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Table of contents

• • •

Boxes

Tables

Figures

This Survey *is published on the responsibility of the Economic and Development Review Committee of the OECD, which is charged with the examination of the economic situation of member countries.*

The economic situation and policies of Mexico were reviewed by the Committee on 4 July 2005. The draft report was then revised in the light of the discussions and given final approval as the agreed report of the whole Committee on 13 July 2005.

The Secretariat's draft report was prepared for the Committee by Bénédicte Larre, Stéphanie Guichard and Isabelle Joumard under the supervision of Nicholas Vanston.

The previous Survey of Mexico was issued in January 2004.

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BASIC STATISTICS OF MEXICO

THE LAND

Area (sq. km)	1 964 375	Inhabitants in major metropolitan areas (millions), 2000	
Agriculture area (sq. km) (1990)	394 000	Mexico City	18.1
		Guadalajara	3.7
		Monterrey	3.3

THE PEOPLE

Population (thousands, Census 2000)	97 483	Employment[1] (thousands, 2004)	41 272
Inhabitants per sq. km (2000)	49.6		
Annual population growth (1990-2000)	1.85		

PRODUCTION

Structure of production, 2004 (per cent of total, 1993 prices)		GDP in 2004 (US$ billion, current prices and current PPPs)	1 046.6
Agriculture	5.5	GDP per capita in 2004	
Industry	26.1	(US$, current prices and current PPPs)	9 807.0
Of which: Manufacturing	19.1	Gross fixed capital formation in 2004	
Services	68.4	(per cent of GDP, 1993 prices)	19.8

THE GOVERNMENT

Public sector indicators (per cent of GDP, 2004)		Composition of Parliament (September 2003)	Senate	Chamber of Deputies
Total expenditure	23.5	PRI	60	222
Total revenue	23.2	PAN	46	151
Net debt (December 2004)	23.2	PRD	16	95
		Other	6	28
		Total	128	496

FOREIGN TRADE

Exports of merchandise (per cent of GDP, 2004)	27.8	Imports of merchandise (per cent of GDP, 2004)	29.1
Main exports (per cent of total, 2004)		Main imports (per cent of total, 2004)	
Manufactures	85.3	Intermediate goods	75.6
Petroleum products	11.3	Capital goods	11.5
Agriculture	3.4	Consumer goods	12.9

THE CURRENCY

Monetary unit: Peso	Currency unit per US$, average of daily figures:	
	Year 2004	11.2808
	August 2005	10.6703

1. People economically active according to results of the Quarterly National Employment Survey.

Executive summary

Prospects are for continued economic expansion, but important challenges remain

After a strong recovery in 2004, output growth is expected to average a little more than 4% over the next two years. Mexico has been pursuing sound macroeconomic policies and has been making some progress with structural reforms to open the economy, improve the functioning of product markets and strengthen the financial sector. However living standards are lagging far behind the OECD average and, although decreasing in the last 4 years, poverty is still widespread. Potential GDP growth is too slow to narrow the income gap. The proximate cause of Mexico's persistent lag is the low level and slow growth of labour productivity. The key medium-term challenge is to step up growth through a deepening of the reform process, drawing synergies from acting simultaneously on a wide front and ensuring effective implementation. Yet, recent years have seen several important missed opportunities for reforms. Action is needed on the education front and to facilitate business operations. The fiscal policy framework should also be strengthened to ensure that development needs are financed on a sustainable basis.

Improving the performance of the education system is a priority

Human capital is the lowest in the OECD and the education system does not perform well enough to reduce the lag at an acceptable pace. Mexicans children still spend comparatively few years in formal education, and do not profit from it as much as they should, so that poor educational attainment is reproduced from one generation to the next, and with it poverty. Inefficiencies and misallocation of spending have to be addressed. It implies resisting pressure for unjustified rises in teachers' real wages while spending more on indispensable non-wage items; training better teachers and school principals; introducing credible sanctions/reward mechanisms; and giving more responsibilities to schools. The generalisation of preschool that is diverting resources away from the necessary expansion of secondary schooling has to be limited to the last grade or to children from low-income families who need it most. On the positive side, there are promising programmes intended to accelerate information and technology systems at school (the so-called Enciclomedia *programme).*

Improving conditions for business and investment will also help achieving higher productivity growth

Private investment and the development of the formal sector are constrained by the combination of still restrictive product market regulation and cumbersome administrative burdens (including for firm creation), strict formal employment protection, a deficient rule of law and ineffective judicial processes. Many promising measures have already been taken; the key is to ensure effective implementation. Business creation has become a priority. New programmes to ease the administrative burden for starts-ups should be extended throughout the country. The removal of legal obstacles to private investment in the electricity sector and the effective application of a non-discriminatory and competition-enhancing regulatory framework in other network industries would

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also facilitate business and investment. The abandonment of labour market reform is regrettable; the reform should be put back on the agenda.

The authorities are also facing several fiscal challenges

Although budget discipline is generally good, the current medium-term fiscal framework should be strengthened and raised to a law. Efforts have been made to assign the oil windfall to investment and saving, but stricter guidelines are needed to deal with the current situation of oil revenue that is high but not necessarily on a permanent basis. These extra resources should be saved or spent wisely, by building up a sizeable Oil Stabilisation Fund, reducing public debt and financing investment. There are also development priorities (basic education, health, infrastructure, poverty alleviation) that require predictable additional funding. A tax reform which enhances revenue, while reducing distortions, is the key to addressing these needs.

The division of powers and responsibilities between levels of government should be reformed to get the most out of the public sector decentralisation

The federal level has retained most taxing powers, while states have had core spending responsibilities transferred to them and have substantial borrowing autonomy. The key challenges are to ensure a cost-effective delivery of, and equity in access to, public services. This would require enhancing sub-national government accountability by clarifying the assignment of spending responsibilities across levels of government and better matching spending responsibilities and revenue-raising powers. A reform of the grant system is needed to improve incentives for efficiency and reduce wide disparities in financial resources across jurisdictions. Mechanisms to discipline sub-national government fiscal behaviour should be strengthened.

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Assessment and recommendations

Mexico's performance has improved, but not by enough

The recovery from the slowdown that started in 2001 seems to be soundly established, with GDP expanding at about its potential rate. The OECD expects that 2006 will mark the third consecutive year that GDP will grow by 4% or more. The recovery was broad-based and both exports and production of non-tradeables are rising briskly with the usual risks related to the evolution of the world economy. It is significant that neither the slowdown nor the recovery were steep, and that there were no signs of serious instability in either financial or foreign exchange markets. Inflation continues to drift downwards, albeit erratically, towards the Central Bank's target of 3% with a variability interval of plus or minus 1%. The stability-oriented fiscal and monetary policies put in place after the 1995 peso crisis are thus bearing fruit, and much of the unexpectedly higher oil revenues in the last couple of years have been spent sensibly, or saved. But although a sustained 4% growth rate of GDP seems out of reach for most OECD countries, in the Mexican case it is barely enough to keep per capita living standards rising at the same rate as the OECD average. Convergence towards these much higher living standards would require faster actual growth for many years and hence a rise in potential growth.

Mexico's challenges and the constraints it faces

Raising potential growth will require some combination of faster growth in the quality of labour inputs, more and better physical capital endowments, better ways of combining inputs of both, and more advanced technology. Achieving some of these can be left to markets, provided that the markets function well. In this respect, the reforms of the past three decades are helping: tariff and quota reductions have put domestic firms under competitive pressure to innovate and cut costs, and the reforms of the financial sector have greatly improved its potential intermediation role. There are other reforms that would have little fiscal cost and could also help. These include further liberalising the labour market and some product market sectors, notably electricity and other network industries. However, no political party has a majority in Congress, and sub-national governments play an active political role. It has therefore proved extremely difficult to reach agreement on some reforms despite continued efforts by the federal government. These delays are unfortunate and risk discouraging foreigners from investing more heavily in the country. On the other hand, some of the pathways to prosperity have to be both mapped out and financed by the public sector. Primary and (at least) lower secondary education, basic health services, transport infrastructure, a minimal social safety net, and the rule of law, can only be provided for by government. Mexico needs more of all of these, and of better quality. Moving ahead quickly over the medium term on all fronts, rather than a piecemeal approach, would create synergies. But core fiscal resources are too limited for this, and oil-related revenues are too unpredictable. Tax reforms that would help ease the fiscal constraints have become snarled up in the political process. Mexico badly needs a fiscal framework that will allow its development needs to be financed in an adequate, stable and predictable fashion by the different levels of government. In the discussion of these crucial reforms, all parties involved should focus on objective elements rather than on narrow political interests. Comprehensive reforms across all these areas are the only means to ensuring that labour productivity can rise fast enough to close the gap in living standards.

Labour is plentiful but its productivity is low

There is no shortage of labour in Mexico, but its productivity is low. Labour force growth has averaged 2½ per cent over the past 15 years. The Mexican population older than 12 years nearly doubled between 1990 and 2004. Most people enter the labour market in their mid-teens, there is no unemployment insurance and pensions are low; pressures to find work are therefore high. But labour productivity is about a third of the OECD average. Although this opens ample opportunity for catch-up, productivity growth, except in the manufacturing sector, has been mediocre, despite the reform programmes of the past two decades. The evidence suggests that:

- Levels of human capital are very low. Educational attainment is not only the lowest among OECD countries as shown by OECD and national surveys but, unlike in most other OECD countries, younger workers have only a little more schooling than the older workers. Adult training is still scarce.
- There is large scope to increase productivity by addressing areas where reforms have been timid or lacking to date, including the labour market and some key network industries.
- Even when reforms are legislated, implementation can be patchy. The legal system offers many possibilities for long drawn out appeals, and it can often be circumvented altogether by interference from pressure groups or plain corruption.

The conclusion is therefore that *action needs to be taken in several areas both to enhance productivity directly, and to release synergies that will augment the benefits of previous reforms.*

Improvements in educational outcomes are a priority

Over the past decades, Mexico has made great progress in increasing school enrolment in a context of tight budgets, rapid growth of the school-age population, great linguistic diversity, sizeable internal and two-way cross-border migration flows, and a high degree of extreme poverty. There has been a deliberate increase in public spending on education; but while the volume of educational services has increased, there are doubts about whether the additional funding is actually delivering the expected improvements. Both the coverage and quality of education services remain far behind OECD best practices even though, on paper, average teacher-pupil ratios are not out of line. And the system is not able to prevent poverty from reproducing itself from one generation to the next. Many children, especially the poor ones, still drop out before completing compulsory education and school-leavers have poor literacy and numerical skills. *Oportunidades* has shown itself to be an effective programme in reducing poverty, improving education, nutrition and health and reducing drop-out rates. It should continue. Beyond that, there is much to be done in improving the quality of outcomes and access to higher education.

Educational resources need to be better allocated…

Teachers' pay absorbs a high proportion of total education spending by international comparison, while spending on infrastructure and teaching aids is low. *Enciclomedia* is a good effort to improve the quality of education through technology and information systems in primary schools. It may also represent an incentive for teachers to raise their skills. *Nevertheless, a larger share of additional resources should go to non-wage items, where the needs are the most acute.* Resource allocation across the country is mainly supply driven, with schools in low-income areas suffering from both lack in public infrastructure and less qualified teachers, thereby compounding difficulties stemming from students' disadvantaged background. *The allocation of federal grants across states, and of spending within states, should be more closely related to numbers of school-age children.* The on-going compulsory generalisation of preschool raises concerns. Preschool is a powerful tool to address learning inequities due to children's social background, but the legal obligation to provide 3 years compulsory pre-school education may well divert scarce resources from secondary education, where the number of students is rising rapidly, and where attainment standards are unsatisfactory. Moreover, potential gains will only materialize if the preschool system is of good quality, which is not yet the case, and reaches those who really need it. Therefore, *the scope of the programme should be limited, focusing only on the last grade of preschool or targeting the areas where preschool is most needed* – i.e. *for children from low-income (and generally low-education) families*.

… and value for money could be improved

Only the younger generation of teachers has academic and/or vocational training. Teaching methods often rely on rote learning though modern curricula are being implemented. *Actions are needed to:* i) *further improve the selection and training of teachers;* ii) *introduce teaching standards that foster comprehension skills and communication;* iii) *better match curricula with student and labour market needs; and* iv) *find alternatives to the systematic use of class repetition which is an inefficient way to correct lags in learning.* Moreover, Mexico has yet to introduce efficiency enhancing policies. *More responsibilities should be given to schools to adapt to local conditions and needs.* This has been done mainly with quality schools (*escuelas de calidad*), whose scope and material means are limited. A key step was accomplished with the creation of INEE (*Instituto Nacional de Evaluación de la Educación*), but to reap the benefits of evaluations, *results must be used broadly to influence policy decisions, school management and users' choice.* Finally, sanctions for teachers' absenteeism and overt incompetence should be set up and enforced and the main financial incentive scheme has to be made more efficient. Since the needed changes would likely affect teachers' interests, such reforms would probably be opposed by the very powerful teachers' union. *Continuous dialogue with the union should be envisaged to encourage them to become partners in raising educational standards and outcomes, rather than actors defending current practices and entrenched interests.*

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Educational reforms lack strategic vision

The authorities at the federal government and state level are aware of the weaknesses of the educational system, and some reforms have been launched to improve its performance and accountability. However, these efforts are spread across many programmes with sometimes conflicting priorities. In some states, interesting experiments are taking place to improve quality and efficiency, reflecting successful negotiations with the local sections of the teachers' union. *The next step should be to evaluate these experiences and find ways to generalise the most successful ones to other states.To facilitate implementation, the required reform should be launched as a package, mixing measures with an immediate and visible impact with deeper efficiency- and quality- enhancing reforms which have more diffuse benefits and are likely to raise opposition.* Once they are well informed, parents could also contribute by putting pressure on the authorities and teachers for a higher quality education for their children.

