminar		
GASTO CORRIENTE																							
Servicios Sociales	1,190.8	1,386.1	1,745.2	2,455.6	2,718.1	2,868.6	3,120.4	3,422.6	3,877.8	3,877.8	3,422.6	3,120.4	3,422.6	3,877.8	3,877.8	3,422.6	3,120.4	3,422.6	3,877.8	5,037.4	5,037.4	6,673.5	6,673.5
Infraestructura y Producción	251.2	400.1	452.8	299.8	347.5	423.2	355.2	324.4	304.7	304.7	324.4	355.2	324.4	304.7	304.7	324.4	355.2	304.7	304.7	398.3	398.3	889.4	889.4
Defensa y Seguridad	468.1	495.9	584.6	697.4	672.3	868.3	1,078.1	1,199.2	1,218.4	1,199.2	1,078.1	1,078.1	1,199.2	1,218.4	1,199.2	1,078.1	1,078.1	1,218.4	1,218.4	1,391.0	1,391.0	1,636.6	1,636.6
Servicios Generales	806.5	629.0	876.1	999.2	1,124.2	1,761.3	1,386.1	1,379.3	1,797.2	1,797.2	1,379.3	1,386.1	1,379.3	1,797.2	1,797.2	1,379.3	1,386.1	1,797.2	1,797.2	2,268.7	2,268.7	2,756.3	2,756.3
Otros	1.4	0.0	20.7	86.2	0.0	5.2	350.2	439.5	443.9	443.9	350.2	350.2	439.5	443.9	443.9	350.2	350.2	443.9	443.9	530.4	530.4	720.4	720.4
Intereses sobre la Deuda Pública	485.5	904.5	1,053.0	859.4	1,431.0	1,173.0	1,638.2	2,853.9	1,461.1	1,461.1	1,638.2	1,638.2	2,853.9	1,461.1	1,461.1	1,638.2	1,638.2	1,461.1	1,461.1	959.5	959.5	1,699.4	1,699.4
TOTAL	3,203.4	3,815.6	4,732.4	5,397.5	6,293.1	7,099.7	7,928.2	9,619.0	9,103.1	9,103.1	7,928.2	7,928.2	9,619.0	9,103.1	9,103.1	7,928.2	7,928.2	9,103.1	9,103.1	10,585.3	10,585.3	14,375.6	14,375.6
GASTO DE CAPITAL																							
Servicios Sociales	643.1	683.8	486.9	1,505.0	2,087.3	1,186.6	1,511.2	2,478.2	3,237.9	3,237.9	1,511.2	1,186.6	1,511.2	2,478.2	2,478.2	1,511.2	1,186.6	2,478.2	3,237.9	3,834.0	3,834.0	2,569.7	2,569.7
Infraestructura y Producción	741.1	951.1	1,341.8	2,698.6	2,355.0	2,214.7	1,736.1	2,053.8	2,798.8	2,798.8	1,736.1	2,214.7	2,053.8	2,798.8	2,798.8	1,736.1	2,214.7	2,053.8	2,798.8	2,851.3	2,851.3	3,072.0	3,072.0
Defensa y Seguridad	106.6	53.9	24.4	26.9	41.4	51.1	66.7	78.7	89.1	89.1	66.7	51.1	78.7	89.1	89.1	66.7	51.1	78.7	89.1	109.9	109.9	76.0	76.0
Servicios Generales	179.1	90.8	85.4	284.4	162.6	208.1	125.0	140.8	123.4	123.4	125.0	208.1	140.8	123.4	123.4	125.0	208.1	123.4	123.4	456.0	456.0	261.9	261.9
Otros	0.7	106.2	56.4	201.0	0.0	557.2	335.8	571.2	614.6	614.6	335.8	557.2	571.2	614.6	614.6	335.8	557.2	614.6	498.6	498.6	802.7	802.7	
TOTAL	1,670.7	1,885.9	1,994.9	4,715.9	4,646.3	4,217.7	3,774.8	5,322.7	6,863.8	6,863.8	4,217.7	4,217.7	5,322.7	6,863.8	6,863.8	4,217.7	4,217.7	5,322.7	6,863.8	7,749.8	7,749.8	6,782.2	6,782.2
GASTO TOTAL																							
