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Mexico
Public Expenditure Review
(In Two Volumes) Volume I: Core Report

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Poverty Reduction and Economic Management Unit
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CURRENCY EQUIVALENTS
Currency Unit – Peso($)

EXCHANGE RATE

$1.00 US = $11.40MXN
$1.00 MXN = $0.087 US

WEIGHTS AND MEASURES
Metric System

FISCAL YEAR
January 1 – December 31

ABBREVIATIONS AND ACRONYMS

CONAPO	National Council on Population	Consejo Nacional de Población
DF	Federal District	Distrito Federal
ENIGH	National Survey of House hold Income and Expenses	Encuesta Nacional de Ingresos y Gastos de los Hogares
ENN	Nutrition National Survey	Encuesta Nacional de Nutrición
FARAC	Trusteeship for the Bailout of Toll Road Concessions	Fideicomiso de Apoyo al Rescate de Autopista Concesionadas
GDP	Gross Domestic Product	
IMSS	Mexican Social Security Institute	Instituto Mexicano del Seguro Social
INEGI	National Institute for Statistics, Geography and Informatics	Instituto Nacional de Geografía, Estadística e Informática
ISSSTE	Institute for the Social Security of State Workers	Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado
NAFTA	North American Free Trade Agreement	
PEMEX	Mexican Petroleum	Petróleos Mexicanos
PER	Public Expenditure Review	
PIDIREGAS	Budget Public Investment Projects Guaranteed By The Government	Proyectos de Impacto Diferido en el Registro del Gasto
PROCAMPO	Program for Direct Support to Agriculture	Programa de Apoyos Directos al Campo
SEDESOL	Secretary of Social Development	Secretaria de Desarrollo Social
SHCP	Mexican Department of the Treasury	Secretaría de Hacienda y Crédito Público
VAT	Value Added Tax	

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Preface

At the request of the Secretary of Finance and Public Credit, the World Bank produced this Public Expenditure Review (PER) that concentrates on four main issues: the overall fiscal sustainability and rigidities in expenditure, the distribution of benefits of public spending across households with different income levels, the geographic distribution of the spending, and the institutions for budgeting and expenditure management. Thus, it is not a traditional PER, with extensive analysis of spending efficiency and institutions in individual sectors. Such analysis is important and is anticipated as follow-up to this report, such as with PERs on Infrastructure, Health and Education.

To continue achieving advances in expenditure quality, the government will need to sustain adequate **fiscal balances**, address **contingent liabilities** such as for pensions, and make **spending flexible** enough to adjust to the evolving priorities of the nations. Chapter 1 deals with these issues.

A central part of this report concerns the analysis of **benefit incidence** to evaluate the impact of public expenditures as well understanding the incidence of taxes, existing and proposed. Understanding the expenditure programs' differing distributions of benefit across income groups can help to evaluate their priority. This, in turn, can help bring agreement about fiscal reform on the tax side. People will agree to pay more if there is consensus that expenditures are effective and help the poor. These are the concerns of Chapter 2.

Another concern is the **geographic distribution** of public spending. Almost all the resources available to states and municipalities (except for the Federal District, DF) come from the federal government. Compared with 1992, sub-national governments now get transfers for about twice as much per capita in real terms. Chapter 3 deals with the geographic-distribution issues.

The fourth chapter concerns the **institutions for budgeting and expenditure management**. Over the past 15 years, multiparty political competition at all three levels of government has activated a democratic federal system, replacing a single party system that had been in place for decades. Making the new system fully operational, however, requires further institutional reforms. The present administration seeks to leave an institutional legacy of transparency, accountability, and federalism that will hinder prospects of future political monopolies. The external opening of the economy makes institutional strengthening more urgent, because good institutions seem to be the most important contributor to sustained competitiveness and per-capita income growth.

This report is a parallel task with the Mexico Poverty Programmatic Analytic and Advisory Activity (AAA). On the critical issue of the benefit incidence of spending and poverty reduction efforts, the two reports divided the labor so that the Poverty Programmatic focuses on the effectiveness and targeting of poverty reduction programs, while the PER aims to put these programs in context by estimating the benefit incidence of all programs across all income levels. The two tasks will help the Mexican authorities to see whether the actual benefit incidence of federal spending is in line with their intended priorities for poverty reduction.

The core team for the PER comprised Jose Luis Aburto (electricity), Odracir Barquera (document production) William Dorotinsky (public expenditure management), Christian Gonzalez (fiscal overview), Jonathan Halpern (water and electricity), Uri Raich (geographic distribution), Anita Schwarz (pensions), John Scott (benefit incidence analysis), and Steven Webb (task team leader). Patricia Chacon-Holt processed the document and handled consultant logistics, and Elizabeth Forsythe provided valuable editorial service. We also benefited from detailed comments and suggestions from Gabriela Aguilar-Martinez, José Maria Caballero, Maria-Luisa Escobar, Gladys Lopez-Acevedo, Harry Patrinos, Panagiota Panopoulou, Michael Walton and the peer reviewers, Dominique van de Walle and Michael Stevens. Dr. Valentín Villa and the Unidad de Politíca Tributaria (in Subsecretaría de Ingresos, SHCP) helped with the estimation of tax incidence. The overall guidance of Dr. Carlos Hurtado (Subsecretario de Egresos, SHCP) and the energetic participation of his colleagues, Humberto Guzman and Deborá Schlam, were essential to the success of this endeavor.

EXECUTIVE SUMMARY

In the last decade Mexico has improved its macroeconomic and fiscal stability, while increasing access of the poor to public services. Since 1995 it has avoided economic crises, which hurt the poor in the past. Conservative macroeconomic management, along with buoyant oil prices and low world interest rates, have achieved a better debt structure and lower financial costs. The combination of higher revenues, from both oil and non-oil sources, and lower debt payments allowed the federal government to expand programmable spending by about a third in real terms, over twice as fast as GDP growth. Most of the spending increase has gone to states and social programs. However, public spending allocations still do not align fully with the strategic priorities of poverty reduction, growth, and job creation. Public investment to increase competitiveness stagnated until recently, while much of the increased spending has been captured by special interests in the private and public sectors. Some recent experiences in Mexico, on the other hand, show the possibility to reallocate resources away from inefficient and inequitable programs, to more effective popular initiatives.

1. Expenditure Allocation

Mexico's public finance system is redistributive in its overall impact. Most resources are raised from taxation of richer households and states. And on average public spending provides comparable benefits per capita to households and states at various income levels. The trend on this dimension has been improving, as the poor states and households did not receive equivalent benefits 12 years ago. In addition to targeted anti-poverty transfers, the biggest general social service programs are substantially used by the poor and thus help make overall public spending redistributive. Nonetheless, some other programs benefit mainly the non-poor.

One-third of total central government spending goes for untargeted social programs with substantial participation by the poor (education below the tertiary level and health for the uninsured and those with private sector social security, IMSS), and almost three percent of central government spending goes for the poverty-targeted programs (Oportunidades and Procampo). One-sixth of the spending goes for programs where over two-thirds of the benefits go to persons in the highest four income deciles. The calculations assume that benefits are equal for all recipients reported in the household spending survey (ENIGH) and that benefits have a value proportional to cost—assumptions that future studies of specific sectors should investigate further. Some items, like electricity subsidies for large household consumers and farmers pumping water from shrinking aquifers, have negative externalities as well as regressive benefits. ***The off-budget cost of under-pricing public utility services—mainly electricity and water—has risen to over 3 percent of the value of budgeted central government spending, encouraging inefficient over-use of electricity and water, and benefiting mostly the non-poor***. Other public expenditures that benefit mainly upper-income groups—for higher education, health insurance and pensions for public employees—may be justified but need re-consideration in comparison with alternatives to finance them with cost recovery.

Education, the largest public spending category, provided benefits for the poor and rural populations in 2002 that were about equal to the national average—a big change from 1992 when education was biased toward upper-income households and urban areas. Important differences remain, however, within the various schooling levels. The expansion of enrollment and public expenditure in basic education was clearly pro-poor, with the gain in coverage in primary education concentrated in the lowest quintile. The most striking change occurred in lower-secondary education, where the deep gap in participation of the poorest deciles was completely covered in the course of a decade. Significant gains in access of the poor also occurred in upper-secondary education, as many children from lower-income deciles enrolled for the first time, although the upper deciles still predominate. Only at tertiary levels is the participation of the poor still negligible, and the growth has concentrated in the upper deciles. Future improvement there will require better basic education for the poor as well as financial assistance for them to continue schooling.

Public spending on health services also became more pro-rural and pro-poor. Public financing of health services for the uninsured goes mostly to the poor—the lower half of the income distribution—while public financing of health services through insurance programs goes mostly to the upper half. The distribution of total public expenditure on health is mildly regressive but becomes neutral when private contributions to IMSS are netted out. Public expenditure on primary care is also about equal across income levels, in contrast to public hospital services, which upper income households use more. The expansion of public expenditures in health from 1996 to 2002, favored the uninsured over the insured, narrowing the gap between services used by the poor and the non-poor.

The conditional cash-transfer program* Oportunidades *is well targeted for poverty reduction, with participation mostly limited to the lower deciles and with conditions of children attending school and getting basic health case, both of which improve the chance to move out of poverty. As a replacement to the general food subsidies, used until the mid 1990s, it is much better targeted and more progressive. Although *Oportunidades* still does not reach all of the extreme poor, especially in urban areas, further improvements are underway. This is not a criticism of the program, which deliberately started on a limited scale with rural focus to ensure quality and which has expanded steadily, but it does point to the remaining agenda.

PROCAMPO, a cash-transfer to farm households based on their hectares previously cultivated in basic annual crops, started in 1994 to replace general agricultural price subsidies and to balance the impact of NAFTA on farm incomes. It was initially quite progressive in distributing benefits, although funding and beneficiary numbers fell in the late 1990s after the fiscal crisis, making the distribution less progressive, but still pro-poor. The other agricultural programs, except for *Alianza para el Campo*, benefit mainly large producers.

About 42 percent of central government spending was transferred to the subnational governments in 2002 for their use, and this share has been rising. The states' total public resources per capita are not correlated with poverty levels. The relative position of the poorer states (higher indices of marginality) has improved since 1992, and now they receive about as much per capita as the national average. The main inequality today is between states at similar poverty levels, reflecting ad hoc and historically driven patterns. ***The states' fiscal resources as shares of their GDP reveal a strong pattern of redistribution toward poorer regions***. The five

states with the highest marginality rates are getting public resources equivalent to 15 to 23 percent of state GDP. At the other end of the distribution, seven of the eight states with the highest income per capita get below-average fiscal resources as a share of GDP, although the tax contributions from those states as a share of GDP is probably above average.

2. Issues for the Future

Five issues threaten future progress in expenditure allocation and fiscal sustainability:

- ***Quality of services delivered is largely unknown, and perhaps inadequate and inequitable in important areas, such as education.***
- ***Powerful vested interests have captured important parts of spending, which then become rigid expenditures that are difficult to reallocate to the government's programmatic priorities.***
- ***Public investment has been low until recently, which not only contributes to budget rigidity but also holds down growth prospects.***
- ***The public-sector pension systems have increasing liabilities and, unless reform is pursued proactively, they will make legally and politically strong demands for fiscal resources.***
- ***Increased resources will be required to finance higher public investment and expanding social services.***

Service quality. The presumed positive value of increased social spending and the calculations showing its pro-poor distribution assume that the quality of service is worth the money and that the quality of service per recipient is roughly equal across income levels and localities. Unfortunately ***for many programs there are no systematic data on quality***, and the available data are seldom used as a basis for decision-making. As noted below, Mexico is beginning to address this gap in knowledge and management.

Spending rigidities. The short-run problem of rigidities is that ***over half the budget goes for inflexible obligations like debt service, wages, and nominally specified transfers to the subnational governments.*** Personnel expenses, including for decentralized federal teachers and health workers, are the largest and fastest growing part of the rigid expenditures. Revenue sharing with the subnational governments, while fixed in law and thus hard to change in the medium term, actually mitigates short-term rigidity in that the participaciones formula automatically makes the subnational governments share proportionally in the burden (or benefit) from total revenue fluctuations. The medium-term problem with rigidities arises when the government needs to cut spending in non-priority areas, in order to reallocate expenditure to meet new priorities. ***Mexico's experience of the last decade shows that it is possible to reallocate resources away from inefficient but entrenched programs, like general food and agricultural subsidies, toward more effective and pro-poor initiatives, like Progresa/Oportunidades and Procampo, when they are well conceived and publicly presented.***

Public investment ***in the budget remained around two percent of GDP for the central government since the cut-back in the late 1980s, and public enterprise investment dropped to about 1 percent of GDP, but there has been some recovery since 2002. Still, future growth may suffer from infrastructure bottlenecks***, such as in electricity and transport, which the Infrastructure PER (2005) will investigate further. Also, since investment has been the main

adjustment factor for macro-fiscal shocks, the past cut backs have left little room in the budget for adjustment to future fiscal shocks. The goal of more investment needs to be tempered with serious evaluation of the quality of projects and balanced with consideration of the funding requirements of the priority current-spending programs.

Debt and Pensions. The federal government has regular debt of about 21 percent of GDP, plus another 21 percent in off-budget debt for the financial-sector restructuring, toll-road bailouts, and off-budget investment in public enterprises (PIDIREGAS). ***The burden of this interest-bearing debt is readily sustainable***, both in the sense of not crowding out much program spending and in the sense of the debt stock being stable as a share of GDP. ***The government's largest liability now is contingent, for unfunded pension liabilities in IMSS for the formal private sector, in ISSSTE for current and former federal government employees*** (including federalized teachers), and in the special pension programs for workers in agencies like PEMEX and IMSS itself (as employer) Already ISSSTE gets budget subsidies of 0.2 percent of GDP, and in the absence of reform these will quadruple by 2020 and would continue to grow unsustainably with present trends. The special agency pensions are even more generous, expensive, and unsustainable. Hence the urgency of reform[1]. After that, there will be large transition costs, as with IMSS, but the debt will be finite and not growing, although the annual costs will grow for about a generation before declining.