Labour market reforms have stalled

A well-functioning labour market is needed to translate human capital improvement into higher productivity and wages. The Mexican labour market is characterised by the coexistence of a large, and largely tolerated, informal sector where workers have only rudimentary social protection and do not pay taxes and a formal sector where jobs are generally more skilled and protected by a strict legislation. Stronger enforcement of tax and social security obligations is part of the solution. *More importantly, a labour market reform is needed to enhance the adaptability of the workforce and reduce obstacles to job creation in the formal sector.* The reform proposal sent to Congress in 2002 has been removed from the policy agenda in 2005. This is regrettable, especially as the proposal was not particularly far-reaching but included several commendable measures. *Easing employment protection legislation and regulation on atypical forms of employment would allow firms to respond more flexibly to changing technology and fiercer competition from other low-wage economies.*

Rigidities in network industries hold back development

Although the large-scale reduction in trade barriers and various privatization programmes have strengthened competitive forces in some sectors, there remains unfinished business elsewhere. The reform proposal to open the electricity sector to private investment and supply has stalled. Given the importance of the sector for future growth, and to *reap the full benefit of other reforms, legal obstacles to private investment in the electricity sector should be removed, a necessary condition for business and households to have access to a low-cost and reliable energy source.* In other network sectors, the incumbent still dominates. Firms too easily take advantage of dilatory and cumbersome judicial proceedings ("*amparos*") to block the implementation of decisions by regulators and the Federal Competition Commission. Although telecom tariffs have fallen, they remain significantly higher than in most OECD countries, probably reflecting weak competitive forces. *In airlines, the terms of the ongoing privatisation project need to be carefully specified so as to ensure adequate competition.* The Mexican government is currently working on a strategy, building on the issues identified by the OECD peer review of competition law and policy, to enhance the effectiveness of competition policy and extend its reach to those areas where competition is still incipient. *Although some of the changes required can be made by the Federal Competition Commission itself, new legislation to strengthen effective competition is urgently needed.*

The business environment is irksome, but entrepreneurship is widespread

Setting up and running a business in the formal sector still entails time-consuming, ongoing and costly attention to a plethora of regulations in particular at state and municipal levels. Hence, more needs to be done to modernise the bureaucratic structures across the country. Positive experiences, such as the fast-track system for start-ups (*Sistema de Apertura Rapida de Empresas*), carried out in some states to enhance transparency should be replicated nationwide. More generally, improvements in the rule of law would lower transaction costs for individuals and business alike. Banks have only recently started to lend again to the private formal sector. The new legal framework for bank guarantees should help to reduce the cost of financing, but because of the difficulties that still persist in recovering assets from bad debtors, banks are reluctant to lend to small firms, even those with a promising business plan. New innovative firms using higher technology are thus discriminated against. Nevertheless, the rate of firm creation is high, although many of them are one-person businesses, often operating in the informal sector. There has been a welcome and so far successful effort to create better access to micro-credit for very small-scale firms, one goal being to encourage such firms to expand if they have opportunities to do so. *In this respect a prompt approval of the New Securities Law would be desirable to further improve access of medium-size firms to the growing domestic capital market.Measures such as these, and further scrapping of dead-weight regulations that hinder normal business operations, should be given priority,* not least because they do not all require prior approval from the legislature and are less likely to fall foul of political infighting.

The fiscal framework lacks a medium-term focus

The annual budget process has been much improved in recent years and, for some time now, budget deficit targets are achieved with very small margins of error. If oil revenues exceed the – usually prudent – budget projections, a mechanism permits part to be saved, part to pay down debt and part to finance additional investment. Conversely, there are budget rules to implement spending cuts – in practice falling mainly on investment – should oil or other revenues come in below budget projections. Fiscal credibility is therefore high in financial markets, and has led to low interest rates and insulation from contagion from crises in other emerging markets. But in other respects, Mexico's fiscal framework leaves much to be desired:

- Total revenues are low relative to GDP, a third of them are oil related and part of these are subject to volatility related to world oil prices.
- Because the volatility of revenues is absorbed largely by changes in investment, especially on the downside, effective medium term spending planning is made more difficult.
- But low levels of physical and social infrastructure (health and education services in particular) and high rates of poverty mean that there is a need for stable, large scale, long term public spending programmes.

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- There is a consensus on the need for a tax reform that would broaden the base, especially for indirect taxes, and generate higher and more stable revenues, while reducing distortions. But serious reforms have failed to emerge because of political squabbling.
- Although the impacts of short term oil price fluctuations are dealt with efficiently, there is no budgetary mechanism for dealing with prolonged periods of either high or low oil prices. Instead, the use of core oil related revenues is decided upon each year in the context of the annual budget exercise.
- Most of the taxes (direct and indirect) are set at the Federal level, but much of the spending is done by the states and municipalities, often in ways that reflect historical endowments rather than current needs.

Higher oil prices are not a windfall, but a harvest to be reaped over the years…

It is likely that revenues will be higher than previously expected for some years to come, thanks to buoyant oil prices (and assuming that oil production remains stable or rises). Higher oil prices present an opportunity, but also pose a two-fold risk. *First*, oil prices are prone to large and unpredictable fluctuations and therefore they must not be the basis for financing development programmes that require stable sources of revenue. Hence currently high prices are not a reason for postponing tax reforms that will permanently broaden the tax base and generate a stably higher flow of revenues. *Second*, there is no rule in place for allocating a medium-term stream of higher oil-related revenue in the analogous way that exists for dealing with annual fluctuations. Higher revenues could thus be frittered away by a succession of annual compromises between the political parties and between different levels of government. Should oil prices fall back to lower levels, there could then be a prolonged period of painful belt-tightening. A new Federal Budget and Fiscal Responsibility Law has been proposed, including principles for multi-annual budgeting. In particular, it includes a transparent mechanism for setting the annual oil reference price in terms of recent historical developments and futures prices. This will insulate the reference price from political manoeuvring. The draft law proposed in March 2005 contains rules to distribute extra revenues: 50% would go to the Oil Stabilisation Fund and the rest would be allocated in equal proportions to two other stabilisation funds, one to smooth transfers to states and municipalities, the other for investment by the state-owned oil producer PEMEX. It establishes that these Funds have a legal basis and can be drawn on only when oil prices fall below the agreed long-term level. Once the three funds reach a certain level, extra revenues would be used to improve the public balance and to finance infrastructure projects. *The proposal should be adopted. A fully-fledged medium-term framework should go even further than this proposal and include a mechanism for preventing persistently high oil prices from translating into permanently higher current spending.*

… and their fruits must be used wisely

Mechanisms for a rational allocation of higher, but not permanently higher, oil revenues could contain the following elements:

- *Since the costs of adjusting to lower prices are large, agree on a deliberately prudent long term oil price and use revenues arising from higher ones in ways that improve public sector net worth.*

- *Of equal importance, multi year outcome oriented spending targets should be introduced for current expenditure so as to avoid excessive increases in the public sector wage bill.*
- *Finally, there should be guidelines to limit federal transfers to sub national levels of government.*

The division of powers and responsibilities between levels of government is not ideal

Fiscal relations across levels of government are unbalanced: sub-national governments account for a high share of public spending and have significant autonomy in their borrowing, while their revenue-raising powers are both extremely limited and still under-exploited. The devolution of spending responsibilities has been rapid but incentives to improve efficiency are lacking. Sub-national governments are now managing core public spending programmes (most notably education and health care) but also have a role in infrastructure development and anti-poverty programmes. Interesting experimentation and innovations have emerged locally. *In order to improve the outcomes of fiscal federalism, a national agreement defining spending responsibilities for each level of government is needed. This would help reducing overlaps of spending decisions. At the same time the quality of information on actual spending and outcomes should be improved, so as to enhance sub-national government accountability.*

Financing of sub-national governments should be reformed, to promote cost-effective public services and inter-regional equity

The current financing system of sub-national governments is characterised by: *i)* a very minor role of sub-national taxes; *ii)* a heavy reliance on earmarked grants; and *iii)* a revenue-sharing mechanism which embodies little redistribution across jurisdictions. Generous adjustments in federal transfers over recent years (associated with both the earmarked grant system and revenue-sharing arrangements) including the distribution of a sizeable part of oil excess revenues have reduced sub-national governments' incentives to raise their own taxes, thus reducing their accountability. In this context, improving the fiscal "pact" would require:

- *Raising the volume of sub national governments' own taxes.* At the municipal level, this would require a better definition of property rights, updating land registers and improving administrative capabilities. At the state level, two options could be considered: further relying on a state surcharge over the federal personal income tax ("piggy backing"), as allowed in 2005, or introducing a state VAT imposed on the same base as the federal VAT.
- *Adjusting the earmarked grant system to promote cost effective provision of, and equity in access to, public services across jurisdictions. Accountability should be strengthened and outcomes evaluation should be reflected in allocation criteria.* The formulae used to allocate money across sub national governments are largely based on historical costs and actual facilities: they should be changed to reflect objective needs criteria (such as in the education sector, using the number of school age children instead of the number of schools and teachers). At the same time, it should be made possible to carry over some part of unspent earmarked grants, in particular those for infrastructure.

- *Limiting federal transfers to encourage sub national governments to fully use their taxing powers.* In this context, it would be desirable to set a prudent path for federal transfers over the medium term and to increase their predictability by smoothing the impact of cyclical developments and/or oil price fluctuations so as to avoid temporary revenue increases from translating into recurrent sub national government spending.

All levels of government and the Congress face risks in this process. If the *status quo* is modified, many sub-national governments could see a reduction in revenues while increasing their own fiscal revenues will have a political cost. Also, the great heterogeneity in socioeconomic conditions between and within states complicates the negotiation process. In consequence, an objective and constructive dialogue must take place in order to come to a sustainable and efficient agreement.

Mechanisms conducive to fiscal sustainability at the sub-national level need to be strengthened

Although sub-national debt is still generally low, fiscal sustainability is not assured in the longer term. The quality of public finance data is poor and implicit liabilities may be high. Under the new scheme the sub-national governments can use federal transfers as guarantee for the lenders. *It would be desirable to set a limit on the extent to which federal transfers can be used as a guarantee. Improving the consistency and coverage of public finance data is also required for financial markets to play an effective role.Although it may be legally and politically difficult to impose fiscal rules on sub-national governments, their use should be promoted.*

Mastering faster growth

Fiscal management has been successful in recent years, and the backdrop of an inflation-targeting monetary policy has helped anchor expectations that macroeconomic stability is here to stay. In addition, the financial sector has gone through an important transformation and a broader and deeper domestic capital market has developed. This will enable the Mexican authorities to turn more of their attention to long-term priorities, which are where the important policy challenges increasingly lie. Faster growth of living standards will require reforms to the tax system so as to finance the appropriate level of current spending and long-term investment needs. Fiscal relations between the different levels of government need to be re-thought so as to ensure a more effective and more equitable use of revenues. Part of higher oil revenues should be earmarked for financing some important multi-year but finite programmes. Major reforms to education, the labour market, the electricity industry, other network sectors and ways of doing business are also desirable, and will help spur investment in Mexico's future by both domestic and foreign firms. It is important that reforms be assessed and judged by legislators on their intrinsic merits rather than through the prism of short-term political considerations.

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Chapter 1

Economic performance and key challenges

This chapter reviews the recent macroeconomic performance of Mexico and the strengths and weaknesses of its economy, identifying the main challenges it faces. The fundamental challenge for policy makers is to raise growth in living standards, and ensure that incomes are better shared among the population, allowing a reduction in still widespread poverty. Two key areas for actions are identified: raising human capital and removing obstacles to private investment. Beside the catching-up challenge, the authorities are also faced with the challenge of strengthening public finances.

Since the 1995 financial crisis, Mexico has made substantial progress in terms of macroeconomic stabilisation, and important reforms have been undertaken to further open the economy, improve the functioning of product markets and strengthen the financial sector. However, the improvement in economic performance has remained insufficient to narrow noticeably the income gap with more advanced OECD countries, and, although it has fallen, poverty remains widespread. This reflects mainly a structural problem: potential output growth, currently estimated at between 3½ and 4%, is too low for Mexico to catch up with the average standards of living in the OECD at a decent pace (Figure 1.1). As highlighted in Box 1.1, Mexico has many strengths, but these have not sufficed so far to boost potential growth. *The overriding challenge for policymakers in Mexico is therefore to raise potential growth, and thereby the convergence of living standards towards those in more advanced OECD countries*. The purpose of this chapter is to identify the remaining key impediments to stronger growth and priority areas for action.