Servicios Sociales	1,833.9	2,070.0	2,232.1	3,960.6	4,805.5	4,055.2	4,631.6	5,900.9	7,115.7	7,115.7	4,631.6	4,055.2	4,631.6	5,900.9	5,900.9	4,631.6	4,055.2	4,631.6	7,115.7	8,871.4	8,871.4	9,243.2	9,243.2
Infraestructura y Producción	992.3	1,351.3	1,794.6	2,998.4	2,702.5	2,637.9	2,091.3	2,378.1	3,103.5	3,103.5	2,091.3	2,637.9	2,378.1	3,103.5	3,103.5	2,091.3	2,637.9	3,103.5	3,249.6	3,249.6	3,961.4	3,961.4	
Defensa y Seguridad	574.7	549.7	609.1	724.2	713.7	919.5	1,144.8	1,277.9	1,307.5	1,307.5	1,144.8	919.5	1,277.9	1,307.5	1,307.5	1,144.8	919.5	1,307.5	1,500.9	1,500.9	1,712.6	1,712.6	
Servicios Generales	985.6	719.8	961.5	1,283.6	1,286.8	1,969.4	1,511.1	1,520.1	1,920.6	1,920.6	1,511.1	1,969.4	1,520.1	1,920.6	1,920.6	1,511.1	1,969.4	1,920.6	2,724.7	2,724.7	3,018.2	3,018.2	
Otros	2.0	106.2	77.1	287.2	0.0	562.4	686.0	1,010.7	1,058.5	1,058.5	686.0	562.4	1,010.7	1,058.5	1,058.5	686.0	562.4	1,058.5	1,029.0	1,029.0	1,523.1	1,523.1	
Intereses sobre la Deuda Pública	485.5	904.5	1,053.0	859.4	1,431.0	1,173.0	1,638.2	2,853.9	1,461.1	1,461.1	1,638.2	1,638.2	2,853.9	1,461.1	1,461.1	1,638.2	1,638.2	1,461.1	1,461.1	959.5	959.5	1,699.4	1,699.4
TOTAL	4,874.1	5,701.4	6,727.4	10,113.4	10,939.5	11,317.5	11,703.0	14,941.6	15,966.9	15,966.9	11,317.5	11,317.5	11,703.0	14,941.6	14,941.6	11,703.0	11,703.0	14,941.6	15,966.9	18,335.1	18,335.1	21,157.8	21,157.8

Fuente: Ministerio de Hacienda y Crédito Público

Cuadro A.1.9
NICARAGUA - Gasto del Gobierno General por Sector
(en porcentaje del PIB)

GASTO TOTAL	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Preliminar
Servicios Sociales	6.5	6.5	5.9	9.0	9.6	7.4	8.1	9.5	9.9	10.8	9.8
Infraestructura y Produccion	3.5	4.2	4.7	6.8	5.4	4.8	3.6	3.8	4.3	4.0	4.2
Defensa y Seguridad	2.1	1.7	1.6	1.6	1.4	1.7	2.0	2.1	1.8	1.8	1.8
Servicios Generales	3.5	2.3	2.5	2.9	2.6	3.6	2.6	2.5	2.7	3.3	3.2
Otros	0.0	0.3	0.2	0.6	0.0	1.0	1.2	1.6	1.5	1.3	1.6
Intereses sobre la Deuda Publica	1.7	2.8	2.8	1.9	2.9	2.1	2.9	4.6	2.0	1.2	1.8
TOTAL	17.4	17.8	17.8	22.9	21.9	20.5	20.4	24.1	22.3	22.3	22.4

Fuente: Ministerio de Hacienda y Credito Publico

STATISTICAL ANNEX TABLE B1: NUMBER OF PUBLIC SECTOR EMPLOYEES, BY INSTITUTION						
	2002	2003	2004	2005	2006	2002-2006
TOTAL PUBLIC SECTOR			117,013	119,345	126,221	3.9%
CENTRAL GOVERNMENT	88,114	88,177	93,584	93,622	96,854	2.4%
STATE POWERS	3,584	3,976	4,060	4,473	4,683	6.9%
NATIONAL ASSEMBLY	408	410	415	424	442	2.0%
PRESIDENCY OF THE REPUBLIC	34	385	376	379	365	81.0%
SUPREME COURT OF JUSTICE	2,528	2,575	2,611	2,934	3,115	5.4%
SUPREME ELECTORAL COUNCIL	182	161	188	207	207	3.3%
ATTORNEY GENERAL'S OFFICE	59	76	95	110	113	17.6%