Raising Resources. Public spending could become more efficient and more pro-poor, either through redistribution from existing programs or from higher resources through tax reform. Substantial increases in public infrastructure investment and social programs, like making secondary education universal, will require increased tax revenue. The main taxes in Mexico—VAT, excises, corporate and personal income tax—raise the majority of their revenue from upper income households, because the distribution of income before taxes and transfers is highly unequal and the tax burden as a share of income rises with income. Consequently, ***any of the tax reform options under discussion, including expanding the VAT to non-basic food, would transfer resources from the rich to the poor***, if the revenues go to increase the share of expenditures targeted to the poor and to expand and improve programs that provide similar benefits to all income levels. ***Reducing the subsidy for residential electricity consumption and using some of those resources to expand Oportunidades and other social programs would be strongly redistributive.***

3. Institutions of Budgeting and Expenditure Management

Although Mexico has the main elements of a robust public expenditure management system, its institutions are not yet functioning to bring spending in line with government priorities and to establish transparent results-based management. Mexico has separate planning and budget processes, with planning institutionalized in a six-year National Development Plan (PND) that remains unchanged during the President's term, while circumstances and the annual budgets evolve and lead to expenditure patterns that diverge from the PND. Even for capital projects, Mexico now budgets only for one year at a time, which preserves some flexibility (since most current spending is seen as rigid) but raises total project

[1] Since this report was completed, Congress approved a reform of the pensions for new employees of IMSS, which will eventually help to solve this problem.

costs and weakens strategic focus. Generally, the President does not get involved in the annual budget until late in the process, leading to limited policy ownership and ad hoc interventions to squeeze out funds for some of his priorities. ***The common OECD practice of a multi-annual budget, up-dated each year with the objectives evolving from the PND, would give the President an instrument to implement his priorities.*** SHCP has made some steps in this direction with the publication in 2002 and 2003 of aggregate fiscal projections.

SHCP follows a traditional mandate of detailed control of agency finances (budget formulation and execution), while missing many larger policy issues. During budget execution, as in budget formulation, its role is process-oriented, adding less value than it could, because it attempts to control budget execution ex ante and centrally. Most OECD countries have replaced centralized, ex ante control regimes, with control at a more aggregate level (e.g. of total spending, personnel spending, and capital spending by each agency) and an active role in ex post monitoring of performance. ***Performance indicators, introduced in Mexico in the 1990s, do not yet have the intended impact, because they do not correspond clearly with the budget lines and because performance outcomes do not affect the subsequent annual allocations.***

Transparency and accountability. ***Mexico has improved transparency, with the elimination of a budget line for the president's discretion, the publication of the overall public-sector borrowing requirement, the passage of a law for access to public information and establishment of an agency to implement that law.*** Further improvements could bring Mexico more in line with common OECD practices:

- More timely and detailed public financial reports.
- Prompt publication of reports on sector performance, such as in education.
- Simplified classification of spending in a way to improve public understanding.
- Actuarial reports on pension and other large mandatory programs, making full disclosure of contingent liabilities.
- Improvements to mandatory program oversight.
- Requirements for costing of new policies—taxation and expenditure—before their enactment.
- Production and wide distribution of a Citizen's Guide to the Budget.

MEXICO PUBLIC EXPENDITURE REVIEW
VOLUME 1—CORE REPORT

1. Mexico has achieved what are the first priorities for reform in many countries—keeping total spending in line with revenues, increasing allocations for social investment, and decentralizing resources and responsibilities to subnational governments.

- The budget deficit is well under 2 percent of GDP, and debt stocks are under half of GDP.

- Over one-third of public spending goes for education, health and social protection, and the share of these programs serving the poor has improved in the past decade.

- Close to half of public spending is carried out at the state and local levels.

2. Nonetheless, the Mexican authorities see that important problems remain and are pushing the public-finance reform agenda further. Public spending allocations do not align fully with the government's strategic priorities—poverty reduction and growth through competitiveness and job creation, while increasing transparency and accountability of the public sector. While some spending addresses these concerns, a large fraction still does not. Public sector employees, special interest groups, and subnational governments make strong claims for resources, but often without adequate transparency or accountability for results. Addressing these problems on the spending side may help bring agreement about fiscal reform on the tax side, as people would agree to pay more if they like what they get for the money.

3. The programs of progressive social spending compete for resources with other programs that benefit smaller higher-income groups; thus, understanding the programs' differing distributions of benefit will help to evaluate their priority. Such benefit incidence analysis also provides a context within which to understand the full incidence of taxes, existing and proposed. Furthermore, as spending has become more decentralized, the geographic distribution of public resources has become an issue not only for equity and economic efficiency reasons, but also for the federal political process that plays an increasingly important role in public finance decisions.

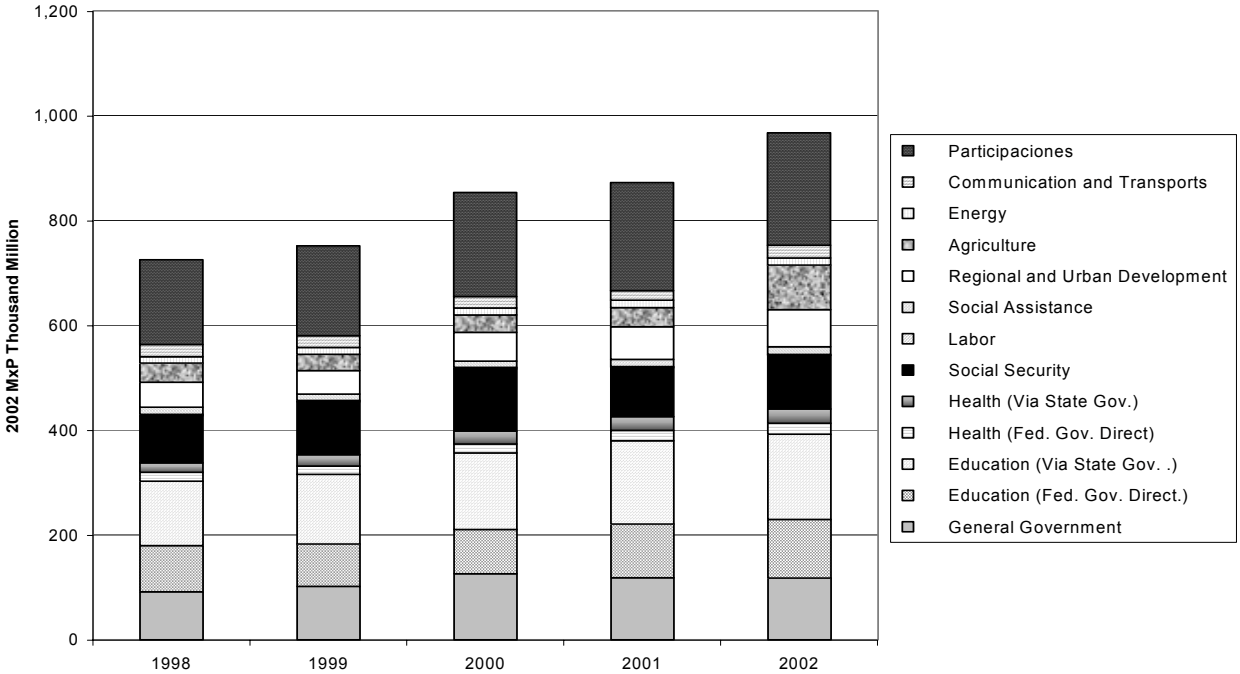
Spending Allocation

4. From 1998 to 2002, programmable spending of the central government increased by about one-third in real terms. Partly this was due to increased revenue and total spending, which grew by over one-fourth—over twice as fast as growth of the economy—but the rest of the increase in programmable spending came from resources formerly going to debt service.[2] In other words, the successful fiscal adjustment has lowered interest costs from 24 percent of total spending in 1995 (44 percent in 1990) to 14 percent in 2002 and allowed more spending for programs. The two largest functional categories, absorbing over half of the federal budget, are for un-earmarked transfers to the subnational government (participaciones) and for education (mostly transferred to the states and effectively earmarked for the teachers in the federal union). See Figure 1. Budgeted spending for communications, transport and energy—essential inputs

[2] The CPI index was used to adjust the nominal values to 2002 prices.

for improving competitiveness and growth—were close to five percent of total spending but have stagnated in real terms, dropping as a share. The spending increase for agriculture in 2002 was mostly for closing Banrural, paying for losses incurred in previous years. Off-budget spending by state enterprises for infrastructure investment also declined. Off-budget subsidies, through under-pricing, for electricity used by households and agriculture grew to equal almost five percent of budgeted spending by 2001; since then some pricing revisions stopped the growth. Targeted anti-poverty programs like Oportunidades receive only a percent or so of total spending—enough to do some good, but not to shift the overall orientation of the budget. As discussed below, the poor also participate substantially in some other larger programs even though they are not targeted to the poor.

Figure 1: Composition of Federal Government Expenditure, by Function (excluding debt service)



Source*: SHCP and World Bank calculations.*

The government—President and cabinet, in collaboration with Congress—should reassess the whole pattern of spending in light of its highest priorities. The increments to spending, at least in real terms and perhaps even nominal pesos, should go only to the true priorities, which should be strongly publicized as the rationale for focused spending.

As elaborated below in the individual sector discussions, increases should go where the need is clear and the risk is low of dissipation into rents for special interests.

Tax reform would be justified as a way to raise resources for strategically focused spending. Even to maintain total revenues as a share of GDP will require stronger tax effort, as the share of oil revenues will eventually shrink in a growing economy.

Institutional changes, elaborated below, are needed to bring the budget more in line with the government's strategic priorities.

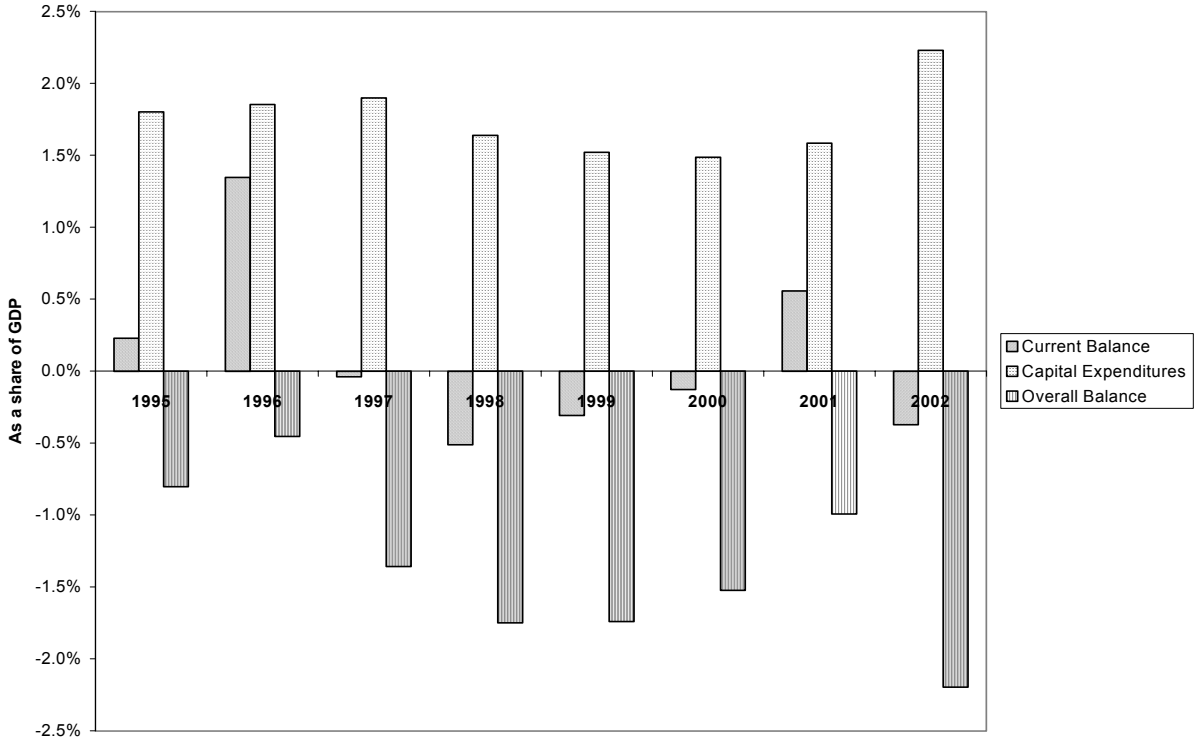
Fiscal Sustainability and Expenditure Rigidities

5. ***Fiscal balances***. The overall non-financial national public sector has improved its fiscal and financial position since the 1995 crisis—keeping **deficits low** and improving maturity structure—and received **investment-grade credit ratings** from the three major international rating agencies in 2000–01. See Figure 2. Nonetheless, some important medium-term fiscal issues require attention. Until 2002 public investment remained in the range of 1.5 to 2.25 percent of GDP for the central government, following the cut-back in the 1980s. The reductions were needed at the time but future growth may suffer from infrastructure bottlenecks, such as in electricity and transport, which the Infrastructure PER will investigate further.[3] In the public enterprises, investment remained almost frozen in nominal terms since 1996, thus falling to about 1 percent of GDP, although there was some additional investment financed off-budget. The low investment figures have been at about the same level as the overall deficit, meaning that the current balance is around zero and occasionally negative—some borrowing went to finance current spending. Also, since investment has been the main adjustment factor for macro-fiscal shocks, the past cut backs have left little room for adjustment to future fiscal shocks. Since 2002 public investment has grown strongly, with much of it coming via off-budget operations (PIDIREGAS) in the energy sector

Further fiscal effort should focus on increasing revenues and containing recurrent expenditures, so that the budgeted investment can continue to increase—raising the current balance and not the overall deficit. To finance part of an efficient growth-oriented expansion of the investment program, the government could sustain a modest increase of net borrowing (overall deficit), with the rest of the investment being financed with increased current balances. More total investment should not obscure the need for serious evaluation of the quality of projects, nor should it crowd out funding for the priority current-spending programs.