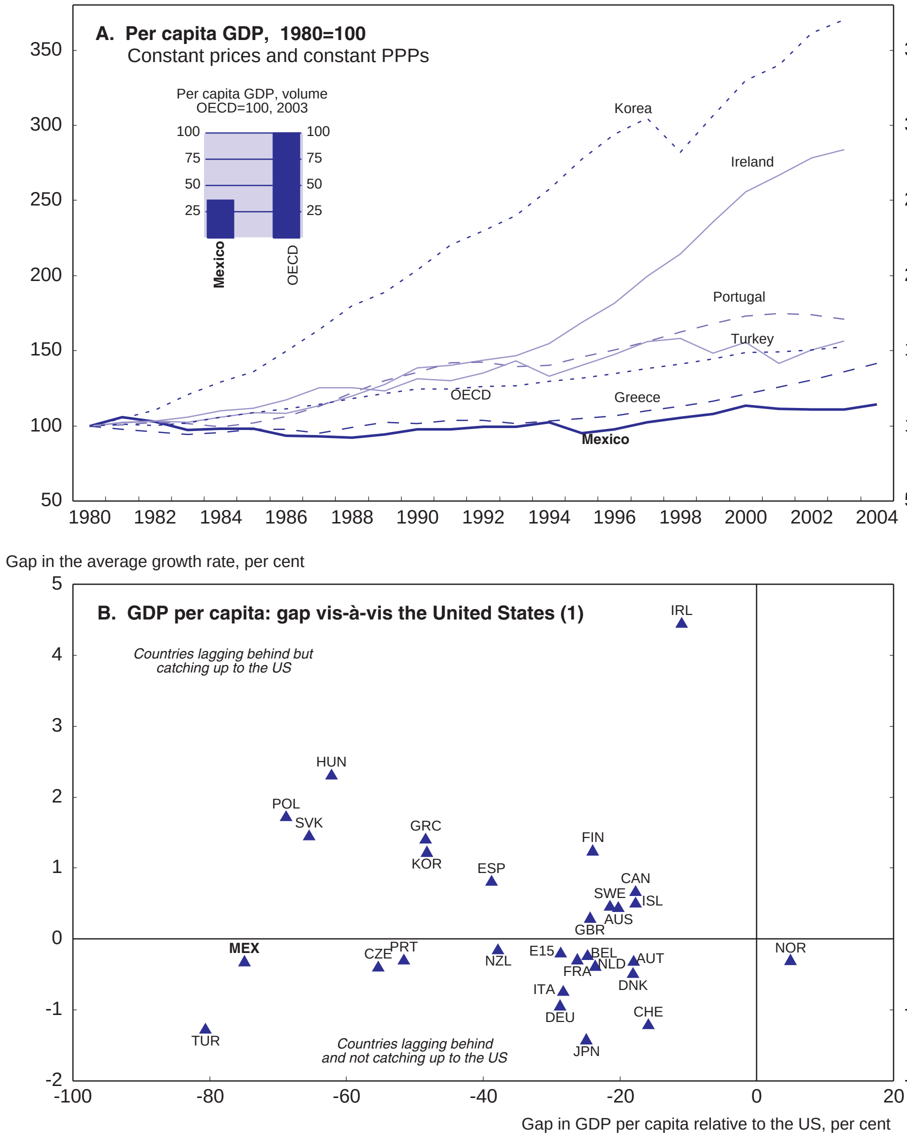
Beside the growth challenge, the authorities are also faced with some fiscal challenges. Although budget discipline is ensured, and the vulnerability of public sector debt to interest and exchange-rate shocks has been reduced, public sector resources fall short of what is needed to support the catching-up process. The tax bases are narrow and budget revenue too volatile to meet Mexico's development needs and deal with rising contingent liabilities from pensions or some of the infrastructure projects carried out by the private sector for the government. Strengthening public finance and the medium-term fiscal framework is essential to ensure stable and predictable financing of spending in social and physical infrastructure, which are key to the growth process. This is all the more important in the current context of higher oil revenues, to ensure that they are not wasted and to limit the country's vulnerability to a downward shift in oil prices. Furthermore, Mexico needs to strengthen the framework of fiscal relations between the different levels of government so as to get the most out of the decentralisation process initiated about a decade ago; this should involve better allocation and use of fiscal resources and preventing the risks of sub-national local governments' running into overindebtness.

A solid macroeconomic performance

Mexico has succeeded in stabilising its economy

Since the 1995 crisis, when the Mexican Central Bank had to give up its exchange rate commitment, the Mexican authorities have made impressive progress towards macro-economic consolidation and stability (Figure 1.2). The macroeconomic framework set up in the aftermath of the crisis has worked well: inflation has fallen from more than 50% in 1995 to below 5%, and the current account deficit was close to 1% of GDP in 2004. The budget deficit has fallen to 0.3% of GDP, while the broader public sector borrowing requirement (PSBR) stands at 2½ per cent compared with more that 6% in 1999. The management of public debt has also reduced vulnerability to interest and exchange rate shocks.[1] From 1995 to 2004, real GDP growth averaged 3.7%, almost one percentage point above the OECD

Figure 1.1. **Mexico's growth performance in comparison**



1. The average growth rate of GDP per capita is calculated over the period 1996-2003. The level of GDP per capita is for 2003 on the basis of 2000 purchasing power parities (PPP).

Source: OECD, Main Economic Indicators database; OECD, National Accounts database.

average. Following trade liberalisation, in particular in the context of NAFTA, Mexico has consolidated its export base and its specialisation has evolved towards medium and higher-technology manufactures. In particular, Mexico has developed a comparative advantage in ITC manufacturing, boosted by FDI inflows in the sector.[2] Conversely, the share of oil in total exports shrank from a third at the end of the 1980s to less than 10% in the early 2000s. Activity in Mexico has hence become less vulnerable to oil price fluctuations, but remains exposed to cyclical downturns abroad, especially in the US, which buys 90% of its exports.

Box 1.1. Main strengths and weaknesses of the Mexican economy

Main strengths

Stable macro-environment. Compared with most economies of the same level of development, Mexico faces very limited macroeconomic imbalances. The fiscal and external deficits are low. Inflation is under control. The policy framework has gained credibility. Country risk has become low and stable.

A young and fast growing labour force. Compared with most OECD countries Mexico's labour force is quite young (about two third is below 40) and has been growing fast (2½ per cent on average over the past 15 years). The labour market has also demonstrated its ability to cope with shocks: open unemployment is low, real wages have been quite flexible in the last decade and the labour force relatively mobile.

Proximity to the United-States (US). The geographical proximity with the world strongest economy has been a very powerful engine of growth in the past decade, spurred by the NAFTA agreement. The US is the first destination of Mexican exports and the first source of foreign direct investment (FDI) inflows to Mexico. Proximity remains the key comparative advantages of Mexico on the US market despite the decline of transportation and communication costs worldwide.

Migrant remittances. Migrant remittances sent from the US have overtaken net FDI inflows in size and are playing an important role in supporting poor households. They amounted to 2.5% of GDP in 2004. Some 5% of Mexican households receive remittances.

A sound financial sector. Since the 1995 crisis, major reforms of the financial sector have been undertaken. Mexico's banking system is now as profitable as in other OECD countries, and supervision and regulatory frameworks are close to good practices elsewhere. The domestic capital market has broadened and deepened the scope of its activities.

Successful poverty reduction programmes. Mexico has developed social programmes targeting the extreme poor. These have worked well and are seen internationally as examples of best practices.

Oil production. Higher oil revenues currently facilitate meeting the budget target and can help in meeting development needs. However this is a mixed blessing. It is not clear that oil revenues can always be spent efficiently, nor that a sufficient share of the extra revenue can be saved or used to reduce debt. Moreover, PEMEX does not invest enough in new capacity.

Main weaknesses

Low levels of human capital. The average number of years of education among Mexican workers is the lowest in the OECD area, and young workers have only a little more formal education than older workers. Educational achievements of the ones still at school are poor compared with other OECD countries. Adult workers can also expect to receive comparatively little training when in work.

A not-so-friendly business environment. While there is cross-country evidence that good governance and a friendly business environment contribute to growth, Mexico ranks poorly in international comparisons. In particular, despite progress, bureaucratic burdens on firms are still important, the quality of public institutions is low, the rule of law is poor, the judicial system largely inefficient, and corruption is widespread. Moreover, infrastructures are insufficient and competition in network industries is not effective, resulting in unnecessary high costs for businesses. Sectoral regulations keeping transportation and communication costs at a high level prevent Mexico from fully benefiting from its proximity to the US. Lastly, the crime rate (including kidnapping of businessmen) is among the highest in the world.

Box 1.1. **Main strengths and weaknesses of the Mexican economy** *(cont.)*

A large informal labour market. Almost 40% of the jobs in Mexico are informal. Although, this provides a safety valve for many of the low-skilled in the absence of unemployment insurance, the persistent high share of informal labour raises several concerns. It contributes to the reduction of the tax base, implying higher tax rates (for the same revenue) for formal workers and increasing taxpayers' perception of unfairness. Informal workers do not contribute to nor benefit from the social security system. They do not have access to on-the-job training opportunities, which limits human capital development opportunities.

Widespread poverty. One Mexican in six lives in extreme poverty with limited access to food and basic services, and nearly half the population lives in poverty. The prevalence of poverty implies that the country faces major social needs, including meeting nutritional and basic health standards for a substantial proportion of the population.

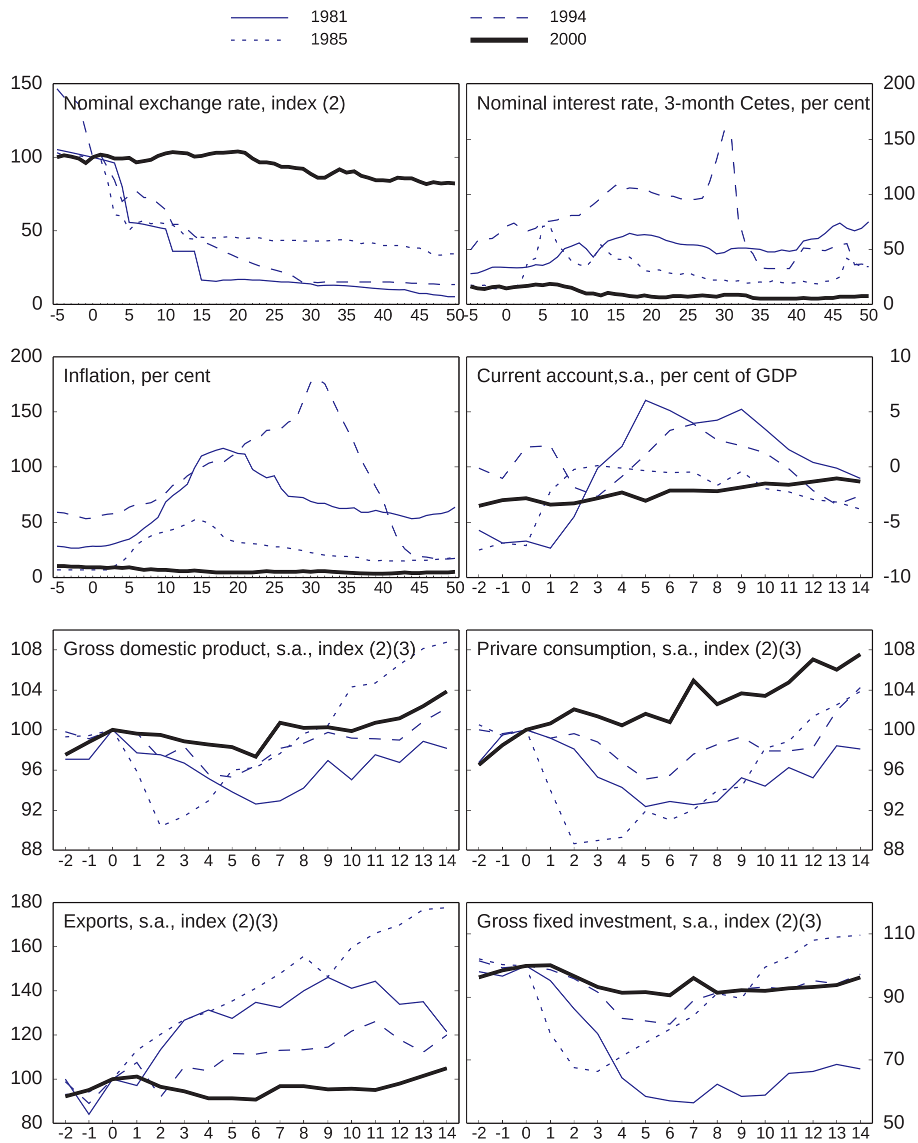
Since the end of the 1990s, Mexico has resisted external shocks relatively well, reflecting some very favourable changes in the way the economy is managed and reacts. In particular, Mexico was spared from contagion from financial crises in other Latin American countries (Argentina, Brazil) and in other emerging markets (Figure 1.A1.1 in Annex 1.A1). The economy was resilient during the last global downturn, experiencing an only very mild recession by Mexican standards, and in contrast with previous downturns inflation remained moderate. Poverty alleviation programmes continued, and some positive results were achieved in reducing poverty.[3]

The short-term outlook is favourable

In mid-2005, Mexico does not face any major macroeconomic problems or imbalances and the short-term outlook is favourable.

- A strong recovery is underway. GDP growth reached 4.4% in 2004, the highest rate since 2000, and GDP growth is projected to average about 4% in 2005 and 2006 at its potential and well above the OECD average (Table 1.A1.1 in Annex 1.A1).
- Despite rising interest rates, after several years of sluggishness, credit to the business sector recovered in mid-2004 (see Chapter 3).
- Thanks to large migrant remittances and continued dynamism of manufacturing and crude oil exports, the current account deficit should remain low relative to Mexico's past history, during the recovery, and it is expected that it will continue to be covered by long term capital inflows.
- Inflation picked up in 2004, pushed by supply factors, after resisting quite well the depreciation of the peso in 2002/2003 (Figure 1.3). Nevertheless, the impact on core inflation and wages has been limited, thanks to the prompt and credible reaction of the central bank that increased the *corto* 12 times between February 2004 and March 2005 (Box 1.2). Inflation started to decline in December 2004 and it should be brought back within the central bank target of 3% with a variability interval of plus or minus 1% by the end of 2005.