COMPTROLLER'S OFFICE	373	369	375	419	441	4.3%
MINISTRIES	84,530	83,815	89,153	88,838	91,821	2.1%
MINISTRY OF AGRICULTURE AND FOREST	370	364	359	359	351	-1.3%
MINISTRY OF DEFENSE	11,687	11,595	11,757	11,828	11,812	0.3%
ADMINISTRATIVE	62	49	48	48	45	-7.7%
ARMY (BUDGET PAYROLL)	2,534	2,455	2,618	2,689	2,676	1.4%
ARMY (TRANSFERENCES)	9,091	9,091	9,091	9,091	9,091	0.0%
MINISTRY OF THE INTERIOR	9,842	9,783	10,055	10,546	10,958	2.7%
ADMINISTRATIVE	246	248	236	259	255	0.9%
POLICE, FIREFIGHTERS, MIGRATION, PENITENTIARY SYSTEM	9,596	9,515	9,819	10,287	10,703	2.8%
MINISTRY OF FINANCE AND PUBLIC CREDIT	657	618	591	577	561	-3.9%
MINISTRY OF THE FAMILY	386	358	420	447	438	3.2%
MINISTRY OF EXTERNAL AFFAIRS	324	315	313	311	294	-2.4%
MINISTRY OF HEALTH	23,599	22,577	22,410	22,600	23,241	-0.4%
MINISTRY OF LABOR	311	307	304	304	313	0.2%
MINISTRY OF TRANSPORT AND INFRASTRUCTURE	330	327	330	320	447	7.9%
MINISTRY OF ENVIRONMENT	143	140	134	142	138	-0.9%
MINISTRY OF EDUCATION, CULTURE AND SPORTS	36,598	37,171	42,206	41,127	42,982	4.1%
ADMINISTRATIVE	3,290	3,604	3,767	3,148	3,122	-1.3%
TEACHERS (BUDGET PAYROLL)	10,255	10,514	10,405	7,378	6,889	-9.5%
DESCENTRALIZED AND INDEPENDENT SCHOOLS	23,053	23,053	28,034	30,601	32,971	9.4%
MINISTRY OF INDUSTRY AND COMMERCE	283	280	274	277	286	0.3%
OTHERS	-	386	371	311	350	
DESCENTRALIZED INSTITUTIONS			11,116	12,103	12,294	5.2%
NICARAGUAN INSTITUTE OF MUNICIPAL DEVELOPMENT	285	261	209	221	221	-4.4%
NICARAGUAN INSTITUTE OF CULTURE	252	257	190	252	362	9.5%
NICARAGUAN INSTITUTE OF TERRITORIAL STUDIES	433	394	393	410	418	-0.9%
NICARAGUAN INSTITUTE OF STATISTICS AND CENSUS	189	166	142	401	217	3.5%
NICARAGUAN INSTITUTE OF SPORTS AND YOUTH	112	130	139	177	191	14.3%
NICARAGUAN WOMEN INSTITUTE	28	25	31	29	35	5.7%
NICARAGUAN ENERGY INSTITUTE	15	9	175	268	217	95.0%
NICARAGUAN INSTITUTE OF WATER AND SEWERAGE	55	55	54	54	50	-2.4%
NICARAGUAN SOCIAL SECURITY INSTITUTE	1,139	1,130	1,122	1,151	1,214	1.6%
NICARAGUAN RURAL DEVELOPMENT INSTITUTE	192	232	248	248	227	4.3%
NICARAGUAN INSTITUTE OF HOUSING AND URBAN DEVELOPMENT	0	65	86	86	108	18.4%
NICARAGUAN INSTITUTE OF SME SUPPORT	1	1	1	1	90	208.0%
NICARAGUAN TOURISM INSTITUTE	287	282	291	329	295	0.7%
NATIONAL AGRICULTURAL TECHNOLOGY INSTITUTE	265	268	266	265	266	0.1%
NICARAGUAN AGRICULTURE AND FOREST INSTITUTE	240	229	224	249	247	0.7%
INTERNAL REVENUE DIRECTORATE	1,303	1,326	1,410	1,361	1,361	1.1%
NATIONAL CUSTOMS DIRECTORATE	819	816	828	863	863	1.3%
NICARAGUAN RADIO	71	73	74	67	67	-1.4%
NATIONAL THEATER	87	86	88	94	88	0.3%