3. Earlier studies showed that increasing investment in transport and electricity would have a significantly positive effect on growth. *Mexico: Fiscal Sustainability*. World Bank 2000.

Figure 2: Federal Government Investment, Current and Overall Balances



Source: SHCP and World Bank calculations

6. ***Sustainability of debt***. The formally issued debt of the federal government is about 21 percent of GDP, and off-budget debt for the financial-sector restructuring of 1995, for past toll-road bailouts (FARAC), and for investment in public enterprises (PIDIREGAS) is also worth about 21 percent of GDP. With primary surpluses around 2 percent of GDP and growth within 2 percentage points of the real interest rate, the burden of this interest-bearing debt is readily sustainable, both in the sense of not crowding out much program spending and in the sense of the debt stock declining as a share of GDP.

7. The government's largest liability now is contingent, for unfunded pension liabilities, mainly in IMSS for the formal private sector and in ISSSTE for current and former federal government employees, including federalized teachers. Under some plausible assumptions, the present-value of unfunded pension liabilities are three-fourths of a year's GDP, although this will surely change once ISSSTE is reformed. (IMSS was reformed in 1998.) This pension liability is not interest-bearing debt, however, so the sustainability calculation is different. For a pay-as-you-go system, which ISSSTE still is, financial sustainability depends on the growth of the number and pay of contributing workers relative to the number and expense of the retirees. Already ISSSTE requires and gets budget subsidies of 0.2 percent of GDP, and in the absence of reform these will quadruple by 2020 and would continue to grow unsustainably with present trends. Pension programs for workers in IMSS (as employer), PEMEX and Luz y Fuerza (Mexico City's electric company) cost even more than for ISSSTE (even though they covers

only about a third as many workers).[4] Hence the impetus for reform. After that, there will be large transition costs, as with the IMSS reform in the 1990s, but the debt will be finite and not growing, although the payments needed on it will grow for about a generation before declining eventually to zero

8. ***Spending rigidities***. SHCP has become rightly concerned with the increasing rigidity of spending allocations. The inflexibility has two distinct aspects—first within the budget year and the second from one budget year to the next. The short-run problem is that 57 percent of the budget goes for debt service, wages, nominally specified transfers to the subnational governments, and other inflexible obligations, although this is low compared to other countries like Peru, Colombia, Argentina, and Brazil. Because of the rigidity, any unanticipated decline in revenue leads to sharper declines in the remaining categories, especially investment, which was only about 11 percent of the budget in 2002—low by international standards—although it has risen considerably since 2002. Revenue sharing with the subnational governments, while fixed in law and thus hard to change in the medium term, actually mitigates short-term rigidity, in that the participaciones formula automatically makes the subnational governments share proportionally in the burden (or benefit) from total revenue fluctuations.

9. The medium term problem with rigidities arises when the government needs to be able to cut spending in non-priority areas, in order to reallocate expenditure in line with the new priorities decided by the democratic process. In some ways the picture has already improved, as items like debt service, which cannot be changed even by law, have actually declined in the last few years, to about one-fourth of outlays. Items that are fixed by law and changeable by law (other than the annual budget law), like participaciones to subnational governments and existing pay levels for federalized teachers, are just over one-half. While these legally established spending programs have strong constituencies and a lot of inertia, Mexico's own experience in the 1990s shows that well-conceived and publicly presented programs can draw resources away from older and apparently entrenched programs. For example, the generalized food subsidy programs—including the expensive tortilla subsidy—were successfully replaced with the much better targeted Progresa/Oportunidades program. And a number of agricultural subsidy programs, which would have been impractical in the NAFTA context, were replaced with the better-targeted and less distortionary Procampo, discussed below.

10. Personnel expenses, including for decentralized "federal" teachers and health workers, are the largest and fastest growing part of the rigid expenditures, and their aggregate size is only part of the problem. Another dimension of rigidity is that the employees are difficult to move even within their sector, like from a school with excess teachers to one where they are needed. Some other recurrent spending, like for maintenance and material, do not contribute to rigidities and are often among the most productive expenditure choices. Where program priorities call for more non-wage recurrent spending, it would also help in reducing rigidities.

> *Further fiscal effort should focus on increasing revenues and containing current expenditures, so that the investment could increase—raising the current balance but not necessarily affecting the overall balance. Indeed, to finance part of an efficient growth-*

[4] Since this report was completed, Congress approved a reform of the pensions for new employees of IMSS, which will eventually help to solve this problem.

oriented expansion of the investment program, the government could sustain a modest increase of net borrowing (overall deficit), with the rest of the investment being financed by increased current surplus.

The government recognizes that the public-employee pension system urgently needs reform and that prompt action would forestall further increases in the cost of reform. For the rest of public finances, there is no immanent crisis, as the ratio of debt stock to GDP is declining over the medium term.

11. Making expenditure more flexible is not an end in itself, for commitment to good programs is also needed, but rather should be achieved as an outcome of reallocating expenditure to uses that people agree have higher priority, such as better social programs or public investment in essential economic infrastructure. Nor is investment rather than recurrent spending a worthy goal in itself. Once the funding priority of a program has been decided, ideally in a medium term spending context, then one can decide the optimum balance of investment and recurrent spending to achieve the program objectives.

Public Spending for the Poor and the Rich

12. The Mexican government gives high priority to expanding social programs for all Mexicans, with a fair share targeted to benefit the poor. This trend was evident in the 1990s, and the present government has accelerated it, as shown with benefit-incidence analysis using data from the budgets and the household surveys (ENIGH). The spending for which we have incidence data is equal to 52 percent of total central government spending; the spending analyzed for incidence also includes some spending outside the central budget, by public enterprises and by subnational governments from their own resources. See Chapter 2 in Volume II. The Mexico Poverty Programmatic (2004) also discusses the trends in poverty and the government's programs that aim to reduce it. **The share of public expenditure benefiting the poor has increased by expanding the budget share allocated to pro-poor programs, and also through better targeting within programs**, either by extending the coverage and quality of programs in poor regions or by interventions to increase the participation of the poor (e.g., reducing participation costs).[5] The programs that are absolutely progressive—giving more benefits to the poor than to the non-poor—comprise about a half of the spending analyzed for benefit incidence, as shown by the white areas in Figure 3. Most of the rest of spending for which we have information on incidence—the gray areas—give more benefit to the poor as a share of their incomes although not absolutely more per capita. Still, these programs do redistribute resources toward the poor, as long as the tax burden is proportionately heavier for the rich than the poor, which it is, and as long as the quality of programs is equal across income levels. (Only a small part of spending, the black area, gives more to the rich as a share of income.) The second assumption needs more investigation, but probably does not fully hold, so that the programs in dark gray might not be even relatively progressive.

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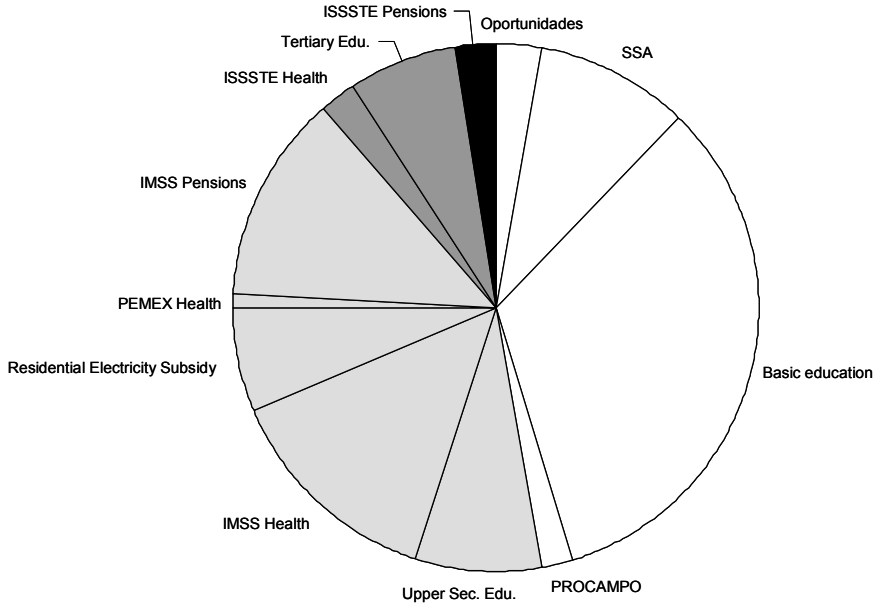
5. Roughly half of Mexico's population, 47 percent in 2002, were counted as poor, so the terms poor and non-poor essentially refer to the lower and upper halves of the income distribution. About one-fifth of the population in 2002 was counted as extreme poor, with income (even after transfers) too low to buy a minimum adequate food basket.

Figure 3: Progressive and Regressive spending programs in Mexico – 2002

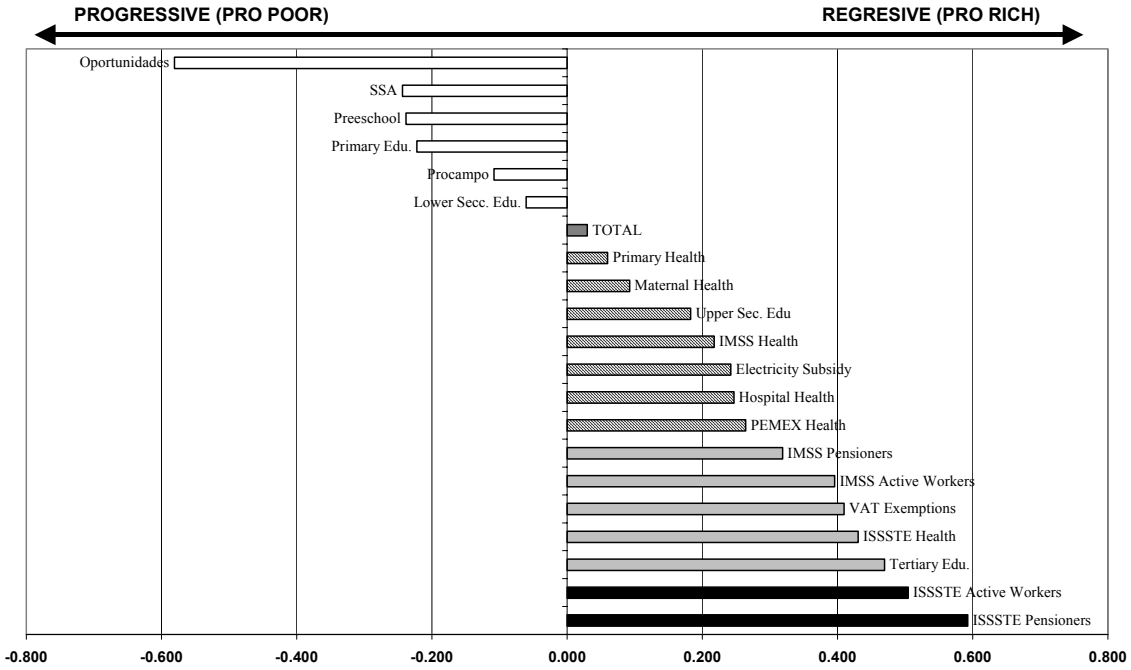


White: absolutely progressive programs, giving more per capita to the poor than the rich
Gray, light and dark: proportionally progressive programs, giving more to the poor as a share of their income, but not in absolute terms. (Dark gray programs are closer to regressive.)
Black: regressive programs, giving more to the rich absolutely and as a share of their income
Source: World Bank calculations based on the ENIGH 2002 and information from the *Cuenta Pública Federal*.

13. Overall, the benefits of federal spending are almost equal per capita across income levels, and nearly all programs are more progressive than the income distribution before government programs. See Figure 4. Since the overall tax burden is progressive in the strong sense of taking a larger share from the income of the rich than the poor (due to the very unequal initial distribution of income, the relatively large share of direct taxes—ISR and social security—and the exemptions on VAT), the whole fiscal system redistributes from the rich to the poor. The cost of public programs used by the lowest-income decile exceeds their own earned income, but is only about 5 percent for the highest-income decile. See Figure 5.