Figure 1.2. **The last slowdown in comparison**[1]

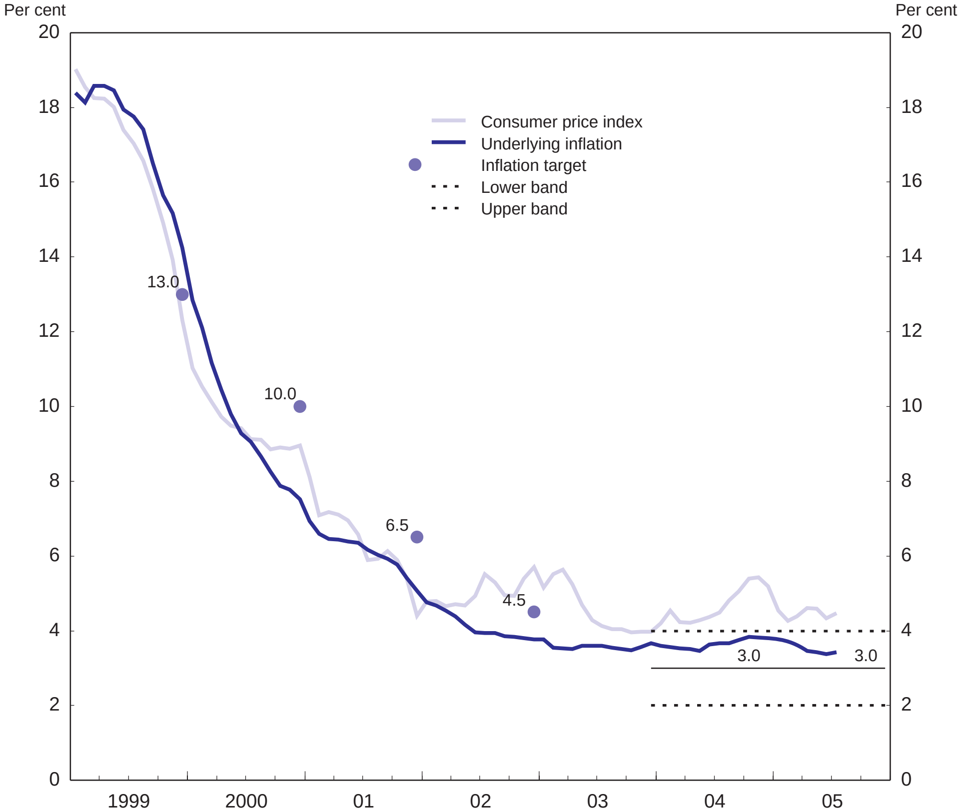


1. 0 = cycle peaks set as October 1981, July 1985, October 1994 and July 2000 for monthly data and Q4 1981, Q3 1985, Q4 1994 and Q3 2000 for quarterly data.
2. Index = 100 in the peak period.
3. At 1995 prices.

Source: OECD, Analytical Database; OECD, Main Economic Indicators database; Bank of Mexico.

- In 2004, the fiscal balance (narrow definition) was close to zero and the PSBR (excluding non recurrent revenue) was down to 2.4% of GDP, lower than in many OECD countries. The oil price assumption in the budget for 2004 was US$20 per barrel for the Mexican mix, while oil prices averaged US$31 over the year. The assumption in the 2005 budget was set at US$27 (see Chapter 4 for a discussion of fiscal policy and oil prices). Further progress in reducing the PSBR is expected in 2005 and 2006.

Figure 1.3. **Inflation performance**



Source: Bank of Mexico.

The gap in standards of living needs to be reduced

Catching up with other OECD countries

Growth is not strong enough to close the gap in standards of living at an acceptable pace

The recent GDP growth performance of Mexico and its short-term prospects are very good by average OECD standards but they are not good enough for Mexico. Although slowing down, Mexico's population is growing much faster than that of other OECD countries, so that GDP per capita growth is about the same as the OECD average. In recent years, the gap in living standards with other OECD countries has hardly narrowed, despite Mexico's extremely low income level.[4] With potential output growth currently estimated at around 4%, it would take several generations for Mexico to catch up with the average OECD GDP per capita. Moreover, the current pace of job creation in the formal labour market is insufficient to absorb the fast growing labour force; as a result, the informal sector – where most jobs have low productivity and workers neither contribute to nor receive benefit from the social security system and have no access to on-the-job training opportunities – has continued to grow.

Box 1.2. **The monetary policy framework**

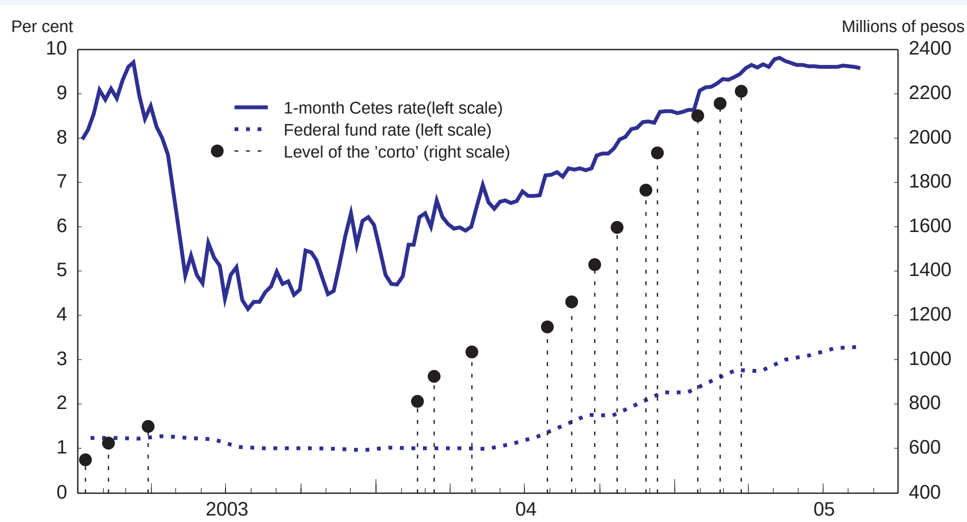
Overview of the monetary framework

After the 1995 crisis, the Mexican central bank successfully reduced inflation from more than 50% to below 5% and gained a solid credibility in a floating exchange rate environment. Monetary policy is conducted within an inflation targeting framework. The main policy instrument of the Bank of Mexico has been the *corto* mechanism: rather than acting directly on a policy rate, the Bank of Mexico operates on short-term liquidity in the market by announcing a target for the sum of the balances of all current accounts held by credit institutions at the Bank of Mexico (see Box 7 of the *2003 OECD Economic Survey of Mexico*). Several changes to consolidate the inflation targeting framework and make monetary policy more transparent and effective were implemented in the last decade, including, in 2003, a streamlining of monetary policy announcements to make central bank signals to the market clearer. Further changes to the monetary framework *via* the replacement of the *corto* by directly setting leading interest rates might become possible once inflation recedes and the pass-through from exchange rate fluctuations to domestic prices diminishes.

Monetary policy in 2004/2005

In 2004, the Bank of Mexico faced a rebound in headline inflation, which reached 5.2% year on year in December, well above the central bank target of 3% and outside its variability interval of plus or minus 1%. This rebound resulted mainly from several supply shocks, including the hike in fuel prices, increases in meat prices following a temporary ban on US imports of beef and chicken as a response to outbreaks of mad cow disease and bird flu in the United States, and increases in tomato prices from the hurricanes in Florida.

Figure 1.4. **Monetary actions**



Source: Bank of Mexico; US Federal Reserve.

This rise in inflation triggered resolute monetary policy tightening, with 12 consecutive *corto* increases between February 2004 and March 2005, amplifying the transmission of higher interest rates in the US (Figure 1.4). Overall, the central bank did a good job in preventing these supply shocks from contaminating core inflation and curbing inflation

Box 1.2. **The monetary policy framework** *(cont.)*

expectations which, by February 2005, had fallen back within the central bank target for December 2005. A tight monetary stance is expected to be maintained as long as headline inflation remains above target.

Mexico's good growth performance might not be replicable over the next cycle

After major structural changes throughout the past decade, the Mexican trade specialisation is reaching its limits. New big players have appeared with lower labour costs, such as China, in direct competition with Mexico on third markets (Box 1.3). Mexico is also facing increased competition among emerging markets for FDI inflows that have helped capital accumulation, technology transfers and managerial expertise in the past decade. As highlighted by recent surveys, the relative attractiveness of Mexico is deteriorating because other emerging economies are moving much faster on the reform front (see below). If Mexico does not adapt to this two-fold competition by moving up the economic ladder and developing comparative advantages in higher value-added goods and services, even a 4% growth rate might become more difficult to achieve in the medium term, further jeopardising the convergence of Mexican income levels.

Labour productivity needs to increase

As illustrated by Figure 1.6, the income gap in Mexico is to a large extent explained by low labour productivity, and the persistence of the gap by low productivity growth gains over the past decades. The OECD *Economic Survey of Mexico* (January 2004) showed that traditional factors driving productivity growth in other OECD countries have played only a small role in Mexico. The reallocation of resources away from low-productivity sectors to high-productivity sectors (*i.e.* away from agriculture and into mostly manufacturing and high-skilled services) occurred only on a limited scale, and most of the reallocation took place between low-productivity sectors (away from agriculture into construction or retail trade, mainly in the informal sector). Moreover, productivity growth within sectors has been relatively slow. Labour utilisation contributes also to the gap but to a much lesser degree. The labour force is young and growing fast. Participation rates of younger and older categories are higher than in other OECD countries. This pattern is bound to change in the medium term as more children attend school, and for longer duration, and development of a less rudimentary safety net facilitates the retirement of older groups. Lower participation of these groups is nevertheless likely to be more than compensated by a continued increase of female participation (still low by OECD standards). To reduce the income gap, policy makers should hence focus mainly on raising labour productivity. This requires identifying the factors that have hampered productivity gains in the past decades.

Mexico suffers from an important shortage in both human and physical capital that are key determinants of productivity levels (as well as of productivity growth in the long run if combined with innovative processes and practices) and have to be taken into account when making policy recommendations to improve performance. As summarised in OECD (2005), cross-country evidence in the OECD has also highlighted several institutional features that tend to enhance productivity, such as a regulatory framework associated with effective product

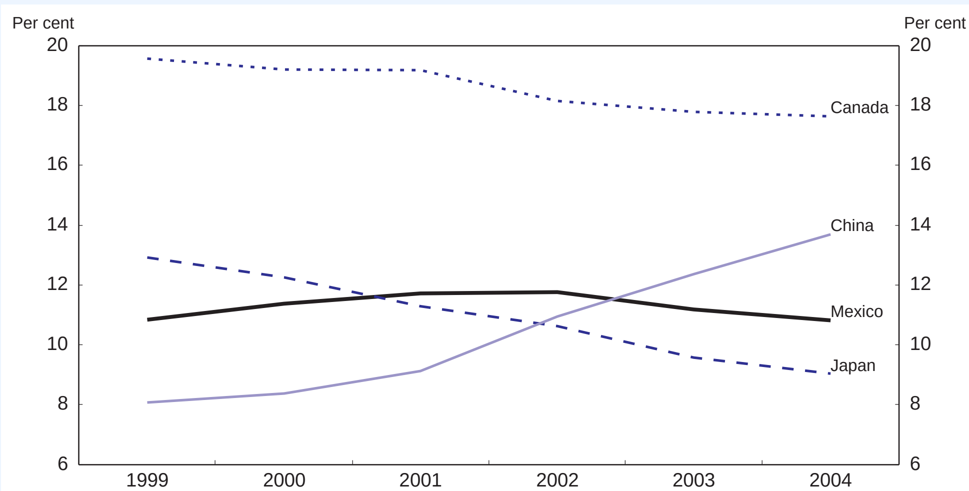
Box 1.3. **The competition from China: threat or opportunity?**

Competition from China as regards exports and FDI inflows is increasingly seen in Mexico as a major threat. This box reviews the scope of this competition and assesses the challenge it represents for Mexico.

In 2002, Mexican goods started to lose market share in the US which buys more than 90% of Mexico's exports. Several other OECD countries beside Mexico also lost market shares, for instance Canada and Japan (Figure 1.5). In the meantime, China became the second exporter to the US. The main sectors where Mexico lost market shares are illustrated by Figure 1.A1.2 in Annex 1.A1. In most cases, losses are in sectors where the competition from China has been fierce. In particular, China overtook Mexico in telecommunication equipment and computers, almost caught up with Mexico in TV and video equipment, cotton apparel and households goods and widened its advantage in computer parts and other textiles (even before the end of the Multifibre Agreement).* Table 1.1 reviews the relative competitive advantages of China and Mexico. Mexico has kept some advantage over China as concerns human capital and the rule of law, where China ranks more poorly, but its key advantage remains the proximity to the US. In the low skilled manufacturing sector, Mexico has no chance to win the labour cost race with China or with other low income countries, including in Central America. On the other hand, there are costs that could be lowered especially as regards transport, communication and energy. Moreover, as shown by the Benchmarking Business Regulation of the World Bank (see *http://rru.worldbank.org/doingbusiness/*) it takes much longer in Mexico than in China to start a business, register property rights, enforce a contract and close a business. Lowering all these business costs would help Mexico to reap the full benefits of its proximity advantage on the US market.

Figure 1.5. **Market share of selected countries in United States imports**

As a percentage of total non-oil US imports



Source: US Census Bureau, Foreign Trade statistics.