HUMANS RIGHTS ATTORNEY'S OFFICE	75	74	67	72	96	6.4%
PUBLIC MINISTRY	219	290	377	677	595	28.4%
SUPERINTENDENCE OF PENSIONS	51	53	59	59	59	3.7%
SUPERINTENDENCE OF BANKS	104	113	134	155	155	10.5%
FREE ZONES CORPORATION	76	75	79	97	97	6.3%
EMERGENCY SOCIAL FUND	418	398	415	441	167	-20.5%
ROAD MAINTENANCE FUND	0	13	21	22	37	41.7%
UNIVERSITIES	3452	3798	3,993	4,053	4,551	7.2%
PUBLIC FINANCIAL INSTITUTIONS	986	1,021	970	977	1,313	16.3%
NICARAGUAN CENTRAL BANK	889	900	846	846	857	-0.9%
NICARAGUAN INSURANCE INSTITUTE	25	25	26	25	346	92.9%
RURAL CREDIT FUND	11	33	35	34	38	36.3%
NICARAGUAN INSTITUTE OF INVESTMENT FINANCE	61	63	63	72	72	4.2%
LOCAL GOVERNMENTS	9,656	10,468	11,343	12,643	15,760	17.9%
MUNICIPALITIES	9330	9995	10,799	12,103	15,201	13.0%
NORTH ATLANTIC REGIONAL GOVERNMENT	170	266	313	302	302	15.4%
SOUTH ATLANTIC REGIONAL GOVERNMENT	57	74	85	87	100	15.1%
REGIONAL NORTH ATLANTIC COUNCIL	59	73	76	75	81	8.2%
REGIONAL NORTH ATLANTIC COUNCIL	40	60	70	76	76	17.4%

STATISTICAL ANNEX TABLE B2: WAGE BILL, BY INSTITUTION (C\$)						
	2002	2003	2004	2005	2006	2002-2006
CENTRAL GOVERNMENT	2,510,263,474	2,674,890,954	3,156,498,904	3,886,592,189	4,558,425,663	16.1%
STATE POWERS	375,439,987	467,578,150	557,915,353	666,175,796	735,907,935	18.3%
NATIONAL ASSEMBLY	47,431,748	50,618,750	133,420,560	139,417,252	157,493,844	35.0%
PRESIDENCY OF THE REPUBLIC	21,062,223	71,625,749	68,332,667	69,819,139	70,377,569	35.2%
SUPREME COURT OF JUSTICE	236,683,513	273,109,824	281,234,447	369,312,476	408,954,352	14.6%
SUPREME ELECTORAL COUNCIL	17,223,336	17,274,036	16,994,198	17,854,889	17,886,800	0.9%
ATTORNEY GENERAL'S OFFICE	7,162,636	9,386,923	9,405,903	56,813,159	13,465,763	17.1%
COMPTROLLER'S OFFICE	46,876,531	45,562,866	48,527,778	12,956,881	69,729,607	10.4%
MINISTRIES	2,134,823,487	2,207,312,804	2,598,583,351	3,220,416,393	3,822,517,728	15.7%
MINISTRY OF AGRICULTURE AND FORESTA	20,916,061	21,146,216	21,558,225	25,893,361	26,081,903	5.7%
MINISTRY OF DEFENSE	333,533,012	332,036,327	362,907,144	363,663,322	388,317,984	3.9%
ADMINISTRATIVE	9,906,113	9,109,984	8,769,217	8,788,043	8,533,995	-3.7%
ARMY (BUDGET PAYROLL)	115,979,368	115,277,812	146,490,396	147,227,748	172,136,458	10.4%
ARMY (TRANSFERENCES)	207,647,531	207,647,531	207,647,531	207,647,531	207,647,531	0.0%
MINISTRY OF THE INTERIOR	372,592,941	373,890,154	392,380,950	505,969,986	590,051,706	12.2%
ADMINISTRATIVE	13,162,339	9,366,813	8,913,560	34,648,005	33,663,338	26.5%
POLICE, FIREFIGHTERS, MIGRATION, PENITENTIARY SYSTEM	359,430,602	364,523,341	383,467,370	471,321,981	556,388,368	11.5%