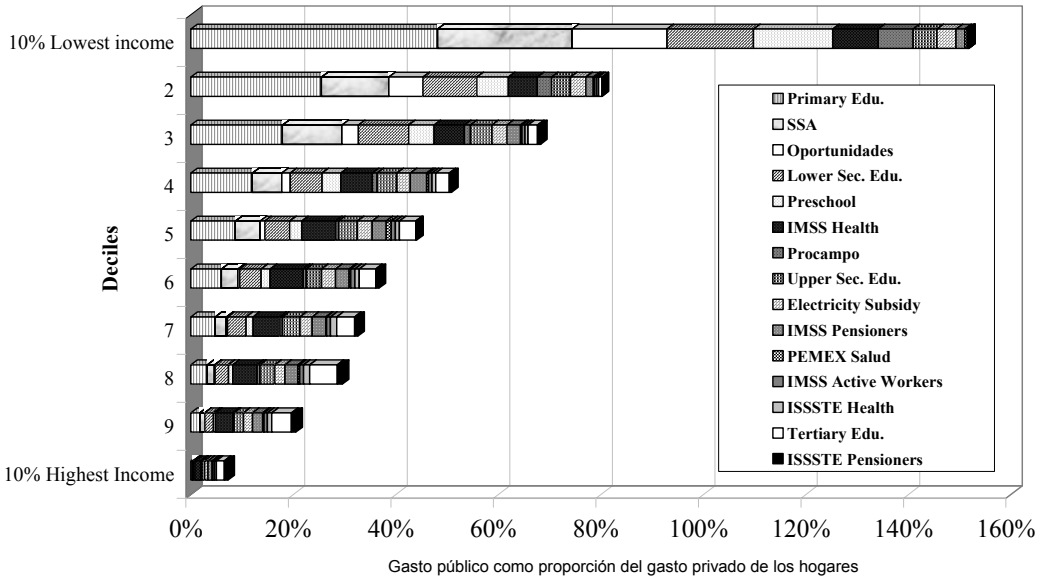
14. The recent increases in progressivity have involved complementary reforms in all three fronts—increasing the share of spending on basic education and health services for the uninsured, extending the coverage of health and education services (and targeted food subsidies) in poor rural areas, and increasing the demand of the poor for these services, through more basic education and through conditional transfers (initially *Progresa*, and today *Oportunidades*) that require the usage of the services. Expanding programs that now are used more by the non-poor, like IMSS and upper secondary education, will probably be very progressive, since most new participants would be from the poor. The same thing happened with lower secondary education in the 1990s, when access became nearly universal.

Figure 4: Concentration Coefficients, National, 2000, 2002



Source: SHCP, ENIGH and World Bank calculations..

Figure 5: Public Expenditure as a Proportion of Autonomous Expenditure, National, 2002



15. Alongside the improved size and effectiveness of targeted programs, spending for some untargeted social programs (like tortilla subsidies) and non-social spending (like infrastructure investment) has declined, while other social spending programs have grown—some benefiting persons at all income levels and others mainly upper income groups, like university education and public sector pension subsidies. Overall 2.6 percent of total central government spending goes for the poverty targeted programs (Oportunidades and Procampo); one-third goes for untargeted social programs with substantial participation by the poor (education below the tertiary level and health for the uninsured and those with private sector social security, IMSS), and one-sixth goes for programs where over two-thirds of the benefits go to persons in the highest four income deciles. The calculations assume that benefits are equal for all recipients reported in the ENIGH and that they have a value proportional to cost. Future studies of specific sectors should investigate this issue further. For almost half of total spending (including debt service, general administration, public security, and transfers to subnational governments not used for education or health) the benefit incidence is unknown.

16. The rationale for the targeted programs has been repeatedly articulated, and SEDESOL and outsiders, including the World Bank, have studied their effectiveness. The untargeted programs have received less attention. Some items, like electricity subsidies for large household consumers and farmers pumping aquifers dry, have negative externalities as well as regressive benefits. Other public spending that benefits mainly upper income groups—for higher education, health for the insured, and pensions—have some justification but need re-consideration in comparison with the alternatives of financing them more with cost recovery or obtaining these services from the private sector. There is little evidence that upper-income households would purchase less than the socially optimal amounts of such services, since those households face relatively few cash constraints and presumably know their own needs better than government officials. In some cases, including middle-income groups among beneficiaries of public programs has a potential rationale in getting their political support for programs with major spill-over benefits to the poor—as for basic education. When the poor have little access, however, then the practical reasons for the programs may be to distribute rents (as from oil) in a non-transparent way to upper-income groups, including, perhaps most importantly, public employees working in the programs.

17. ***Benefits net of tax cost***. How actual and potential additional spending is financed has important effects on the net benefit incidence of public spending. The three main vehicles for increasing tax revenue (with a clear pattern of incidence on households) are (i) broadening the base of the VAT (or other indirect tax) to include at least some food, (ii) enforcing better the collection from the existing VAT, and (iii) improving enforcement or reducing exemptions to the personal income tax. The ENIGH data on (labor) income to impute the income tax and social security contributions (health and pensions separately) show that all of these taxes are highly progressive in absolute terms (the sense used to evaluate spending)—most of the burden falls on higher income groups. The income tax is the most progressive, as its burden as a share of income rises with income (the usual definition of progressive for tax analysis), so the net effect of its use for financing any main category of spending, even ISSSTE pensions, would transfer income from higher income to lower income groups. It also makes substantial transfers within income groups. Thus, the **benefits of public spending net of taxes are progressive**, because of the highly unequal pre-tax/transfer distribution of income and the progressivity of the tax system.

18. The more difficult question is whether redistribution is limited within the upper half of the distribution or is also relevant for poverty reduction. Given that most of the "excess" income inequality observed in Mexico (compared to countries with a similar income level) is found *within* the top decile, it is perfectly possible for net benefits to reduce inequality while failing to reach the poor. The existing VAT puts somewhat less than average burden on low income groups if one considers how much they purchase in the informal un-taxed economy. Taking **into account the asymmetry of welfare effects between taxes and spending**—taxes reduce monetary resources with relative certainty, while the individual's valuation of public services may be less—**assuring a progressive effect of a tax increase may require some compensation through well-targeted monetary transfers.**

19. Another potential source of financing, in addition to increasing (general) tax revenue, would be increasing collection of user fees, for utilities (notably electricity) and higher-end social services (tertiary education and some health). Increasing employees' social security contributions would be another possibility, especially for public sector workers, although for the private sector this would imply partially reversing the shift from social security (payroll) taxes to general taxes in the 1997 IMSS reform, which was designed to reduce labor costs and informality.

> *Tax reform and rationalization of expenditure should both proceed with the motivation to improve equity of public finances by expanding programs targeted to the poor (like Oportunidades) and by expanding participation of the poor in general spending programs (secondary education, social security). Social programs in remote rural areas especially need expansion. Where various programs are approximate substitutes for each other, as with basic health, then we recommend to expand the more progressive ones. Where there are good programs without substitutes, for example higher education and advanced health, they should expand the effective access of the poor*
>
> *Any of the relevant tax reform options, including a VAT on non-basic food, would have a progressive effect—transferring resources from the rich to the poor—if the revenues go to increase the share of expenditures targeted to the poor and the rest go for programs that provide similar benefits to all income levels, like health and primary and secondary education. Reducing the very distortionary subsidy for residential electricity consumption and using those resources to expand Oportunidades and other social programs would be highly progressive.*
>
> *To finance expenditures that go mostly to upper income groups, like for pensions or for university education to the present beneficiaries, expanding the VAT base would have a net effect against the lower income groups, whereas financing with measures like more income-tax collection or reduced electricity subsidy would be still progressive.*

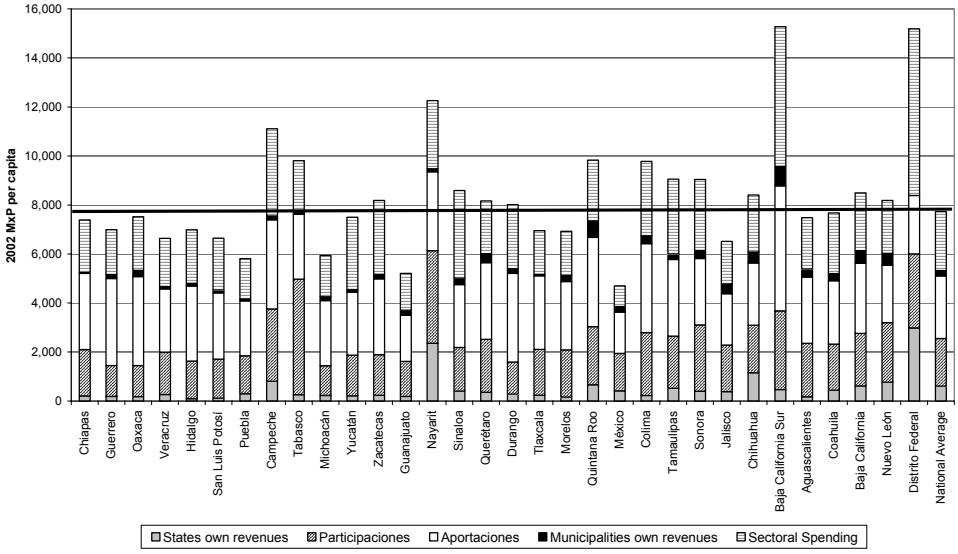
Fiscal Federalism and Geographic Equity

20. Almost all the resources available to states and municipalities (except for the DF) come from the federal government, so the distribution of these resources is an active concern of the federal government—to assure that states can meet the spending obligations delegated to them,

especially in executing decentralized social programs, and that the SNGs have appropriate incentives for efficient spending and their own tax effort. **Compared with 1992, before the major sector decentralizations beginning in 1993 and the last main revision of the participaciones formula in 1994, the SNGs now get transfers for about twice as much per capita in real terms.** About 42 percent of central government spending was transferred to the subnational governments in 2002 for their use. See Chapter 3 in Volume II.

21. Although there is a lot of inequality between states in the resources transferred to their governments and in direct spending of the federal government in the states, **the inequality in the states' total public resources per capita is not correlated with poverty levels. The relative position of the poorer states (higher indices of marginality) has improved since 1992; now they receive about as much per capita as the national average.** See Figure 6. States are arrayed from the highest CONAPO marginality (poorest) on the left, to the richest on the right. At all levels of poverty and marginality the variations depend partly on the states' population size. The five smallest population states have per capita resources well above average, while the large states, except DF, get less than average.[6] These outcomes appear as the accumulation of separate decisions, apparently based on narrower sectoral concerns. The largest inequalities originated from the pattern of state taxation before the 1980 *pacto fiscal*, by which the states gave up these tax bases, and from the distribution of teachers in federal schools before 1993, when they were given over to state authorities along with money to pay their salaries.

Figure 6: Geographic distribution of per capita resources, 2002



Source: INEGI and SHCP data and World Bank calculations

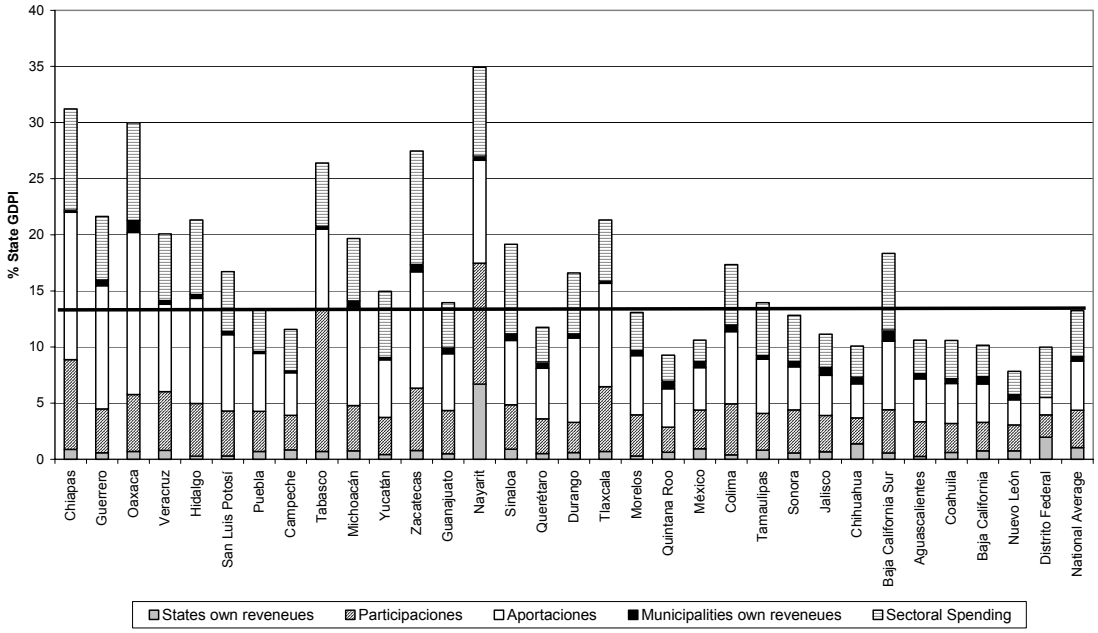
22. Investment done directly by the federal government but located in the states to benefit those populations (roads, water, etc. but excluding PEMEX and central government functions) declined in real pesos per capita by about 20 percent from the early 1990s to the end of the

6. The resources for the DF include direct federal spending for teachers, which is shown as part of aportaciones, in order to be compatible with the representation of other states. In Nayarit the state's own revenues are unusually high in 2002 because of some large improvement fees (mejoras).

decade, and it remained highly unequal across states. It is positively correlated with the transfers to the state governments, thus accentuating rather than offsetting the inequalities of the transfers.

23. Looking at the **states' fiscal resources as shares of their GDP, rather than per capita, reveals a strong pattern of redistribution toward poorer regions.** See Figure 7. The five states with the highest marginality rates are getting public resources equivalent to 15 to 23 percent of state GDP. At the other end of the distribution, the eight states with highest income per capita (except Baja California Sur, with very low population) get below-average resources as a share of GDP. This shows, first, that the public sector is much more important in the low income states, and the private sector is less important than elsewhere. This is consistent with what we observe in the redistributive impact of benefits for poor households and the rural sector. Of course there are many causal relations between these facts. Since the poorer states also have a larger informal sector, the public employment and contracting dominates the formal economy in the marginal localities. Conversely, the larger and more formal private sector in the upper-income states means that there are employment opportunities unrelated to the public sector, that many talented people are available to take public posts for a few years and then return to corporate careers, and that there is a substantial tax base.