A notable exception to the apparent switch in market share from Mexico to China is the automobile sector which is dominated by the three major American car producers. Until now, competition from China has been non-existent, although it is expected to grow in the

Box 1.3. **The competition from China: threat or opportunity?** *(cont.)*

next 2 to 3 years. Still, Mexico's market share in the US has decreased by almost 5 percentage points since 2000 and this sector explains about one-fifth of the Mexican market share losses since 2002. It is mainly Canada and Korea that have strengthened their positions on the US market at the expense of Mexico. The poor performance of Mexico thus reflects to a large extent the current difficulties of the three major American car producers.

Table 1.1. **Relative competitive advantage of China and Mexico**

	Mexico	China	US
Bribery and corruption			
IMD survey (ranking)	**(51)**	(55)	(15)
Transparency International 2004 survey (ranking)	**(64)**	(71)	(17)
Rule of law[1]	**45.9**	40.6	92.3
Productivity in industry (ranking) – IMD	**(49)**	(55)	(4)
Hourly compensation in the manuf. sector, USD – IMD	**2.13**	0.66	21.33
Hourly compensation in the clothing sector, USD[2]	**2.45**	0.88/0.68	. .
Share of population with secondary education[3]	**24.6**	16.8	71.7
Electricity costs, USD cent/kWh[2]	**17.14**	5.07	. .
International fixed phone costs, USD per 3 min – IMD	**2.65**	2.90	0.45
Mobile phone costs, USD per 3 min – IMD	**0.83**	0.22	1.05
Port efficiency index[4]	**3.34**	3.49	6.27
Total cost of shipping a 40 foot container to the US, USD[2]	**1 750**	4 300	–
Average number of days in maritime transport to the US[2]	**2**	12-18	–
R&D spending in 2001 as % of GDP (OECD)	**0.4**	1.1	2.7

1. Rule of law indicator (World Bank, 2004).
2. From Estevadeordal, Devlin and Rodríguez (2005).
3. Percentage of population over 25 having at least completed secondary education. *Cf.* Barro and Lee (2000).
4. Index from 1 (low efficiency) to 7 (high efficiency). *Cf.* Estevadeordal, Devlin and Rodríguez (2005).

Source: IMD *World Competitiveness Yearbook* 2004, Transparency International 2004, World Bank, Estevadeordal, Devlin and Rodríguez (2005), Barro and Lee (2000), Clark, Dollar, Micco (2004), *OECD Science, Technology and Industry: Outlook* 2004.

The trade story does not end on the export side. Mexican imports from China (and Newly Industrialized Countries in Asia and the rest of Latin America) have increased in the last 3 years, mainly at the expense of imports from the US (of which the share in Mexican imports has decreased from 3/4 to 2/3). China has become the second exporter to Mexico and, beside the increase of consumption good exports, a large part concerns intermediate goods. This should increase the competitiveness of Mexican exports as these goods are cheaper than inputs produced locally or imported from the US.

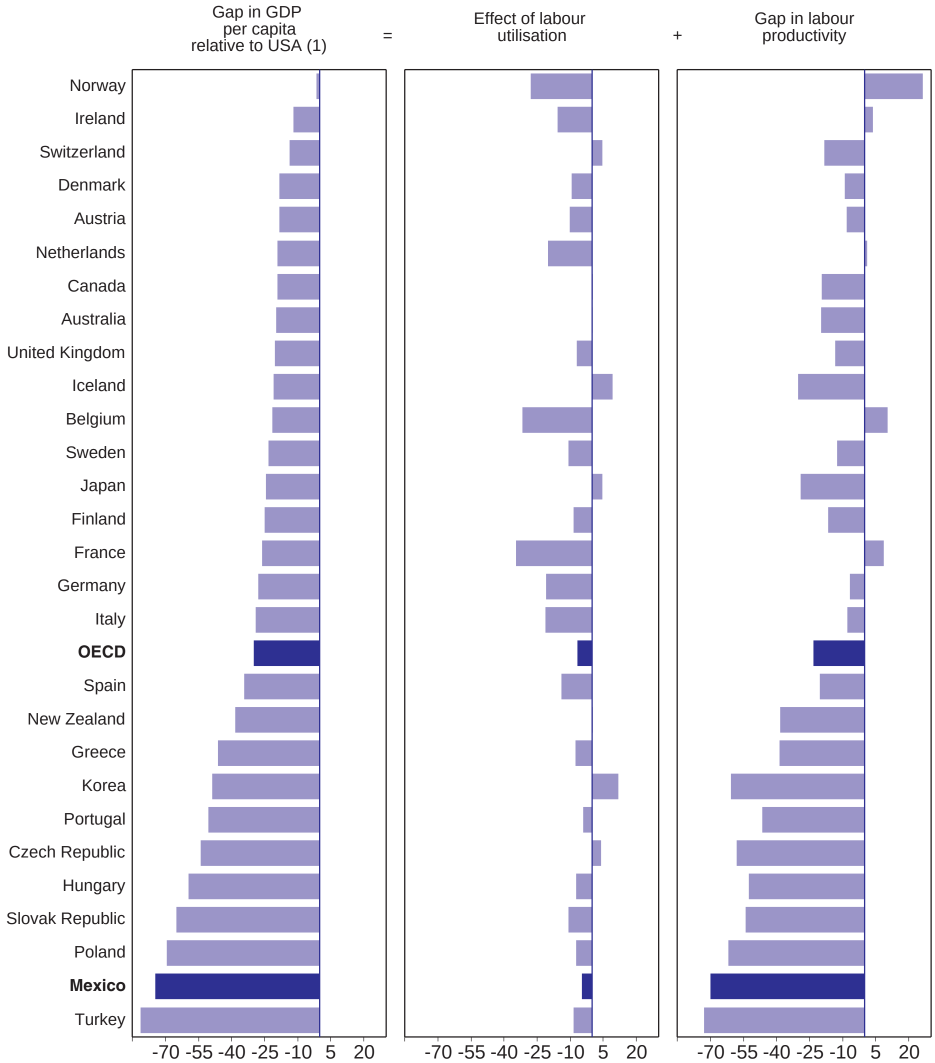
Another concern is the relocation of some of Mexico's *maquiladora* industries to lower cost countries, especially China. Already, according to A.T. Kearney (*www.atkearney.com*) from the end of 2000 to April 2004, roughly one in four *maquiladoras* left Mexico and among these firms about one in three reportedly relocated to China. Mexico also lost some attractiveness for FDI as a result of poor supply conditions and high business costs. As pointed out in Table 1.1, Mexico compares favourably with China as concerns some key business environment features but could do much better in others.

Overall, the competition from China appears as an opportunity for Mexico. It is not by itself responsible for insufficient economic growth; it only reflects Mexico's own structural weaknesses and thereby underscores areas where actions are needed. It might turn out to be the most effective way to push for a consensus on concrete reforms in Mexico.

* See IMF, *World Economic Outlook*, April 2005 for a simulation of the Impact of Quota Elimination on Textiles and Clothing Exports as of 1st January 2005 on Mexico and China, among others.

Figure 1.6. **Breaking down the income gap**

Percentage point differences in GDP per person relative to the United States, PPP-adjusted, 2002



1. The gap in GDP per capita is equal to the sum of the two components shown. The effect of labour utilisation is based on total hours worked per capita. Productivity is measured on a per-hour basis.

Source: OECD, Productivity Database.

market competition, an efficient labour market, and a business-friendly environment. Weaknesses in those areas have to be addressed in Mexico's reform agenda. The strong complementarities between growth factors, and therefore between structural reforms, also have to be taken into account. Indeed, these complementarities may explain to a large extent why the progress already achieved in product market reforms through privatisation and lowering barriers to trade, FDI and business operations has not been sufficient for Mexico to catch up. In the absence of notable progress in education, labour market reforms, or the quality of law, more open product markets have brought only limited benefits. In the same way, better educated workers will not be able to use their skills productively if the labour market does not foster a good allocation of human resources, if unproductive firms cannot exit the market and new firms cannot be easily created. And improved mechanisms to foster a better resource allocation will not have their full impact on productivity if the adaptability of the production structure remains limited because the needed skills are not available.

Addressing the human capital shortage

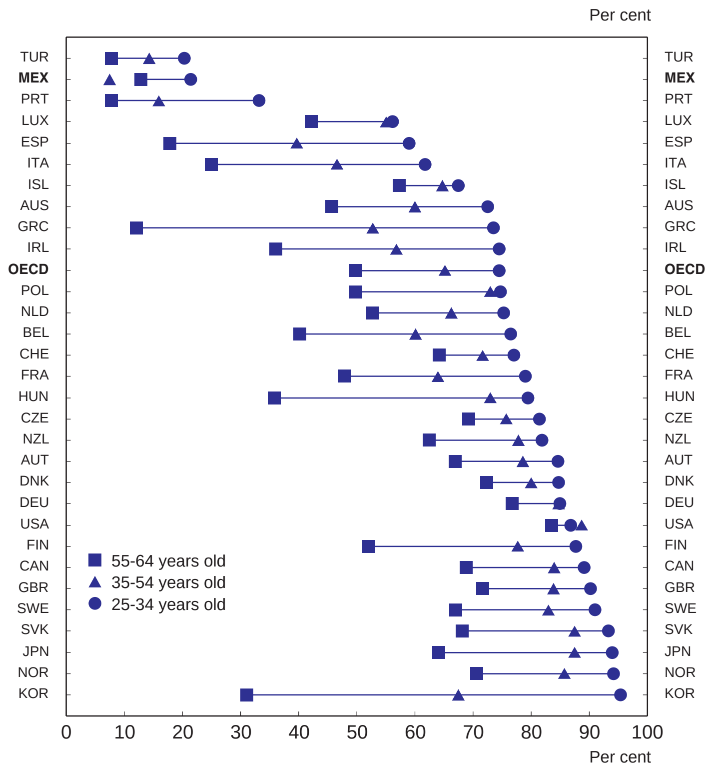
Human capital in Mexico, as measured by average years of schooling amongst the working-age population, is the lowest in the OECD and there has been only limited progress over recent decades (in contrast with Korea or even Spain and Greece) (Figure 1.7). Reducing the human capital gap between Mexico and other OECD countries is crucial to reap the full benefits of Mexico's young and growing labour force at a time when competition from less-developed countries is putting pressure on Mexico to move towards more value-added and competitive products and services.[5] This process would also help reduce income inequities by preventing them from repeating themselves from one generation to the next.

Average years of schooling are low

While primary education has become nearly universal, Mexican enrolment rates are still lagging at lower and upper secondary education levels (Figure 1.8).[6] About 20% of the population aged 12-15 has already left school and a quarter of those still at school have

Figure 1.7. **Educational attainment of the working-age population**

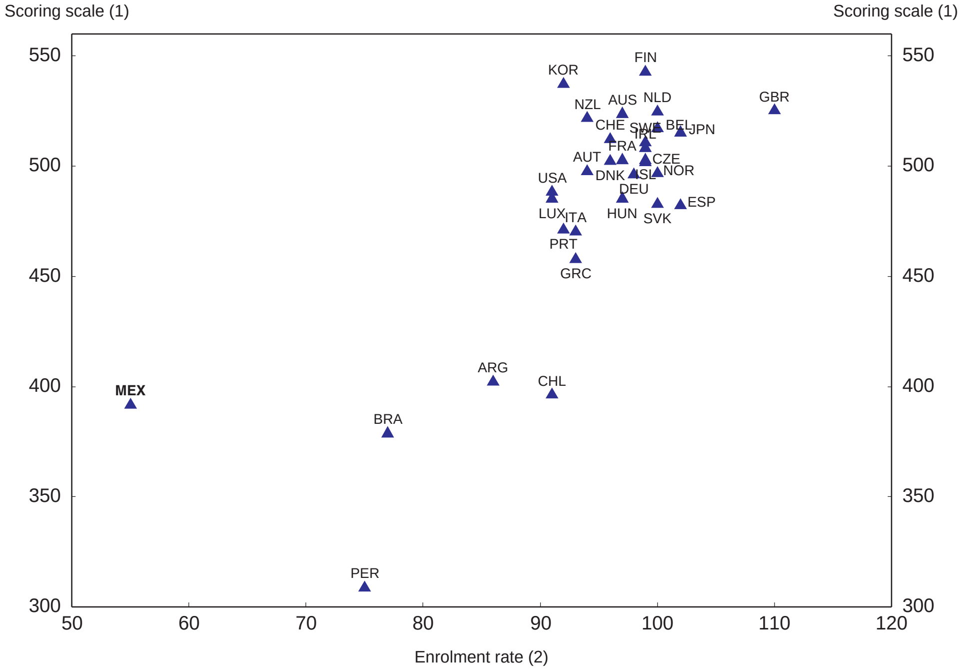
Population with at least an upper-secondary qualification, 2002[1]



1. Per cent of each age group. 1999 for Hungary.

Source: OECD, Labour Market Statistics Database.

Figure 1.8. **Student performance and enrolment rate at age 15**



1. Average performance across the combined reading, mathematical and scientific literacy scales in 2003. Except for the United Kingdom, Argentina, Chile and Peru for which 2000 results are shown.
2. Net enrolment rate at age 15. Public and private institutions.

Source: OECD, *Literacy Skills for the World of Tomorrow: further results from Pisa 2003* (2004); OECD, *Education at a Glance* (2004).

already repeated at least one class. The challenge to expand enrolment further beyond the primary level is compounded by the demographic structure that will put increasing pressure on secondary education services over the next years. Furthermore, given the low educational attainment of the population, repairing the skills of those already in the labour force (including basic literacy) is necessary to increase labour force mobility and to remove unskilled adults from poverty traps. Despite notable progress over the 1990s, less than a quarter of the labour force has ever received some form of training from their employers and, among these, qualified workers have been the main beneficiaries.[7] Moreover total spending on active labour market policy remains by far the lowest in the OECD.