MINISTRY OF FINANCE AND PUBLIC CREDIT	44,194,540	43,367,688	39,951,132	43,866,212	42,567,168	-0.9%
MINISTRY OF THE FAMILY	15,465,983	17,980,768	21,176,831	23,956,114	25,116,763	12.9%
MINISTRY OF EXTERNAL AFFAIRS	35,588,410	34,978,996	35,674,288	36,557,430	35,554,130	0.0%
MINISTRY OF HEALTH	612,736,254	667,744,987	708,552,884	971,148,074	1,151,626,713	17.1%
MINISTRY OF LABOR	12,411,659	12,525,721	12,225,421	14,773,044	16,525,329	7.4%
MINISTRY OF TRANSPORT AND INFRASTRUCTURE	19,069,804	19,368,232	19,788,574	18,883,995	30,313,236	12.3%
MINISTRY OF ENVIRONMENT	11,614,018	11,767,912	11,011,182	13,182,936	13,477,407	3.8%
MINISTRY OF EDUCATION, CULTURE AND SPORTS	625,078,518	640,241,089	941,804,641	1,171,314,301	1,459,161,898	23.6%
ADMINISTRATIVE	85,479,966	95,976,270	100,178,962	104,785,596	126,674,660	10.3%
TEACHERS (BUDGET PAYROLL)	171,865,250	176,193,745	175,087,536	152,078,198	238,180,100	8.5%
DESCENTRALIZED AND INDEPENDENT SCHOOLS	367,733,262	368,071,074	666,538,143	914,450,507	1,094,307,238	31.3%
MINISTRY OF INDUSTRY AND COMMERCE	31,622,287	32,265,714	31,552,079	31,207,818	43,723,503	8.4%
OTHERS					71,638,001	
DESCENTRALIZED INSTITUTIONS					71,638,001	
NICARAGUAN INSTITUTE OF MUNICIPAL DEVELOPMENT					316,734	
NICARAGUAN INSTITUTE OF CULTURE					1,132,763	
NICARAGUAN INSTITUTE OF TERRITORIAL STUDIES					1,869,063	
NICARAGUAN INSTITUTE OF STATISTICS AND CENSUS					1,872,310	
NICARAGUAN INSTITUTE OF SPORTS AND YOUTH					643,743	
NICARAGUAN WOMEN INSTITUTE					242,434	
NICARAGUAN ENERGY INSTITUTE						
NICARAGUAN INSTITUTE OF WATER AND SEWERAGE					1,049,766	
NICARAGUAN SOCIAL SECURITY INSTITUTE					10,825,413	
NICARAGUAN RURAL DEVELOPMENT INSTITUTE					3,785,663	
NICARAGUAN INSTITUTE OF HOUSING AND URBAN DEVELOPMENT					1,497,810	
NICARAGUAN INSTITUTE OF SME SUPPORT					1,415,397	
NICARAGUAN TOURISM INSTITUTE					2,610,739	
NATIONAL AGRICULTURAL TECHNOLOGY INSTITUTE					-	
NICARAGUAN AGRICULTURE AND FOREST INSTITUTE					-	
INTERNAL REVENUE DIRECTORATE					0	
NATIONAL CUSTOMS DIRECTORATE					0	
NICARAGUAN RADIO					0	
NATIONAL THEATER					344,666	
HUMANS RIGHTS ATTORNEY'S OFFICE					1,190,807	
PUBLIC MINISTRY					5,532,753	
SUPERINTENDENCE OF PENSIONS						
SUPERINTENDENCE OF BANKS						
FREE ZONES CORPORATION						
EMERGENCY SOCIAL FUND					2,455,429	
ROAD MAINTENANCE FUND					486,983	
UNIVERSITIES					34,366,528	
PUBLIC FINANCIAL INSTITUTIONS					13,107,718	
NICARAGUAN CENTRAL BANK					8,309,763	
NICARAGUAN INSURANCE INSTITUTE					4,153,233	