Figure 7: Geographic distribution of public resources, as a share of state GDP, 2002



Source INEGI (2003), SHCP data and World Bank calculations

24. The difference in resources received, as GDP shares, sheds light on the magnitude of inter-state resource flows. If the states all contributed equal shares of their GDP to the national revenue pool for geographically distributed spending—the 13 percent average spending share of GDP is also the approximate average contribution—then the richer states are contributing at least 3-6 percent of their GDP for spending in other states. The poorer states are getting at least 8-18 percent of their GDP as fiscal resources transferred from elsewhere. Since taxation is broadly progressive, the net interstate redistribution is probably even larger.

25. Overall then, the picture for geographic distribution is analogous to the distribution across households. **The rich states, like the rich households, pay more resources into the fiscal system per capita, and on average rich and poor states get out similar amounts in per-capita expenditure benefits.** Some spending programs explicitly target some of the poor—new programs started in the 1990s and expanded since then with a good record of targeting. Other programs go more for some of the rich. Achieving this sort of aggregate equality on average, with an ad hoc collection of programs, has the disadvantage that there is a lot of inequity within most programs and thus within each income level of households or states.

> *Interstate transfers of this magnitude—5 to 15 percent of local GDP— are not uncommon in other countries and are necessary in Mexico to achieve equity of access to fiscal resources for subnational governments in rich and poor area, which seems to be a revealed national value. Nonetheless, there are problems to rectify. First, reforms need to rationalize the transfer system to achieve more nearly equity for every state and municipality, not just on average. Second, if substantial taxing power is devolved to the states, transfers will need to become explicitly more redistributive to compensate for differences in per capita tax bases. Also, it is necessary to evaluate the programs making these transfers to see if they are really helping the poor, developing backward regions, and achieving the other objectives that claim to justify the programs.*

Sectoral Analyses

26. The discussions of individual spending areas summarize the results for the both the household benefit incidence and the geographic distribution of spending. Education, health, agriculture, water, and road spending are mostly funded by the federal level but largely managed by states or by municipalities in the case of water and sanitation. The federal government fully funds and largely manages the main spending programs targeted to poor households—Oportunidades and PROCAMPO—as well as the geographically targeted electricity subsidy.

27. ***Targeted anti-poverty.*** The conditional cash-transfer program **Oportunidades is well targeted for poverty reduction, because its participation is mostly limited to the lower deciles and because it has conditions of children attending school and getting basic health case, both of which improve the chance to move out of poverty.** As a replacement to the general food subsidies, used until the mid 1990s, it is much better targeted and progressive. See Figure 8. In 2002 it cost only 1.6 percent of total programmable spending—less than one-tenth that of federal basic education spending and one third of the electricity subsidy. It also has a geographic distribution clearly favoring more marginal states. See Figure 9.[7] Although *Oportunidades* still does not reach all of the extreme poor, especially in the urban areas, further improvements are in progress. In the ENIGH, about 60 percent of rural households with consumption below the extreme (food-based) poverty line report participation in the program, while the share is only 17 percent in urban areas. This is not a criticism of the program, which deliberately started on a limited scale with rural focus to ensure quality and which has expanded steadily, but it does point to the remaining agenda.

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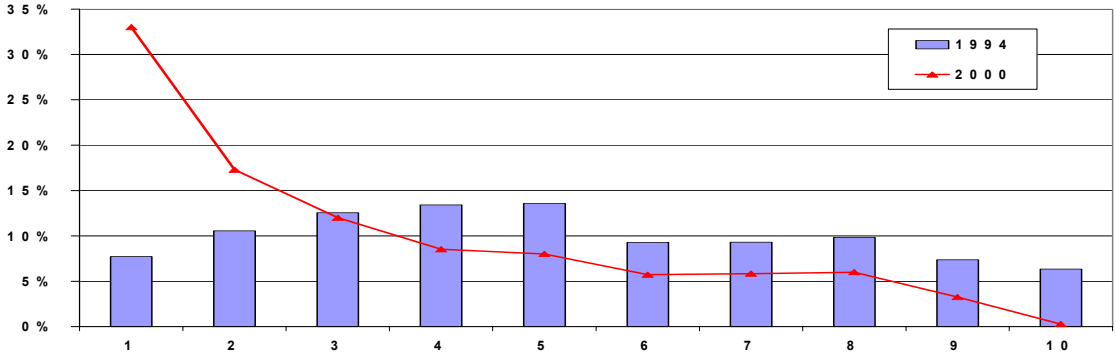
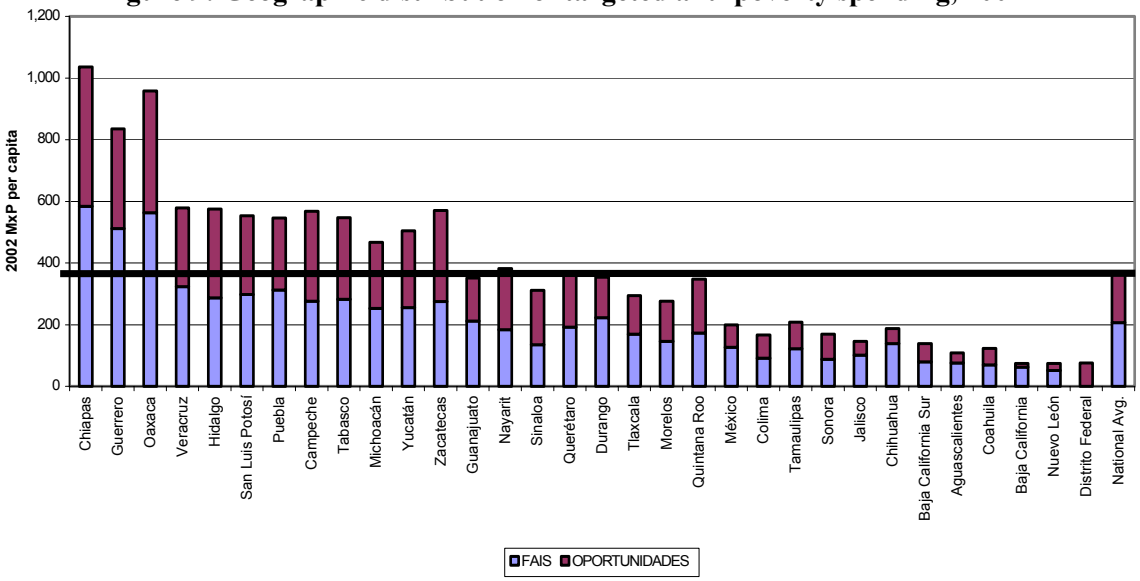
7. States are shown starting with the most marginal, poorest on the left. To judge how well these programs are reaching the poor in different states, it would be useful to see the distribution per capita poor person. Unfortunately, state-by-state data on the number of poor are not available.

Figure 8: Distribution of Public Expenditure on Food Programs, By income deciles, 1994 and 2000



Data: ENN (1999); ENIGH (1996, 2000*); Poder Ejecutivo Federal (2001).*
Notes: Food subsidies include (a) general (1990) and targeted tortilla (*tortivales* and *tortibonos* in 1990, FIDELIST in 2000) subsidies, (b) targeted milk subsidy (LICONSA), (c) school breakfast (DIF), and the Progress food component (2000). Household deciles are ordered by income per capita
Source: Scott (2003)..

Figure 9: Geographic distribution of targeted anti-poverty spending, 2002



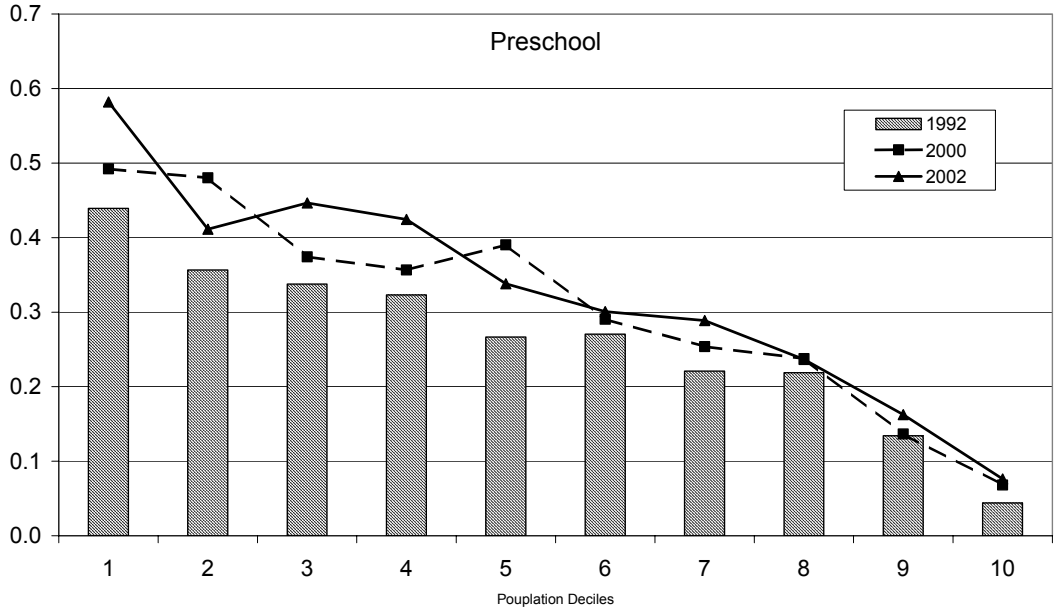
28. Some other allegedly anti-poverty programs, like LICONSA, are revealed in the ENN (Encuesta Nacional de Nutrición 1999) as spreading their benefits over all income groups. They thus become proportional food subsidies (a general milk subsidy would be regressive in absolute terms) and lose effectiveness as a tool to reduce poverty.

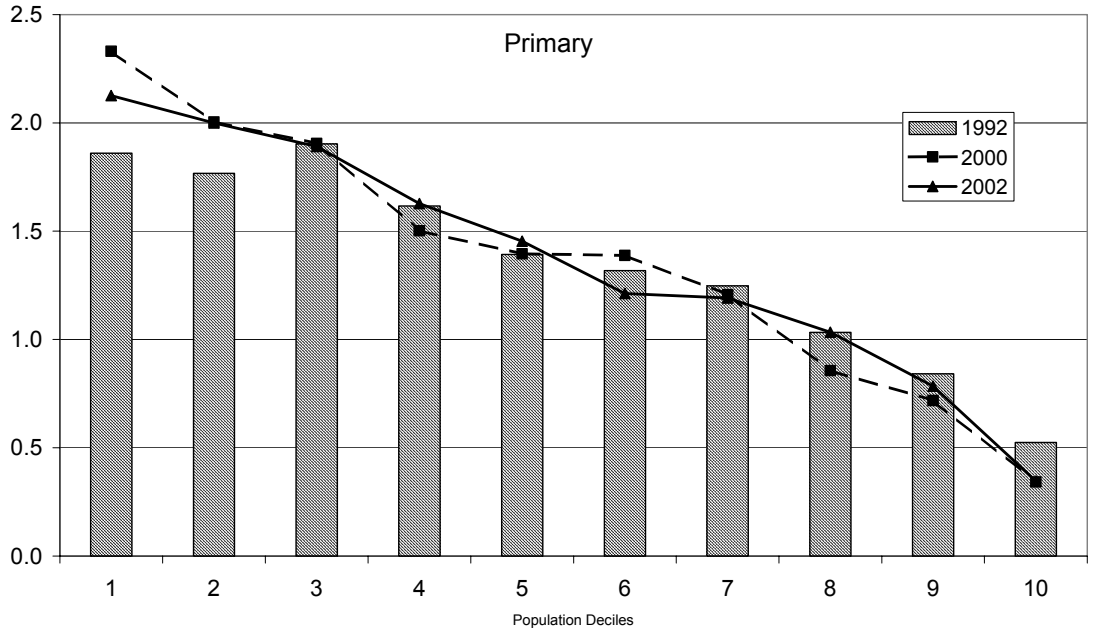
> *Oportunidades should continue to expand its coverage among the poor, which will require proportional increases in funding, since there is very little overhead in the program.*

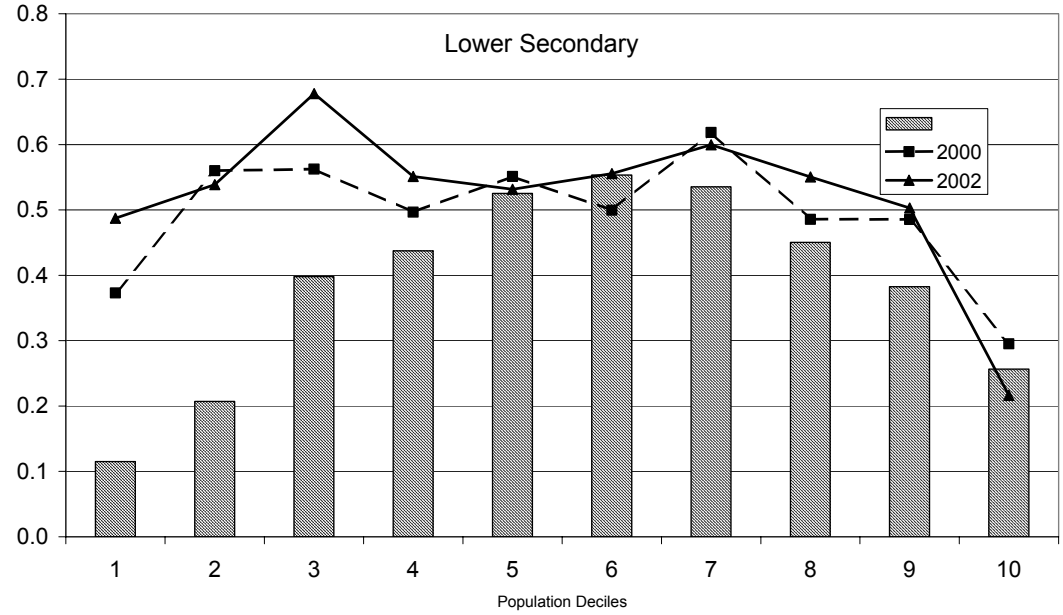
SEDESOL should continue with its evaluation of programs, identifying which programs are best meeting its poverty-reduction objectives and concentrating resources there.