And the quality of education is poor

The quality of education, defined as the impact of the education system on the academic, economic and social capabilities of students, is also low. Most indicators, including repetition rates, drop-out rates and students' achievements tested at both national and international levels show that the average quality of education services is poor. Raising the quantity of education has been a policy priority for several decades, but only in the early 1990s did quality move to the top of the agenda. Although repetition and drop-out rates have decreased in recent years there has not been any improvement in international literacy surveys such as PISA. This could be just a short-term effect: Mexico's success in lowering the less than 15-years old drop-out rate might have lowered average performance. However, other Latin American countries, such as Argentina, Brazil and

Chile, achieved comparable results at PISA with a much larger enrolment *(i.e.* an even more diverse student population). And, examples in other OECD countries, such as Korea and Poland, show that it is possible to increase both quality and quantity. In any case, there should not be a trade-off between the two in the medium term.

Mexico is therefore faced with two major tasks in education which are discussed in the next chapter:

- increasing further the coverage of secondary education; and
- improving the quality of services at all levels.

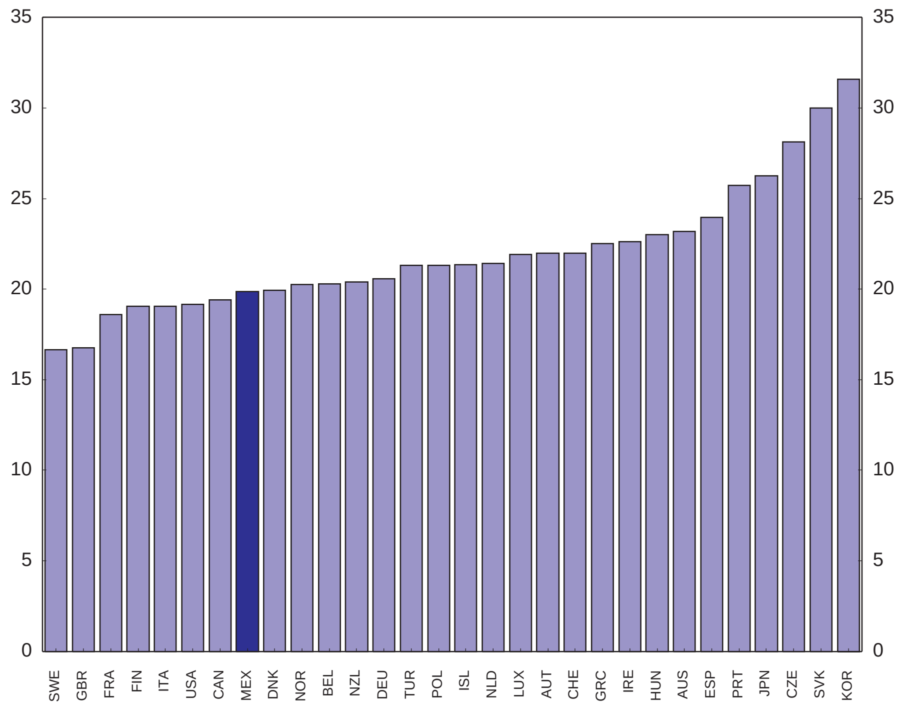
Chapter 2 reviews factors behind the current performance of the education services, assesses on-going reforms, and makes specific recommendations.

Removing obstacles to business and investment

Mexico's investment rate (typically used as a proxy for the rate of accumulation of physical capital) is below the OECD average (Figure 1.9) and the quality of the existing capital stock is a concern. Investment in infrastructure (electricity, transport and communication) has been insufficient, resulting in high costs for the business sector and creating bottlenecks that deter investment projects in other areas.[8] In particular, weaknesses in transport and communication infrastructure prevent Mexico from getting the most out of its proximity to the US. Also, investment in new technologies and R&D is scarce. Mexico has the lowest R&D intensity in the OECD, and the gap with the OECD average and with non-OECD competitors is widening. Between 1995 and 2002 spending on

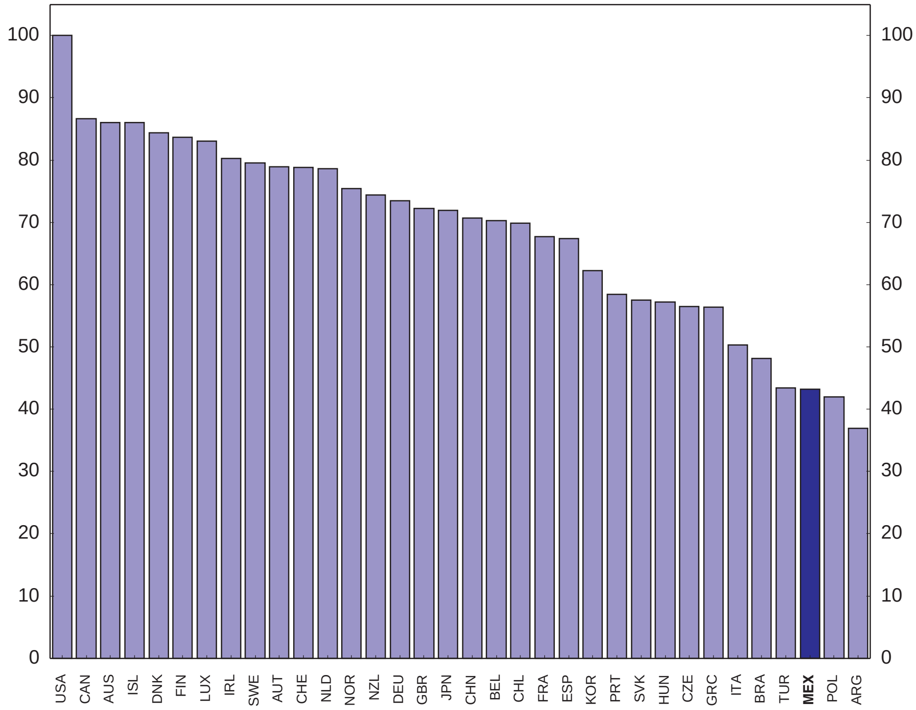
Figure 1.9. **Fixed investment ratios**

Per cent of GDP, in nominal terms, average 1996-2003



Source: OECD, Economic Outlook 77 database.

Figure 1.10. **Indicator of international competitiveness**[1]



1. The indicator of international competitiveness is a composite indicator calculated from 241 criteria grouped into the four following competitiveness factors: economic performance, government efficiency, business efficiency and infrastructure. Countries are ranked from the more competitiveness country to the less.

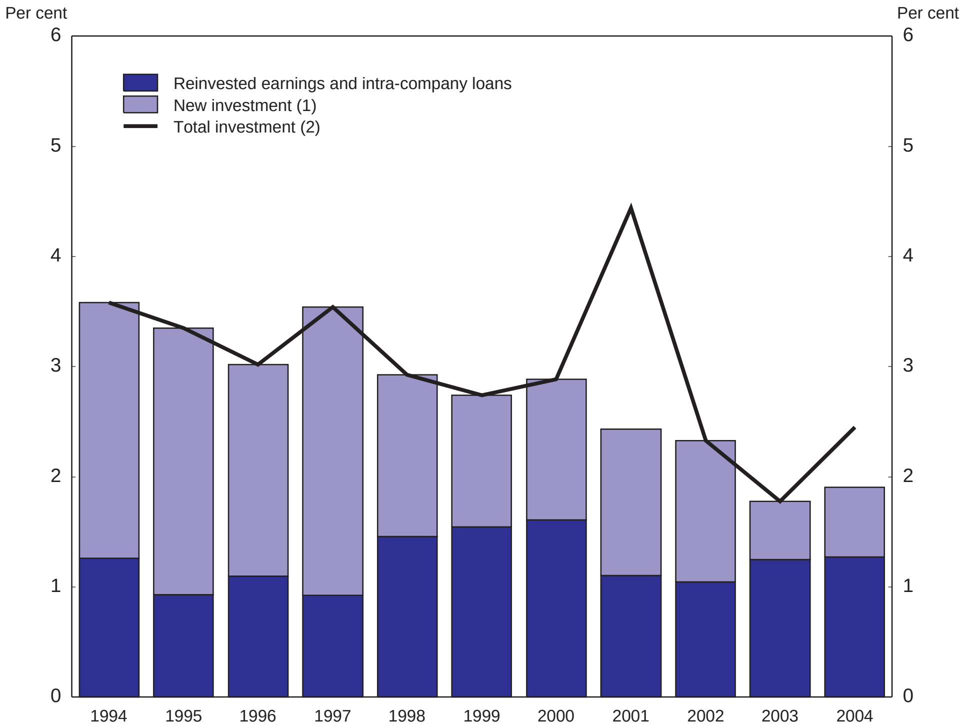
Source: IMD, *World Competitiveness Yearbook* (2004).

research and development in Mexico increased from 0.31% to 0.39% of GDP while during the same period, China doubled it from 0.6% to 1.2% of GDP.[9] A World Bank study also points to inefficiencies in R&D spending in Mexico (World Bank, 2003).

More generally, private activity and investment are limited by weaknesses in the business environment that result from the combination of excessive product market regulations, remaining obstacles to firm creation, a largely unskilled labour force, a deficient rule of law and judicial system and widespread corruption. Moreover, strict employment protection and high non-wage costs in the formal labour market weigh on the ability of businesses to develop higher-value added products and better respond to technological changes and international competition. A labour market reform proposal that addresses some of these issues was sent to Congress in 2002, but it could not be adopted.[10] This is the case in several other areas. Despite a political consensus that reforms are necessary, no consensus could be reached on the details of many of the most needed reforms and key reform projects have been blocked by Congress, sometimes even before reaching it (see for instance Annex 1.A2 that reviews actions on recommendations from previous OECD Surveys). A case in point is the still pending electricity sector reform. As a result, Mexico has not been able to keep pace with other countries in and outside the OECD in many areas of reform, even though the administration would have liked to move ahead.

Foreign direct investment (FDI), which was helpful in improving the specialisation of Mexico in the past decade and is a factor of innovation more generally, suffers even more

Figure 1.11. **Gross foreign direct investment in Mexico**
Per cent of GDP



1. Excludes the sale of Banamex in 2001 and the sale of BBVA-Bancomer in 2004.
2. Includes the sale of Banamex in 2001 and the sale of BBVA-Bancomer in 2004.

Source: Secretaría de Economía, Dirección General de Inversión Extranjera.

from these institutional weaknesses and lack of reform. Most international surveys point to the relatively low position of Mexico regarding international competitiveness (Figure 1.10).[11] When the large operations in the financial sector are excluded, already by 2004, greenfield investments in Mexico had declined significantly compared with earlier years (Figure 1.11).

The challenges for Mexico in this area, which are covered in detail in Chapter 3, are therefore to:

- remove legal obstacles to investment and firm creation;
- facilitate the upgrading of the infrastructure network;
- improve the rule of law and the judicial system.

Reducing poverty is as important as raising average incomes

Levels of GDP per capita are only an approximate measure of welfare and standards of living. A somewhat better measure of economic performance is the per capita level of private consumption. In Mexico, this is in fact slightly higher relative to the OECD average than is per capita GDP, partly reflecting the high scale of migrant remittances. However, even consumption per capita indicates only the country average standard of living.

The distribution of income in Mexico is one of the most uneven in the OECD reflecting widespread poverty and the quasi absence of a middle class (Table 1.2 and Figure 1.A1.3). Since the early 1990s, middle-income groups have increased their share of national income and the bottom deciles have gained slightly. However, nearly half of Mexico's population still lives in poverty and one person out of six lives in extreme poverty, while the two poorest deciles share less than 5% of the income (and the two richest receive more than a half). In practice, despite progress made in reducing poverty, this means that a large share of the population is still unable to develop its full productive potential because basic nutritional, health and social needs are not met. Moreover, the narrowness of the middle class limits the size of the potential markets for producers.

Table 1.2. **Income distribution**[1]

	2004		1992	
	Percentage	Cumulative percentage	Percentage	Cumulative percentage
Household deciles				
I	1.58	1.58	1.55	1.55
II	2.89	4.47	2.73	4.28
III	3.91	8.38	3.70	7.98
IV	4.91	13.29	4.70	12.68
V	5.97	19.26	5.74	18.42
VI	7.29	26.56	7.11	25.53
VII	9.09	35.64	8.92	34.45
VIII	11.62	47.26	11.37	45.82
IX	16.16	63.43	16.02	61.84
X	36.57	100.00	38.16	100.00
Total	100.00		100.00	
Gini coefficient[2]				
Total	0.460		0.475	
Monetary income	0.479		0.509	
Non-monetary income	0.557		0.540	
For deciles I to IX only	0.340		0.347	

1. Average household income includes monetary receipts and non-monetary, including auto-consumption. Households in the first four deciles (which account for about half of the population) had an average income below three times the minimum wage in 2004, which corresponded broadly to the (third) poverty line.
2. Gini coefficients on a per capita income basis would be higher, revealing a more unequal distribution, because household size is on average higher in low income families.

Source: INEGI, *Income and Expenditure Survey of Households* (*Encuesta Nacional de Ingresos y Gastos de los Hogares*), third quarter 1992 and third quarter 2004.