RURAL CREDIT FUND					644,722	
NICARAGUAN INSTITUTE OF INVESTMENT FINANCE						
LOCAL GOVERNMENTS					1,616,838	
MUNICIPALITIES						
NORTH ATLANTIC REGIONAL GOVERNMENT						
SOUTH ATLANTIC REGIONAL GOVERNMENT					627,413	
REGIONAL NORTH ATLANTIC COUNCIL						
REGIONAL NORTH ATLANTIC COUNCIL					989,425	

STATISTICAL ANNEX TABLE B3: AVERAGE GROSS MONTHLY WAGE BILL, BY INSTITUTION (C\$)					
	2002	2003	2004	2005	2006
CENTRAL GOVERNMENT	193,097,190	205,760,843	242,807,608	298,968,630	350,648,128
STATE POWERS	28,879,999	35,967,550	42,916,581	51,244,292	56,608,303
NATIONAL ASSEMBLY	3,648,596	3,893,750	10,263,120	10,724,404	12,114,911
PRESIDENCY OF THE REPUBLIC	1,620,171	5,509,673	5,256,359	5,370,703	5,413,659
SUPREME COURT OF JUSTICE	18,129,501	21,008,448	21,633,419	28,408,652	31,304,181
SUPREME ELECTORAL COUNCIL	1,324,872	1,326,772	1,307,246	1,373,453	1,375,908
ATTORNEY GENERAL'S OFFICE	550,972	722,071	723,531	996,837	1,035,828
COMPTROLLER'S OFFICE	3,605,887	3,504,836	3,732,906	4,370,243	5,363,816
MINISTRIES	164,217,191	169,793,293	199,891,027	247,724,338	294,039,825
MINISTRY OF AGRICULTURE AND FORESTA	1,608,927	1,626,632	1,658,325	1,991,797	2,006,300
MINISTRY OF DEFENSE	25,656,386	25,541,179	27,915,934	27,974,102	29,870,614
ADMINISTRATIVE	762,009	700,768	674,555	676,003	656,461
ARMY (BUDGET PAYROLL)	8,921,490	8,867,524	11,268,492	11,325,211	13,241,266
ARMY (TRANSFERENCE)	15972887	15,972,887	15,972,887	15,972,887	15,972,887
MINISTRY OF THE INTERIOR	28,660,996	28,760,781	30,183,150	38,920,768	45,388,593
ADMINISTRATIVE	1,012,488	720,524	685,660	2,665,231	2,589,488
POLICE, FIREFIGHTERS, MIGRATION, PENITENTIARY SYSTEM	27,648,508	28,040,257	29,497,490	36,255,537	42,799,105
MINISTRY OF FINANCE AND PUBLIC CREDIT	3,399,580	3,335,976	3,073,164	3,374,324	3,274,397
MINISTRY OF THE FAMILY	1,189,691	1,383,136	1,628,987	1,842,778	1,932,059
MINISTRY OF EXTERNAL AFFAIRS	2,737,570	2,690,692	2,744,176	2,812,110	2,734,933
MINISTRY OF HEALTH	47,133,558	51,364,999	54,504,068	74,703,698	88,586,670
MINISTRY OF LABOR	954,743	963,517	940,417	1,136,388	1,271,179
MINISTRY OF TRANSPORT AND INFRASTRUCTURE	1,466,908	1,489,864	1,522,198	1,452,615	2,331,787
MINISTRY OF ENVIRONMENT	893,386	905,224	847,014	1,014,072	1,036,724
MINISTRY OF EDUCATION, CULTURE AND SPORTS	48,082,963	49,249,315	72,446,511	90,101,100	112,243,223
ADMINISTRATIVE	6,575,382	7,382,790	7,706,074	8,060,430	9,744,197
TEACHERS (BUDGET PAYROLL)	13,220,407	13,553,365	13,468,272	11,698,323	18,321,546
DESCENTRALIZED AND INDEPENDENT SCHOOLS	28,287,174	28,313,160	51,272,165	70,342,347	84,177,480