29. ***Education.*** Improving the quality and coverage of education is critical for sustained poverty reduction and competitiveness in Mexico. Free provision of (basic) education is a main tenet in the Mexican constitution, and the sector receives strong funding, which has grown in recent years. **It is the largest area of spending and employment in the public sector.** Educational coverage is expanding, becoming nearly universal at the primary level and moving toward that at the lower secondary level. See Figure 10. Access to upper secondary education remains regressive—with 55 percent of the attending students coming from the upper four deciles—but the increase of enrollment from 2000 to 2002 was spread across the middle and lower income deciles, making that expansion of the program progressive. See Figure 11. **These recent trends, mainly since the mid-1990s for basic education, have made overall education spending progressive, reversing the upper-class bias of previous decades.**

Figure 10: Distribution of Students in Public Education (million)

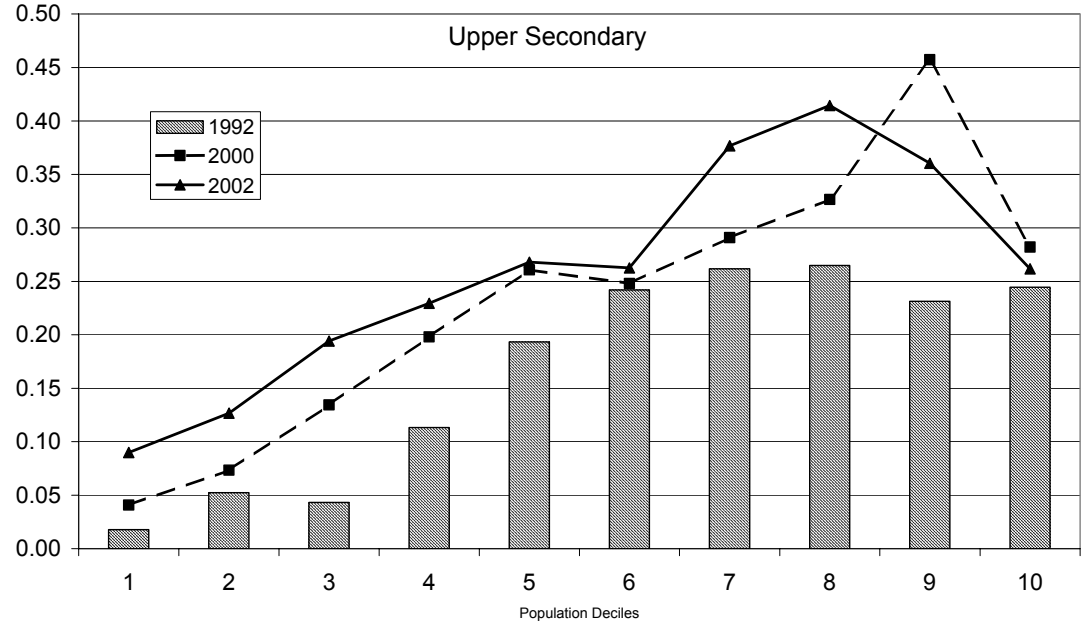


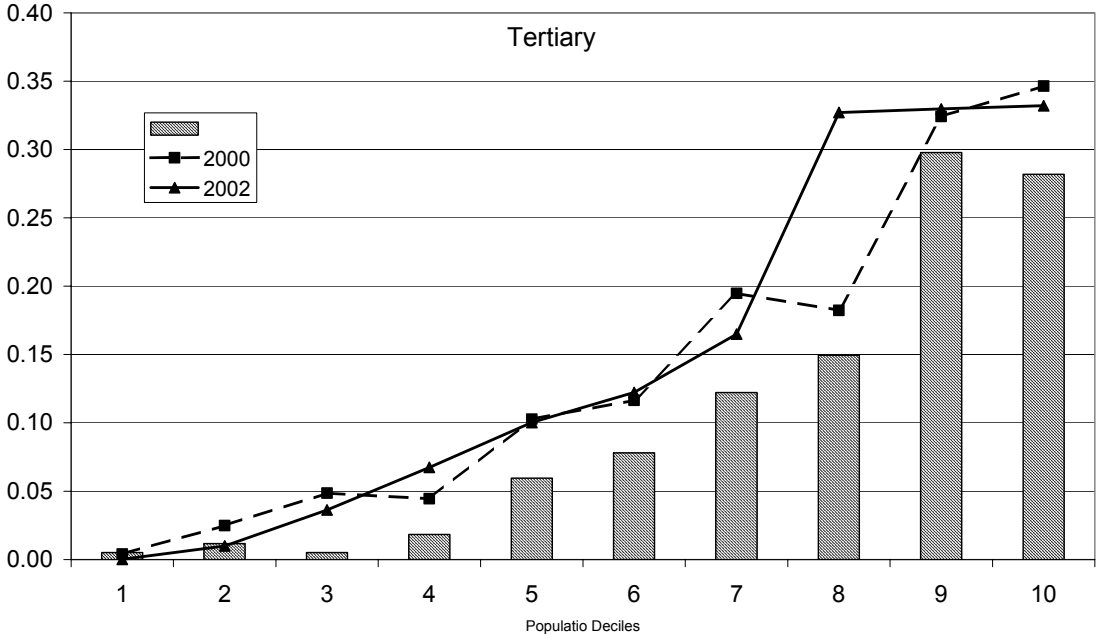




Data: ENIGH 1992, 2000, 2002, Populations deciles ordered by per capita expenditure

Figure 11: Distribution of Students in Public Education (million)





Data: ENIGH 1992, 2000, 2002. Population deciles ordered by per capita expenditure.

30. If one compares private with public spending on education, private spending is very unequal (although it would be different in the total absence of public spending), and public spending makes total spending much more equal. The lowest decile spends of its own money about one-tenth as much as the eighth decile, but public spending for the lowest decile brings its total spending for all schooling levels up to about half of that for the eighth decile.

31. Access to **public tertiary education remains exceptionally regressive**; the participation of the first quintile (1 percent on average in 1992-2002) is the smallest among eight Latin American countries with such data for the 1990s. The expansion of enrollment over the decade 1992-2002 was concentrated in the upper deciles (although it spread out among them) and did not reach the lowest deciles at all.

32. Ten years ago female enrollment rates were 10 to 15 percentage points lower than males, especially in rural areas and tertiary education. By 2002, however, that gap disappeared in every case (except preschool), as **female enrollment rose strongly**, partly in response to the explicit conditions for transfers in *Oportunidades* program, and often now exceeds male enrollment. ***Oportunidades* specifically recognizes the value of female education and the past difficulties in making it universal—the secondary-school subsidy is higher for females.**

33. Federal funding per capita (earmarked) for education varies across states, and is within 10 percent of the national average for about half of the states. There are some substantial outliers, however, above the average (Federal District, Baja California Sur, Colima, and Sonora) and below (Estado de Mexico, Guanajuato, Jalisco, and Puebla). The variation arises from five sources. The first two determine the demand for spending in the state and are exogenously given from the point of view of the state: differences in the underlying needs (numbers of children in each age group, corresponding to a school level) and differences in the national average spending per student at each grade level. Since the age structure varies relatively little across states, these exogenous demand factors account for little of the difference in spending across states. The second two factors reflect the spending in the state to supply the potential demand: the amount spent in the state per student at each school level (compared to the national average) and the share of the age-group population that is actually enrolled at each level of school. There is substantial interstate variance in the enrollment shares at the secondary and tertiary levels (the most costly)— the richer states have higher enrollment shares than the poorer states, but there is also variation in the share of enrollment that is in federal schools, rather than state schools. The enrollment effect is further amplified with variations in funding per student, as indicated by teachers per student, which vary more for the more expensive upper-school levels, where the enrollment variance is also high.

34. **In education, perhaps more than most areas of public service, the ratio between the cost of provision and the value of services to the citizens varies widely, without reliable measurement.** The children of richer households have much higher rates of promotion and continuation on to the next level of schooling. This could be because their schools are better and basic education spending is less progressive than our estimates from the raw data. There are no data ready to estimate such variance in quality, so it lies beyond the scope of this study, but the problem is clearly important and needs more attention. Furthermore, the different education outcomes could result at least partly from family background and other outside factors that the schools do not fully overcome.

> *Providing resources to increase secondary coverage and to increase the quality of all basic education, especially in rural and low-income areas, would have very pro-poor effects. Improved quality at lower levels of school will be essential, along with increased supply of student spaces, to continue progress toward universal secondary education.*

Substantial increases of university students from low-income families will first require stronger secondary school programs to provide more qualified graduates; then universities will need more resources from a combination of public funding, student loans, and direct cost recovery (partial) from the non-poor.

Education policymakers should continue to monitor gender balance and adjust incentive policies as necessary to assure that neither boys nor girls are left behind.

Although the complex pattern of education financing could not be changed overnight, the system has many inequities and inefficiencies, for which the government should initiate a strategy of reforms. They should move the system toward allocations based on students actually enrolled, plus incentives to improve quality at all levels and to expand coverage at secondary and tertiary levels.

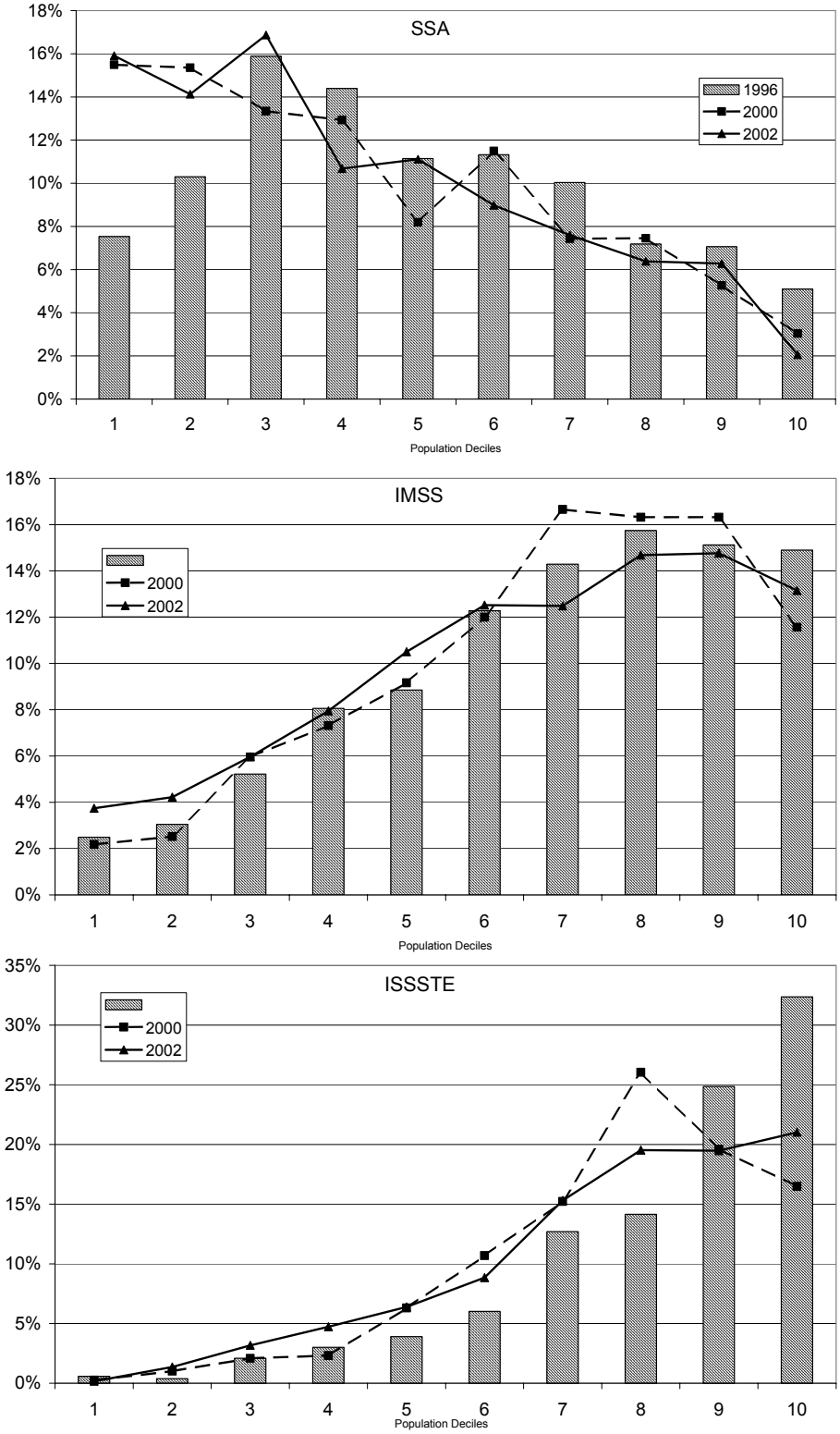
Education quality and efficiency in using resources are such important issues, about which too little is known, that they warrant in-depth study.