Stronger growth is a necessary condition to reduce poverty. But it has to be accompanied by the continuation of the programmes targeted on the extreme poor which have been shown to be effective. Moreover, the reform agenda will have to be designed to ensure that income benefits from the on-going expansion phase are better shared across the population. In turn, a better income distribution might support the catching up process, since countries with a less inequitable distribution tend to grow faster.[12] There are complementarities between most productivity-enhancing reforms and the poverty and inequity reduction goal. Education and training are not only key for growth, they are also the most powerful tool to reduce income inequities and poverty. Yet this is only true if opportunities for better-paid jobs are created in the formal sector and the labour market is able to ensure an efficient matching of skills with those jobs.

Strengthening public finances and getting the most out of fiscal federalism

The current high level of oil prices, that is expected to last for some time but not permanently, poses a major challenge to fiscal policy: ensuring that the additional revenues generated by the increase in oil prices since 2002 are well allocated while limiting the vulnerability of the economy to a substantial drop in oil prices in the future. Although Mexico has put in place mechanisms to deal with short-term variations in oil prices, there is no framework for dealing with a situation of oil prices remaining either high or low for some time. Hence, in the medium term, there is a risk that extra oil-related revenues be eventually passed through to higher average spending of a recurrent nature which would be difficult to scale down when oil prices decline. If not enough of extra revenue is saved or used to reduce debt or contingent liabilities, a fall back of oil prices would be extremely costly.

Success in achieving fiscal targets has given Mexico a solid reputation of fiscal rectitude. However, the current fiscal setting falls short of what is needed to support the catching-up process. Revenues are insufficient and too volatile to meet Mexico's development needs (basic health, education, infrastructure, acute poverty relief and other social programmes) and to face spending pressures that are likely to emerge in the medium term with population ageing as well as rising demand for better social safety nets. The reasons for the inadequate financing are twofold:

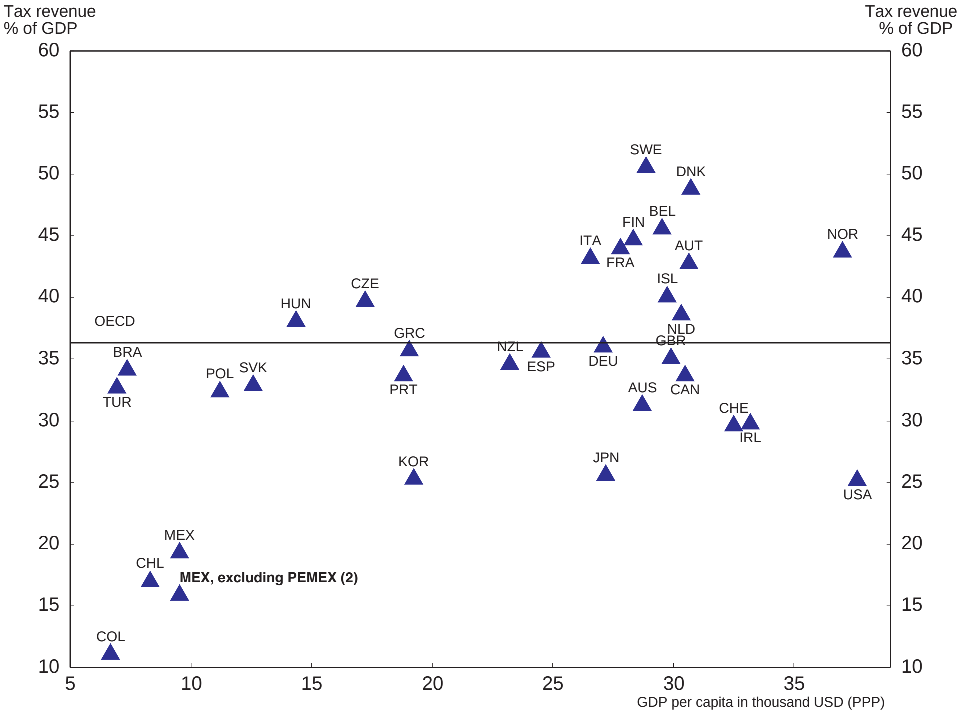
- First, the direct and indirect tax bases are narrow because of *i)* numerous exemption and special regimes (which also make tax collection difficult) and *ii)* the wide dispersion of income and narrowness of middle income categories. The tax/GDP ratio is the lowest in the OECD (Figure 1.12).
- Second, oil related revenue accounts for about a third of total budget revenue and part of it is volatile.

In addition, to maintain Mexico's fiscal credibility, safeguard rules have been set so that, in case of a revenue shortfall, expenditure cuts are automatically implemented to maintain the budget on target. As a result, multi-year investment programmes necessary to Mexico's development are often suspended. Besides, there are weaknesses on the expenditure side as regards cost effectiveness and resource allocation. In the past few years, these weaknesses have been exacerbated by frequent disagreements between the Executive and the Legislative Branches.

Although the current abundance of oil revenue seems to have reduced pressure for a tax reform, a reform that enhances revenues by widening the tax base is still needed to provide durably stable financing for core development spending. Such a reform would also help improve the business environment by reducing distortions, making taxes less complicated and changes in legislation less frequent. It has not been possible so far to build a political consensus on the reform details, except as regards the reduction in the income tax rate. Nevertheless, there is a consensus that higher core spending is desirable and it will have to be financed by higher and more predictable revenue.

The ongoing decentralisation process also raises some issues. Mexico has decentralised key spending items (in particular health and education) to sub-national

Figure 1.12. **Tax revenue and the level of income in comparison**[1]



1. 2003 or nearest year available. Including social security contributions. Unweighted average for OECD.
2. Excluding PEMEX contributions to the Federal Government.

Source: OECD, Revenue Statistics database; OECD, *National Accounts*; Inter-American Center of Tax Administrations; World Bank.

levels of government. However, the federal level has retained most taxing powers and core spending responsibilities of the states are financed mainly through supply driven earmarked grants which do not reflect well needs and changes in needs. Moreover incentives to improve efficiency in spending by states and municipalities are missing.

The challenge for the authorities is therefore to:

- strengthen the medium term framework for fiscal policy;
- secure fiscal discipline in a context of high and unpredictable oil revenue;
- build a consensus on an acceptable tax reform;
- improve the efficiency of spending; and
- improve the current setting of financial relations across the different levels of government.

Chapter 4 covers fiscal policy issues overall. Measures to improve the efficiency of spending in education (which is the largest public spending item) are discussed in Chapter 2. The extent to which the ongoing decentralisation can help increase the cost-effectiveness of public spending and correct inequities is discussed in Chapter 5 which focuses on how to get the most out of the process underway.

Concluding remarks

To succeed in the challenge of catching up to the average living standards in the OECD, reforms are needed on several fronts. In recent years, several reform opportunities were missed. In areas where measures have been taken, implementation has not always been effective (see Annex 1.A2). The reform agenda for durably raising growth in Mexico that is developed in the next chapters of this survey needs to be seen as a global package, with important synergies to be drawn from taking measures on several fronts. The greatest long-term gains would be expected from progress in raising human capital, where Mexico lags the most, but it will take time to reap the benefits from actions in this area. On the other hand, Mexico's weaknesses regarding the business environment are perhaps less pronounced, but reforms will have a more immediate impact, notably via an increase in investors' confidence in Mexico.

Notes

1. The outstanding stock of public debt was reduced, its maturity lengthened (by the end of 2004, the average maturity of domestic debt was above 1 000 days), the share of floating-rate bonds was reduced and resort to external debt diminished. The Brady Bond debt was completely paid back in 2003.
2. 2004 OECD *Information Technology Outlook*.
3. After increasing sharply in the immediate aftermath of the 1995 crisis, poverty diminished continuously throughout the second half of the 1990s and the first half of the 2000s. According to the Technical Committee for the Measurement of Poverty (*Comité Técnico para la Medición de la Pobreza)* definitions, extreme poverty corresponds to people below the first poverty line with an income insufficient to cover basic food necessities, according to the nutritional requirements established by the INEGI-CEPAL food basket (*Línea de Pobreza Alimentaria*). The second line of poverty corresponds to income per capita insufficient to satisfy basic food, health and educational consumption (*Línea de Pobreza Capacidades*). And below the third line of poverty income is not sufficient to satisfy the basic consumption of food, clothing, shoe, housing, health, public transport, education, and other goods (*Línea de Pobreza Patrimonio*). According to the most recent available data, the number of Mexicans living below the extreme poverty line fell from 24.2% to 17.3% from 1996 and 2004 and the share of Mexicans in poverty (*i.e.* below the third poverty line) is now less than half the population. Several factors contributed to this decrease, including lower inflation, public programmes targeted to the extreme poor (*Oportunidades* in particular) and increased remittances from the US.
4. The gap *vis-à-vis* the OECD average is slightly larger now than it was before the 1995 crisis. As a comparison, it took only two years for Korea to recover the relative GDP per capita lost after the 1998 crisis and the gap has continued to narrow since then.
5. A.T. Kearney's 2004 Offshore Location Attractiveness Index shows for instance that the skills of the labour force are a key disadvantage of Mexico in attracting offshore outsourcing of business services.
6. The situation is comparable in other Latin American countries (*cf.* Wolff and Castro, 2000).
7. See *Encuesta Nacional de Educación, Capacitación y Empleo* (2001). Access to training has nevertheless increased in the past decade. The 1999 ENESTYC survey shows an increase in the share of the workforce having been trained from 25% in 1992 to 38% in 1999 in the formal manufacturing sector, with increased access for low-skilled workers working in companies that also employ high skilled workers (see Tan, Lopez-Acevedo, 2003).
8. As highlighted notably by Tornell, Westermann and Martínez (2004) and illustrated by Nicoletti *et al.* (2003).
9. During the same period the OECD average increased from 2.1% to 2.3% of GDP. See OECD *Science, Technology and Industry: Outlook* 2004.
10. The functioning of the labour market as well as the 2002 law reform proposal were discussed extensively in the *OECD Survey of Mexico,* January 2004.
11. For instance, according to a survey by consulting firm A.T. Kearney on the most attractive countries for FDI, the standstill on key reforms and the magnetic pull of China have led global investors to

rethink Mexico, which dropped to 22nd in 2004 from third place in 2003. *www.atkearney.com/main.taf?p=1,5,1,151*. According to this survey, Mexico's loss of competitiveness is, currently, limited to labour-intensive industries characterized by low-cost and large-scale production.

12. See for instance Aghion, Caroli, and García-Peñalosa (1999).

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ANNEX 1.A1

Background information

Table 1.A1.1. **Short-term outlook**

Percentage changes, volume (1993 prices)

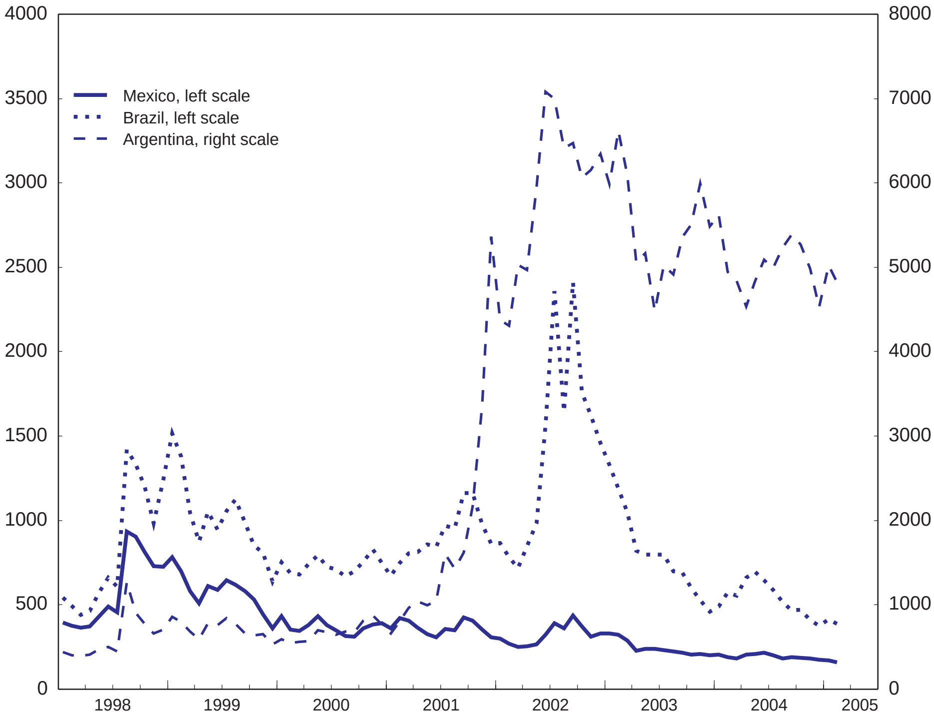
	1996-2000[1]	2001	2002	2003	2004	2005	2006
Private consumption	6.1	2.5	1.6	2.3	5.5	4.8	4.3
Government consumption	3.1	–2.0	–0.3	0.8	–1.2	–0.6	2.2
Gross fixed capital formation	12.6	–5.6	–0.6	0.4	7.5	7.6	6.3
Final domestic demand	6.9	0.3	1.0	1.8	5.3	4.9	4.5
Change in stockbuilding[2]	0.3	0.2	–0.1	–1.0	–1.1	0.1	0.0
Total domestic demand	7.1	0.6	0.8	0.7	4.1	4.9	4.5
Exports of goods and services	12.9	–3.8	1.6	2.7	11.5	7.6	7.4
Imports of goods and services	18.7	–1.6	1.5	0.7	10.2	9.7	8.0
Net exports[2]	–1.5	–0.7	0.0	0.7	0.2	–1.0	–0.5
GDP at market prices	5.5	0	0.8	1.4	4.4	4.0	4.2
GDP deflator	15.1	0	7.0	8.5	6.1	6.3	3.8
Memorandum items:							
Consumer price index	15.7	6.4	5.0	4.5	4.7	4.4	3.7
Current account balance[3]	–3.0	–2.8	–2.1	–1.3	–1.3	–1.9	–2.0

1. Annual average growth rates from 1996 to 2000.
2. Contributions to change in real GDP.
3. As a percentage of GDP. 2004 data have been revised to 1.1 % of GDP.