MINISTRY OF INDUSTRY AND COMMERCE	2,432,484	2,481,978	2,427,083	2,400,586	3,363,346
OTHERS					
DESCENTRALIZED INSTITUTIONS					71,638,001
NICARAGUAN INSTITUTE OF MUNICIPAL DEVELOPMENT					316,734
NICARAGUAN INSTITUTE OF CULTURE					1,132,763
NICARAGUAN INSTITUTE OF TERRITORIAL STUDIES					1,868,063
NICARAGUAN INSTITUTE OF STATISTICS AND CENSUS					1,872,310
NICARAGUAN INSTITUTE OF SPORTS AND YOUTH					643,743
NICARAGUAN WOMEN INSTITUTE					242,434
NICARAGUAN ENERGY INSTITUTE					
NICARAGUAN INSTITUTE OF WATER AND SEWERAGE					1,049,766
NICARAGUAN SOCIAL SECURITY INSTITUTE					10,825,413
NICARAGUAN RURAL DEVELOPMENT INSTITUTE					3,785,663
NICARAGUAN INSTITUTE OF HOUSING AND URBAN DEVELOPMENT					1,497,810
NICARAGUAN INSTITUTE OF SME SUPPORT					1,415,397
NICARAGUAN TOURISM INSTITUTE					2,610,739
NATIONAL AGRICULTURAL TECHNOLOGY INSTITUTE					
NICARAGUAN AGRICULTURE AND FOREST INSTITUTE					
INTERNAL REVENUE DIRECTORATE					
NATIONAL CUSTOMS DIRECTORATE					
NICARAGUAN RADIO					
NATIONAL THEATER					344,666
HUMAN RIGHTS ATTORNEY'S OFFICE					1,190,807
PUBLIC MINISTRY					5,532,753
SUPERINTENDENCE OF PENSIONS					
SUPERINTENDENCE OF BANKS					
FREE ZONES CORPORATION					
EMERGENCY SOCIAL FUND					2,455,429
ROAD MAINTENANCE FUND					486,983
UNIVERSITIES					34,366,528
PUBLIC FINANCIAL INSTITUTIONS					
NICARAGUAN CENTRAL BANK					8,309,763
NICARAGUAN INSURANCE INSTITUTE					4,153,233
RURAL CREDIT FUND					644,722
NICARAGUAN INSTITUTE OF INVESTMENT FINANCE					
LOCAL GOVERNMENTS					
MUNICIPALITIES					
NORTH ATLANTIC REGIONAL GOVERNMENT					
SOUTH ATLANTIC REGIONAL GOVERNMENT					627,413
REGIONAL NORTH ATLANTIC COUNCIL					
REGIONAL NORTH ATLANTIC COUNCIL					989,425

STATISTICAL ANNEX TABLE B4: AVERAGE INDIVIDUAL SALARY GROSS MONTHLY (C\$)						
	2002	2003	2004	2005	2006	2002-2006
CENTRAL GOVERNMENT	2,191	2,333	2,595	3,193	3,620	13%
STATE POWERS	8,058	9,046	10,571	11,456	12,088	11%
NATIONAL ASSEMBLY	8,943	9,497	24,730	25,293	27,409	32%
PRESIDENCY OF THE REPUBLIC	47,652	14,311	13,980	14,171	14,832	-25%
SUPREME COURT OF JUSTICE	7,171	8,159	8,285	9,683	10,049	9%
SUPREME ELECTORAL COUNCIL	7,280	8,253	6,953	6,635	6,647	-2%
ATTORNEY GENERAL'S OFFICE	9,339	9,501	7,616	9,062	9,167	0%
COMPTROLLER'S OFFICE	9,667	9,498	9,954	10,430	12,163	6%
MINISTRIES	1,943	2,026	2,242	2,788	3,202	13%
MINISTRY OF AGRICULTURE AND FORESTA	4,348	4,469	4,619	5,548	5,716	7%
MINISTRY OF DEFENSE	2,195	2,203	2,374	2,365	2,529	4%
ADMINISTRATIVE	12,290	14,301	14,053	14,083	14,588	4%