35. ***Health.*** Like most of Latin America, Mexico's health system combines financing and provision of care into several packages, each accessible to a different group in society, according to its employment status—public sector, formal private sector, and others ("open population"). The benefit incidence of these programs varies widely, as shown in Figure 12. States run the open program, although funding is through national transfers, while the insurance programs are nationally run. **Mexico has done better than most developing countries in providing universal access to basic care, as measured by actual use of the programs.** Although the quality of the open program is still less than that of the programs for the insured (assuming some correlation of quality with the level of per capita funding), its increased coverage over the last ten years has been associated with major improvements in health indicators. On the other hand, the **care available through the open program is not meeting all the medical needs of many Mexicans**, especially when there is a medical emergency. In the poorest quintile—too poor to afford adequate nutrition—about five percent of households are paying over 30 percent of their income out of pocket for medical services, some to the public facilities and some to the private sector, such as for medicines (Secretaria de Salud, 2002).

36. **Most households in the lower income deciles lack access to the medical insurance programs (and cannot afford private care) and so form the bulk of the clientele for the open program**—giving it a very progressive incidence. Funding per capita for the open programs average half or less than the insurance funding, however, so the incidence of total public spending (including the public insurance) on healthcare to individuals is regressive in absolute amounts, although not relative to household spending.

37. The government recently launched several initiatives to allow the open population to buy health insurance at a subsidized price. These measures will help especially the poor, who are mostly uninsured now.

Figure 12: Distribution of Public Health Coverage, 1996-2002



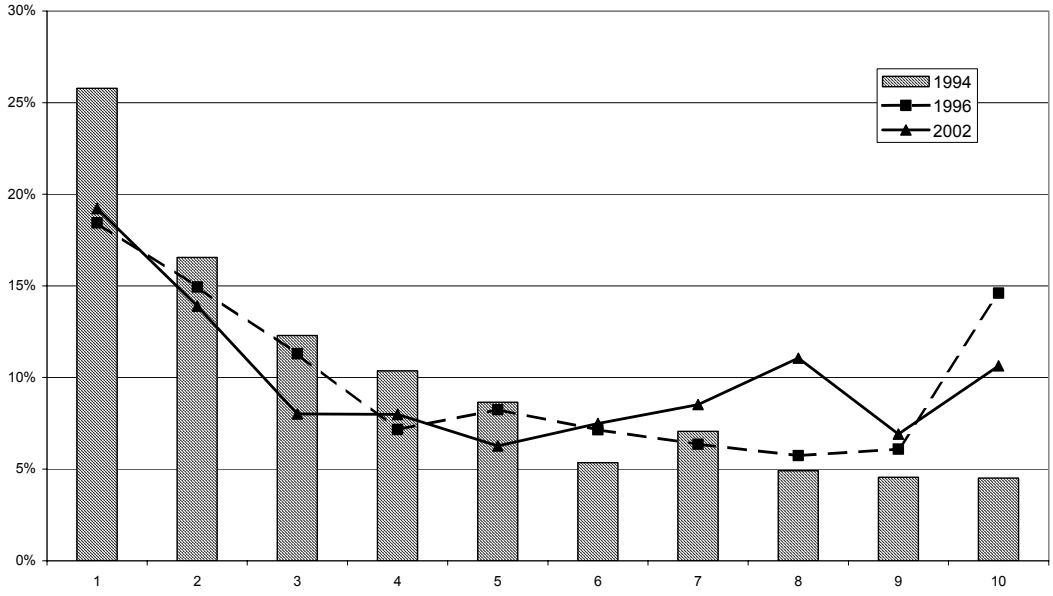
Data: ENIGH 1996, 2000, 2002. Population deciles ordered by per capita expenditure.

38. **In health spending per patient, there is exceptionally wide geographic variety across states**—mainly correlated negatively with population size. The per capita spending for the open (uninsured) population is not correlated with poverty, or wealth, which is an improvement compared with 2000, when the poorer states got less than the average. Over half of this funding comes through earmarked transfers to the states (mainly FASA in Ramo 33), but the states also put in substantial unearmarked resources of their own. For the insured population, which almost all comes in federal programs, the wealthier states tend to have more health insurance spending per capita.

> *Increasing public spending on health, which is now low in Mexico by international standards, would be appropriate, needs to be combined with specific measures to improve quality of service in poor areas. These would include the assuring availability of pharmaceuticals and medical supplies, improving sanitary practices to reduce patient infection and mortality rates, and adjusting consultation hours to meet the needs of working parents.*
>
> *More choices for patients, more incentives for quality and efficiency, and broadening the minimum package of care to which all have access should be the key goals of the on-going evolution of Mexico's healthcare system.*
>
> *If the money followed the patients, who could chose their facilities, there would be more equity as well as incentives for quality and efficiency in the resource allocation.*

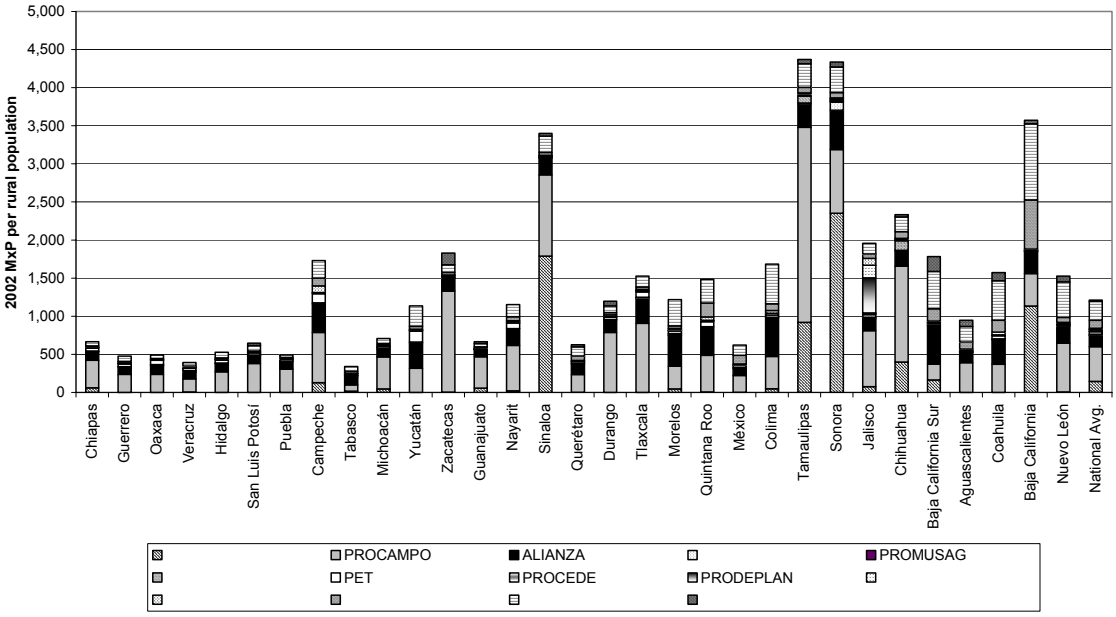
39. ***Agriculture.*** The three largest agriculture programs are PROCAMPO (41 percent), Alianza para el Campo (Rural Alliance, 18 percent), and irrigation infrastructure (17 percent). PROCAMPO, a cash-transfer to farm households based on their hectares cultivated in basic annual crops, started in 1994 to replace general agricultural price subsidies and to balance the impact of NAFTA on farm incomes, particularly of grain producers. It was initially quite progressive in distributing benefits, although funding and beneficiary numbers fell in the late 1990s after the fiscal crisis, making the distribution less progressive but still pro-poor. See Figure 13. The other agricultural programs do not appear in the household survey, but except for Alianza para el Campo, they seem to benefit mainly large producers. While some benefits may trickle down to low-income workers on those enterprises, they probably accrue mostly to agribusiness and upper-income landowners. **Geographically there is a lot of variation; on average the agricultural programs give more per capita of rural population to the rich and middle-income states than to the poor states.** See Figure 14.

Figure 13: Distribution of Procampo Transfers, 1994–2002



Source: ENIGH 2002., World Bank calculations.

Figure 14. Geographic Distribution of Public Spending for Agriculture per Capita of Rural Population, 2002.



Source: SHCP, SAGARPA, and World Bank calculations. (Subsidy refers to the agricultural electricity subsidy

40. **The bias of federal policy in favor of agriculture in the middle and upper income states also appears strongly in relation to water.** The 10 most marginal states get much less than the national average per capita rural for both federal irrigation spending and the subsidies to

agricultural electricity usage, mainly for pumping irrigation water. Much of federal investment in hydraulic infrastructure also serves to deliver water for agriculture in the North, although it is not counted as part of the sector's spending. Farmers in the dry states use heavily—often overuse—irrigation water without payment of fees equal to the value of the water in the rest of the economy, although we do not know the quantitative details. These subsidies for irrigation distort land use—encouraging production of water-intensive crops in water-scarce areas—and are irreversibly depleting aquifers. They only benefit farmers using irrigation, typically in modern, capital intensive agriculture. Since the benefit of the implicit water subsidy is capitalized into the value of their land, reform will be difficult. On the other hand, the industrialization of the north has created other interests who now see their further development seriously constrained by the water shortages resulting from present policies.

> *The agriculture support programs need re-evaluation to see if they really contribute to sustainable development of agriculture and support of the poor. If not, they should be reconfigured or phased out. The government does not subsidize the prices for shoemakers in Leon when market forces lower shoe prices (to the benefit of consumers), and it should apply the same wise logic in the agricultural sector.*

> *If the government wants to subsidize the farmers of the (dry) North, it should avoid measures that encourage overuse of electricity or scarce water, which competes with other uses and does serious environmental damage.*

41. ***Pensions*** account for over a tenth of government outlays with benefits assignable to individuals, even since the 1997 reform of the system for private sector workers (IMSS). **The government subsidy to the various pension systems is large and growing rapidly**—partly to pay the unavoidable cost of the previous IMSS reform. **These payments are regressive in absolute terms**, and the pensions for federal-workers (ISSSTE) and special agencies (PEMEX, Luz y Fuerza and IMSS as an employer) are even regressive as a share of income and have become more so over the decade.[8] The current pensioners in these three state companies represent 8 percent of all pensioners considered, but absorb almost a third of the benefits from the tax-financed annual deficit of these pension schemes, which is more than all ISSSTE pensioners together. The regressivity of the public sector pensions reflects not only the generous pension ratios, but also the relatively high pay in the federal public sector, which has advantages as well as disadvantages, although the issue of the government's pay levels is beyond the scope of this study. A fundamental problem, however, is that the pensions are now a hidden bonus, not revealed in the published salary. IMSS, on the other hand, could expand and become less regressive, as it did to a small extent between 2000 and 2002, when coverage appears to have expanded at the lower income levels and contracted at the upper half.

> *For IMSS the government should continue opening the pension program to low income participants—as the Seguro Popular also does—and allowing enrollment in IMSS pensions or health as stand-alone options, thus extending coverage independently, from formal sector employment.*

[8] Since this report was completed, Congress approved a reform of the pensions for new employees of IMSS, which will eventually help to solve this problem.

For ISSSTE and the other special pension programs, the reform moving them to defined contribution and individual accounts like IMSS needs to be done soon and in a way that does not over-expand government debt. The costs of such a reform and generally of ISSSTE and the other special pensions should be made fully transparent. The cost of pensions should be allocated as cost to the agencies employing the personnel.

42. ***Electricity.*** The electricity sector has many issues beyond the scope of this study, which concentrates on the price subsidies. The sector does provide electricity to over 95 percent of the households, and the price subsidies do reach the poor, who pay only a fraction of the full cost of service. **The problem is that most of the subsidy goes to the non-poor and encourages inefficient energy use and environmental damage**. The subsidies are large in total value, around MxP 62 billion—about one percent of GDP and over twice the spending for Oportunidades—and give the largest benefits to upper income groups and geographic areas. They are complex, making their benefits obscure—112 different tariff schedules for households, according to consumption level, season, and climates.

43. Mexico subsidizes electricity by charging prices for some users that are only part of total cost—45 percent for residential customers in 2002, only 29 percent for agricultural users, and 97 percent for industrial and service-sector users. The excess of operating cost over revenue is covered by direct cash subsidies (MxP 17 billion in 2002) from the budget to the Central Power and Light (LFC) distribution company for Mexico City and by reduced profits (to essentially zero) for the Federal Electric Commission (CFE) that runs the rest of the system and would otherwise provide the government with revenue from taxes or remitted profits. The large direct cash transfers to LFC are merely the most visible drain on fiscal resources. The implicit subsidies, with an estimated value of MxP 45 billion in 2002, also reduce substantially the fiscal resources otherwise available for much needed investment in the sector and for other sectors, although that effect cannot be precisely quantified. **Without the subsidies, CFE would have higher and more predictable cash flow levels, and could mobilize more than proportional volumes of private sector credit for investment** (without encumbering federal borrowing capacity to the same degree as now). Constrained investment in the electricity sector reduces long-term GDP growth, and hence future tax receipts. The forthcoming Infrastructure PER will investigate this in more detail.

44. Underpricing of electricity has contributed to demand growth, in excess of supply. Between 1993 and 2001, electricity consumption per household grew annually at 0.8 percent in temperate zones and more than double, at 1.7 percent in the hot-summer zones. While residential customers in temperate zones received an average subsidy of about 1,000 pesos in 2002, those in the warmest zones got 3,500 pesos. Without further changes to tariff structure, the implicit subsidies to residential users are likely to grow by at least 40–45 percent over the next 5 years, up to MxP 60 billion.

45. **While the electricity subsidies are rationalized as a help to poor households, the high correlation between income and electricity consumption and the substantial levels of use covered by the subsidy has meant that most of the benefit actually accrues to non-poor households.** The summer subsidy, meant to offset the costs of air conditioning, has grown rapidly over time, now covering 42 percent of the population. Even more than the general subsidy, the summer subsidy benefits non poor households, as many poor households in Mexico

do not have air conditioning and those that do consume significantly less energy than non-poor households. With subsidized electricity prices in summer, many households in the (relatively prosperous) North under-invest in energy-saving measures, like insulation, and import old air-conditioners that are too inefficient to operate with full-cost electricity in the United States. Over time, the size of the subsidized energy blocks has grown, as has the duration of the summer tariff, accelerating the growth in overall consumption and hence subsidies in summer zones relative to temperate zones.

46. The 2002 residential tariff revision directed price increments at only high consumption customers, with the aim to reduce the overall volume of subsidies and to leave them targeted to lower income households. As a result of interest group pressure, however, under 3 percent of residential consumers wound up paying the full-cost tariffs, and subsidies remain concentrated in the upper-income deciles 6–9. The total volume of residential subsidies in 2002 declined by only 5 percent over the prior year and their magnitude remains large. Almost two thirds of subsidies still go to the non-poor population, because they consume much more subsidized energy even if their average price is slightly higher than that for a poor low-consuming household.

The principle options for making electricity more accessible to the poor are to subsidize the service itself or to augment the purchasing power of the poor households through income transfers. Mexico has already started to change its basic strategy for assistance to the poor, shifting from subsidizing prices, like food, to targeted and conditional income transfers, as through Oportunidades. Eventually it could do this with electricity as well, although the incomplete coverage of the cash transfers may justify some continued electricity price discount for the poor.

Subsidies should be assigned to the fixed charge, as much as possible, letting charges per amount of consumption reflect marginal cost above the most minimum level and eliminating the subsidy to customers in the intermediate consumption categories. .

For the sake of efficiency as well as equity, the regional and agricultural subsidies could be phased out with steady monthly increases of the rates toward marginal cost. Because agriculture can use off-peak and interruptible service, making it less expensive, its unsubsidized price could be lower than for residential users.

47. ***Water.*** Access to water supply and sanitation services (WSS) is an important determinant of living standards in its own right but also is an important contributor to broader socioeconomic status, particular health (avoidance of water related illnesses, which disproportionately burden the poor) and in some instances education attainment. In areas without good service, women and children devote considerable time and energy to collecting and disinfecting their water.

48. The allocation of public resources has two dimensions in the water sector—spending for construction and operation of infrastructure for irrigation, water and sanitation and, second, the pricing and subsidies for the water itself, which legally belongs to the national government, represented by the *Comisión Nacional de Agua* (CNA). The full picture is hard to see because the accounts do not distinguish clearly the two dimensions, local companies handle the operation of the water supply and sanitation facilities, and most of the water resources are captured directly

by farmers, who often do not report it or pay for it. The large quantity of information on the sector has mostly been not collected or organized in a way to facilitate reforms, which has suited the interests of those benefiting from the status quo. Recently, the scarcity of water and fiscal resources has motivated some improvements, although increased autonomy of subnational governments makes this more difficult.

49. **The geographic distribution of WSS coverage and investment is highly unequal across states, with low incomes and rural location being strongly correlated with less access to service.** Households counted as having "access" in the aggregate statistics receive a wide range of service levels and quality, ranging from 24/7 service in the home, to public standpipes with only a few hours of service per week. Poorer households and those living in poorer states tend to receive the inferior service. Disparities in sanitation and sewerage services are even more pronounced than for water supply. In 2002, rural localities had access rates of 68 percent for water supply and 40 percent for sewerage; the corresponding access was 92 percent and 80 percent in medium size cities; and 98 percent and 92 percent in large cities. With medium sized cities projected to grow most rapidly over the next decade, the access gap will grow there if recent trends continue.

50. Annual investment spending on water and sanitation infrastructure from 1995 to 2002 oscillated around of MXP 4,000 million (constant 2002 pesos) which was low, considering the growth in population and real incomes, the mounting backlog of rehabilitation and modernization of systems and networks, and demands for higher quality of services. It was also low as a percent of GDP compared to other middle income countries. Water investment increased sharply in 2003, however. After more than a decade of decentralizing responsibility to municipalities and their water companies (*organismos operadores*), the sector remains financially dependant on federal funds (half) and state funds (one fourth), with the rest coming from borrowing and local fees. Key federal programs (eg. APAZU and PROMAGUA) are ostensibly targeted to support localities which take concerted steps to modernize their water supply and sanitation services The program procedures are complex and time consuming, however, taking 2–5 years, which conflicts with the 3-year electoral cycles at the local level. The long history of CNA de facto directly providing large volumes of federal resources for unbudgeted emergency works and other ad hoc investments in non-reforming localities in response to political pressures has diluted incentives for states and municipalities to participate in the more organized and transparent programs.

51. The recently revised national water law stipulates the creation of decentralized water-shed agencies (organismos de cuenca) and thus provides an opportunity for more effective technical support to local jurisdictions. Restructuring institutional responsibilities and building up planning and execution capabilities, in line with locally determined investment priorities, will require increased financial resources.

52. Per capita federal and state spending in 2002 for water and sanitation in urban areas of poorer states was roughly one-third that of rich states (low marginality). Per capita spending in rural areas in 2002 was a small fraction of federal and state WSS spending in urban areas, despite the large gaps in the access of rural communities in the poorer states. Ramo 33 has provided increased infrastructure investment funding for municipalities since 1998, distributed progressively according to the degree of marginality, but there are no data on how much of this

goes for water and sanitation. It is most likely, however, that overall public spending for WSS remains highly skewed toward better off states, and within states, to the large urban areas.

Motivating and designing reforms will require continued efforts to improve the quality and transparency of information on water usage and financing.

The precarious financial position of many organismos operadores calls for stronger and better focused federal technical support to state-level institutions and the organismos, in order to build capacity for policy formulation, regulation, investment planning, and operations. CNA should shift its emphasis toward providing this technical assistance and matching grants to the localities less able to pay. Some of this could come from reallocation of Ramo 33 funds; resources need to be made available on a timetable commensurate with the 3-year terms of elected local officials.

Strengthening incentives for organismos operadores to improve operational performance and creditworthiness will require making incremental resources conditional on achievement of realistic goals for technical and fiscal efficiency. Such systems of performance-based transfers (and credit) will need improved sectoral information systems, capable of reporting regularly and consistently on service quality, financial and operational performance.

Although the increase of funds for WSS should mostly come from local sources, on the benefit principal, the federal transfers for WSS services could become progressive, or at least less regressive, through targeting to poorer communities and households in each jurisdiction. This would include programs to support small/medium sized cities (currently absent), expansion and refinement of rural programs and explicit components targeted to poor households within existing urban programs. Such poverty-oriented programs could usefully incorporate successful elements of Mexico's programs in other sectors, eg. household-level targeting in Oportunidades and community-led approaches used by SEDESOL.

Institutions of Budgeting and Expenditure Management

53. Although **Mexico has the main elements of a robust public financial management system, they are not yet functioning to bring spending in line with government priorities and to make decisions and outcomes transparent.**

54. ***Planning, Performance Measurement and Budget Allocation.*** Mexico has separate planning and budget processes, with planning institutionalized in a six-year National Development Plan (PND) that remains unchanged during the presidents term, while circumstances and the annual budgets evolve and lead to expenditure patterns that diverge from the PND. SHCP follows a traditional mandate of detailed control of agency finances (budget formulation and execution), while missing many larger policy issues. Generally, the President does not get involved in the annual budget until late in the process, leading to limited policy ownership and ad hoc interventions to squeeze out funds for his priorities.

55. Mexico introduced government-wide performance measurement in 1996, and now the annual budget includes some 10,000 **performance indicators. They do not yet have the intended impact, however, because they do not correspond clearly with the budget lines and most of the yearly allocations do not depend on the performance outcomes.** Even for capital projects, Mexico now budgets only for one year at a time, which preserves some flexibility (since most current spending is seen as rigid) but generally raises total project costs and weakens strategic focus. On-going investments get some priority in the annual budget exercise, which is a step toward multi-year budgets.

56. ***Budget implementation*. During budget execution, as in budget formulation, Egresos' role is process-oriented, adding less value than it could.** Last year, Egresos processed over 150,000 changes to the budget. The volume of changes is directly related to the degree of detail to which Egresos attempts to control budget execution centrally and ex ante. Most OECD countries have moved away from centralized, ex ante control regimes, replacing them with control at a more aggregate level (e.g. of total spending, personnel spending, and capital spending by each agency) and an active monitoring role.

57. ***Transparency and accountability.* Mexico has made strides in improving transparency**, with the elimination of a budget line for the president's discretion, the publication of the overall public-sector borrowing requirement, the passage of a law for access to public information and establishment of an agency to implement that law. Further improvements could bring Mexico more in line with common OECD practices:

- *More timely, frequent, and detailed public financial reports.*
- *Simplified classification of spending in a way to improve public understanding*
- *Actuarial reports on pension and other large mandatory programs, making full disclosure of contingent liabilities.*
- *Improvements to mandatory program oversight.*
- *Requirements for costing of new policies—taxation and expenditure—before their enactment.*
- *Production and wide distribution of a Citizen's Guide to the Budget*

58. ***The Role of Congress***. Since 1997, when for the first time in modern Mexican history the party of the President did not control Congress, the congressional role in policy and budget formulation has been evolving. The present arrangements of limited time for Congressional review, historical dominance of the executive in budget matters, limited Congressional institutional capacity to engage in budget debates, and inadequate budget information for policy discussion all combine to limit Congress's positive impact on public finances. Both the executive and legislative branches are still adjusting to their roles. Besides the accumulation of experience, Congress needs three things—more time to consider the budget (before approval and during and after implementation), institutions for technical support of their deliberations, and a longer duration for congressmen to stay involved in budget issues. The Mexican congress has had less than two months to consider the budget, no opportunity to discuss over-all budget policy prior to addressing the budget, and little or no oversight of spending programs. In 2004 the budget will go to Congress earlier—a practice that should continue. There is no congressional

budget office, and the budget and finance committees do not have substantial professional staff. Individual deputies have little incentive to press for these, since they cannot be reelected.

> *The budget process should start with the President, cabinet and perhaps congressional leaders agreeing on the main priorities. Then these should be the selling points for making the necessary adjustments to tax policy and non-priority spending.*
>
> *The PND could contribute strategic budget planning if it is linked to the annual budget with realistic sectoral resource ceilings to guide planning by sector ministries. It would also need to have some updating process, perhaps at mid-term in the sexenio. Alternatively, Mexico could switch to a system, as in many OECD countries, where the each annual budget process contains a 3-year medium term projection and thus becomes the planning process as well.*
>
> *Multi-year estimates for each sector in the annual budget process would help assure the realism of capital plans and allow better assessment of recurrent costs and sustainability of capital projects.*
>
> *SHCP should consider revising the control regime in order to improve performance. Some steps can be taken administratively, within the existing law to move in this direction. This would be a good example of the type of reform SHCP can promote across government, moving beyond reform of internal SHCP processes.*
>
> *For monitoring and evaluation to have operational significance, they need to be linked to the budgeting and spending, both in the sense that the administrative units correspond and in that actual resource allocation depends on the performance results. Given the political import of these decisions, it will take persistence and time to achieve such a link.*
>
> *Performance indicators should tie to the current program structure, which should be more stable and reflect the activities operating in ministries. SHCP should establish the framework for identifying and reporting performance indicators, and then enable line ministries to formulate the indicators they can use in managing operations.*
>
> *To improve the objectivity and accuracy of multi-year macro-fiscal projections, they could be compared with private-sector forecasts and vetted in academic and non-government fora.*
>
> *The executive and the congress could agree, and eventually put into law, a more extended period for budget discussion, starting with an agreement on the macro parameters, taxes and the main spending features (by mid year), and then moving to a detailed discussion and agreement on the specific spending measures in the fall.*
>
> *Even without reelection of deputies, the party caucuses have some durable interest in improved fiscal outcomes and also have some staff, which could evolve into regularized committee staff. They need to get more technical capacity.*

59. ***Implementing Institutional Reform***. Mexico and other countries have various ways to implement reform of public expenditure management—where a key variable is whether to start gradually with pilots or to go with a single comprehensive reform. While the latter big-bang approach has worked in some places with nearly universal professionalism and strong cultures of compliance, it has not worked in the two major attempts that Mexico made in recent years. The

current administration since 2002 has been focusing on reforms within SHCP, in order to make that a center of excellence and a model institution for reforms in the rest of the government.

In pursuing this strategy, the reform of key parts of SHCP should be linked to the rest of the Secretariat and to rest of the government, so that the reform will not become encapsulated and ultimately futile, but rather will become self-sustaining and expanding.

Beyond SHCP, a broader reform of the budget process to improve spending ministry budget incentives, and provide a broader framework for performance improvement, should guide public finance system development. The reforms recommended above provide an enabling environment for improvement in policy, resource allocation, and performance.

With a mandate from the President, SHCP could contribute by strengthening its challenge function—demanding that the line ministries show public evidence of effectiveness and efficiency in spending as pre-requisites for any increased budget allocation.