ARMY (BUDGET PAYROLL)	3,521	3,612	4,304	4,212	4,948	9%
ARMY (TRANSFERENCES)	1,757	1,757	1,757	1,757	1,757	0%
MINISTRY OF THE INTERIOR	2,912	2,946	3,002	3,691	4,142	9%
ADMINISTRATIVE	4,116	2,905	2,905	10,290	10,155	25%
POLICE, FIREFIGHTERS, MIGRATION, PENITENTIARY SYSTEM	2,881	2,947	3,004	3,524	3,999	9%
MINISTRY OF FINANCE AND PUBLIC CREDIT	5,174	5,398	5,200	5,848	5,837	3%
MINISTRY OF THE FAMILY	3,082	3,864	3,879	4,123	4,411	9%
MINISTRY OF EXTERNAL AFFAIRS	8,449	8,542	8,767	9,042	9,302	2%
MINISTRY OF HEALTH	1,997	2,275	2,432	3,305	3,812	18%
MINISTRY OF LABOR	3,070	3,138	3,093	3,738	4,061	7%
MINISTRY OF TRANSPORT AND INFRASTRUCTURE	4,445	4,556	4,613	4,539	5,217	4%
MINISTRY OF ENVIRONMENT	6,247	6,466	6,321	7,141	7,512	5%
MINISTRY OF EDUCATION, CULTURE AND SPORTS	1,314	1,325	1,716	2,191	2,611	19%
ADMINISTRATIVE	1,999	2,048	2,046	2,560	3,121	12%
TEACHERS (BUDGET PAYROLL)	1,289	1,289	1,294	1,586	2,660	20%
DESCENTRALIZED AND INDEPENDENT SCHOOLS	1,227	1,228	1,829	2,299	2,553	20%
MINISTRY OF INDUSTRY AND COMMERCE	8,595	8,864	8,858	8,666	11,760	8%
OTHERS						
DESCENTRALIZED INSTITUTIONS						
NICARAGUAN INSTITUTE OF MUNICIPAL DEVELOPMENT						
NICARAGUAN INSTITUTE OF CULTURE						
NICARAGUAN INSTITUTE OF TERRITORIAL STUDIES						
NICARAGUAN INSTITUTE OF STATISTICS AND CENSUS						
NICARAGUAN INSTITUTE OF SPORTS AND YOUTH						
NICARAGUAN WOMEN INSTITUTE						
NICARAGUAN ENERGY INSTITUTE						
NICARAGUAN INSTITUTE OF WATER AND SEWERAGE						
NICARAGUAN SOCIAL SECURITY INSTITUTE						
NICARAGUAN RURAL DEVELOPMENT INSTITUTE						
NICARAGUAN INSTITUTE OF HOUSING AND URBAN DEVELOPMENT						
NICARAGUAN INSTITUTE OF SME SUPPORT						
NICARAGUAN TOURISM INSTITUTE						
NATIONAL AGRICULTURAL TECHNOLOGY INSTITUTE						
NICARAGUAN AGRICULTURE AND FOREST INSTITUTE						
INTERNAL REVENUE DIRECTORATE						
NATIONAL CUSTOMS DIRECTORATE						
NICARAGUAN RADIO						
NATIONAL THEATER						
HUMAN RIGHTS ATTORNEY'S OFFICE						
PUBLIC MINISTRY						
SUPERINTENDENCE OF PENSIONS						
SUPERINTENDENCE OF BANKS						
FREE ZONES CORPORATION						
EMERGENCY SOCIAL FUND						
ROAD MAINTENANCE FUND						
UNIVERSITIES						
PUBLIC FINANCIAL INSTITUTIONS						
NICARAGUAN CENTRAL BANK						
NICARAGUAN INSURANCE INSTITUTE						
RURAL CREDIT FUND						
NICARAGUAN INSTITUTE OF INVESTMENT FINANCE						
LOCAL GOVERNMENTS						
MUNICIPALITIES						
NORTH ATLANTIC REGIONAL GOVERNMENT						
SOUTH ATLANTIC REGIONAL GOVERNMENT						
REGIONAL NORTH ATLANTIC COUNCIL						
REGIONAL NORTH ATLANTIC COUNCIL						