Source: OECD. Based on data available on 18 May 2005. Estimates and projections as prepared for *Economic Outlook 77*.

Figure 1.A1.1. **Trend in risk premia (EMBI spread 1998-2005) in Mexico, Argentina, Brazil**[1]

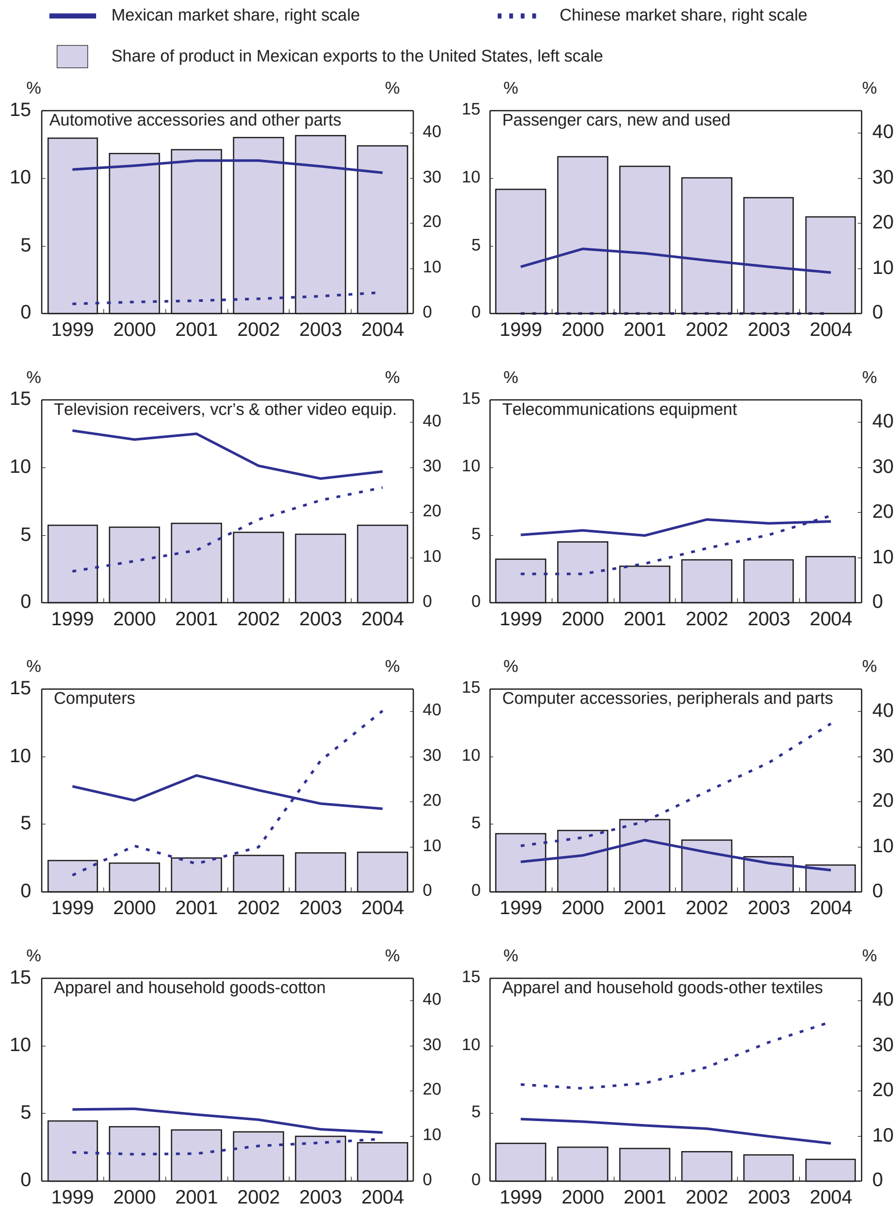
Basic point spread over US



1. Emerging Market Bonds Index (EMBI).

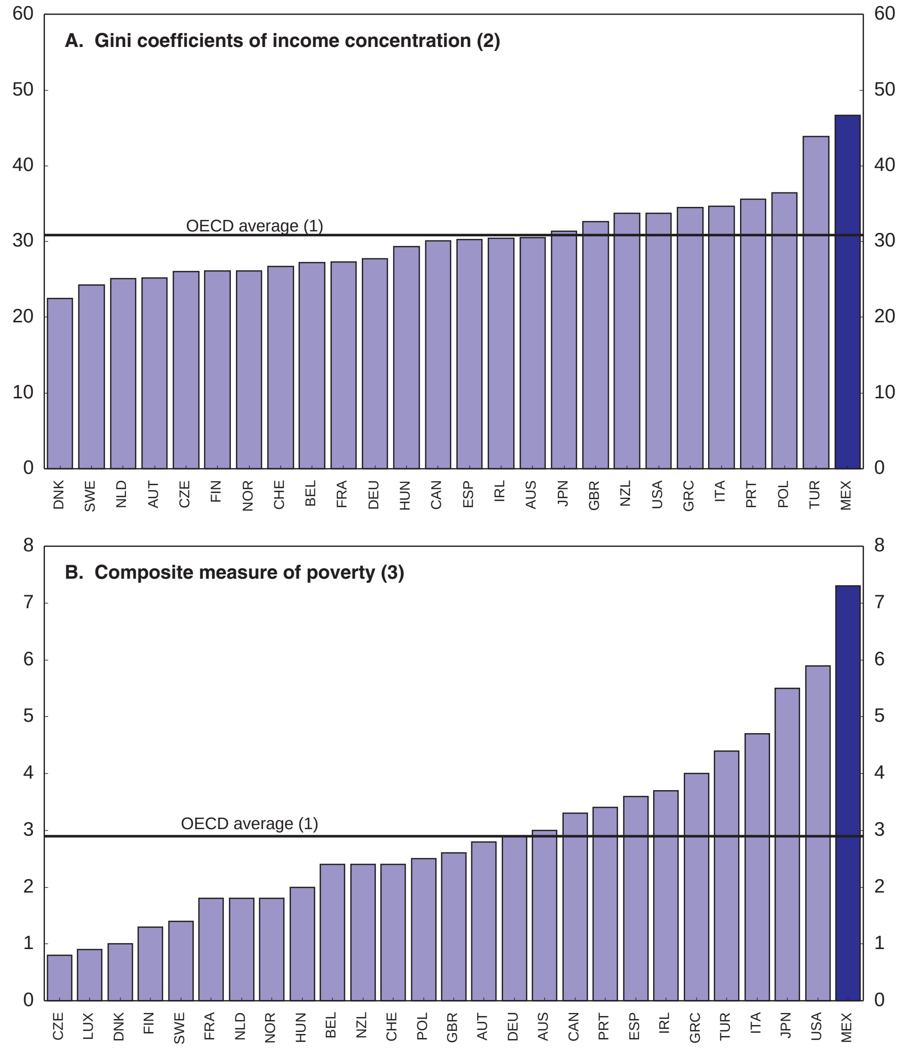
Source: J.P. Morgan Securities, Inc. Emerging Markets Research.

Figure 1.A1.2. **Market share of Mexico and China in US imports for selected products**



Source: US Census Bureau, Foreign Trade statistics.

Figure 1.A1.3. **Income distribution and poverty in selected OECD countries**



1. Data refer to year around 2000, except for Belgium and Spain (around 1995), which are excluded in the country OECD average.
2. The income concept used is that of disposable monetary household income, adjusted for household size. Gini coefficients multiplied by 100.
3. The composite poverty index measures the size of the income transfer that would be required to raise all those in poverty up to the poverty threshold of 50% of median normalised disposable income.

Source: Förster and Mira d'Ercole (2005).

ANNEX 1.A2

Taking stock of structural reforms

This table reviews action taken on recommendations from previous *Surveys*. Recommendations that are new in this *Survey* are listed in the relevant chapters.

Recommendations	Action taken since the previous *Survey* (January 2004)
ENHANCING HUMAN CAPITAL	
A. Increase coverage of post compulsory education	
Facilitate access of poorer students to upper secondary education	Extension of *PROGRESA/Oportunidades* to upper secondary has a positive impact
Increase fees for tertiary education while developing an unsubsidised student loan market and increasing the scope of scholarships for low income students	No recent action
B. Increase quality of education services	
Modernise curricula and better integrate them between levels	The *reforma integral de la secundaria* seeks to modernise curricula in lower secondary education. A new curriculum for preschool has started to be implemented
Better train teachers and administrative staff	Ongoing, notably via the strengthening of teachers selection at the state level
Make schools more accountable; make government transfers conditional to student characteristics and to outcomes	The number of schools participating in *Escuelas de calidad* has increased
Evaluate schools and publish results	In progress both at the Federal level (INEE) and at the states' level
Review incentives for teachers	No recent action
C. Facilitate the transition from school to job	
Consider the introduction of apprenticeship contracts or alternation programmes	No action
Further strengthen vocational education	Ongoing
D. Adult training	
Continue to develop skill standardisation and certification	Ongoing
Strengthen public training programmes	Ongoing
Facilitate development of on the job training	Measures were included in the 2002 Labour Law reform proposal. The proposal was abandoned in 2005
LABOUR MARKETS	
A. Increase the flexibility of employment regulations	
Ease permanent contracts regulation	Partly addressed by the 2002 Labour Law reform proposal – abandoned in 2005
Allow probationary periods so as to facilitate job creation through long term contracts	In the 2002 Labour Law reform proposal – abandoned in 2005

Recommendations	Action taken since the previous *Survey* (January 2004)
Broaden scope for using short term contracts	No action
Broaden scope for using part time contracts	No action
Review overtime remuneration	No action
Ease employment protection provisions while putting in place minimal revenue support in case of job loss	No action
B. Reform the tax and transfer system	
Increase IMSS efficiency	Ongoing
Reform public housing fund (INFONAVIT)	No action
Avoid use of payroll tax	Federal Payroll tax eliminated in 2003 States' payroll taxes are still in place
Review social contribution rates, rather high at the low end of the salary scale	No action
C. Modernise the collective bargaining framework	Partly addressed by the 2002 Labour Law reform proposal – abandoned in 2005
ENERGY	
Electricity: reform the sector to open it to private investors and establish a transparent, effective, non-discriminatory and competition enhancing regulatory framework	Reform proposal in Congress – still not approved
Gas: Continue liberalisation and opening up of the sector	Ongoing
Advance liberalisation in petrochemicals	No action
TELECOMMUNICATION	
Use market based mechanism to ensure universal service	In progress
Improve the regulatory framework to enhance competition	Decree giving COFETEL more autonomy proposed in 2003 – not approved.
The 2002 Telecommunication Law reform proposal is still not approved	
TRANSPORTATION	
Proceed with privatisation of airlines as separate entities	Scheduled for 2005
PROMOTE A BUSINESS FRIENDLY ENVIRONMENT	
Facilitate entry and exit of firms	Ongoing extension of fast track system for start ups (SARE)
Reduce business costs	In progress
Improve the functioning of the judiciary system and ensure enforceability of laws	In progress, but implementation is slow
PROMOTE USE OF NEW TECHNOLOGY	
Emphasise the importation and diffusion of technologies, for now concentrated in large exporting companies	Ongoing

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Chapter 2

Delivering efficient and equitable education services

This chapter discusses the performance of education services up to the upper secondary level. It assesses both the efficiency (outcome for money invested) and the equity of the system. The chapter shows that the education system has to be improved further to narrow the human capital gap with other OECD countries at a faster pace and to better prepare children for life and work in a modern economy. Mexicans spend comparatively few years in formal education, and the quality of the education they receive is lower than in other OECD countries. This poor performance does not stem mainly from a lack of resources but rather from inefficiencies and misallocation of spending and weak incentives for education professionals to perform well. The chapter makes specific recommendations to improve the system. The ongoing efforts undertaken by the authorities go in the right direction but are not sufficient.

Introduction

Narrowing the human capital gap *vis-à-vis* other OECD countries is essential for Mexico to improve relative competitiveness, resume its catching-up and overcome poverty (see Chapter 1). Formal education therefore plays a central role in the growth process. Despite major progress in the past 20 years to expand the coverage of education services, there are serious lags in enrolment, and achievements of children who are at school are well below those in other OECD countries. The 2001-2006 National Education Programme aims at "offering the entire population a quality and relevant education". There are indeed examples of other OECD countries that have filled the human capital gap within a generation (Korea in particular). This is however a tough challenge for Mexico in a context of limited fiscal resources, fast growth of the secondary-school-age population, sizeable internal and external migration flows, acute income inequities, the existence of widespread poverty including a high proportion in extreme poverty[1] and great cultural and linguistic diversity (for instance about 62 different languages, each with several dialectal variations, are spoken by the 9% indigenous population).[2]

The chapter focuses on basic and upper secondary education. It does not deal with tertiary education and adult and on the job training which are also key pillars of human capital development in Mexico. The key recommendations are summarised in Box 2.2 at the end of the chapter.

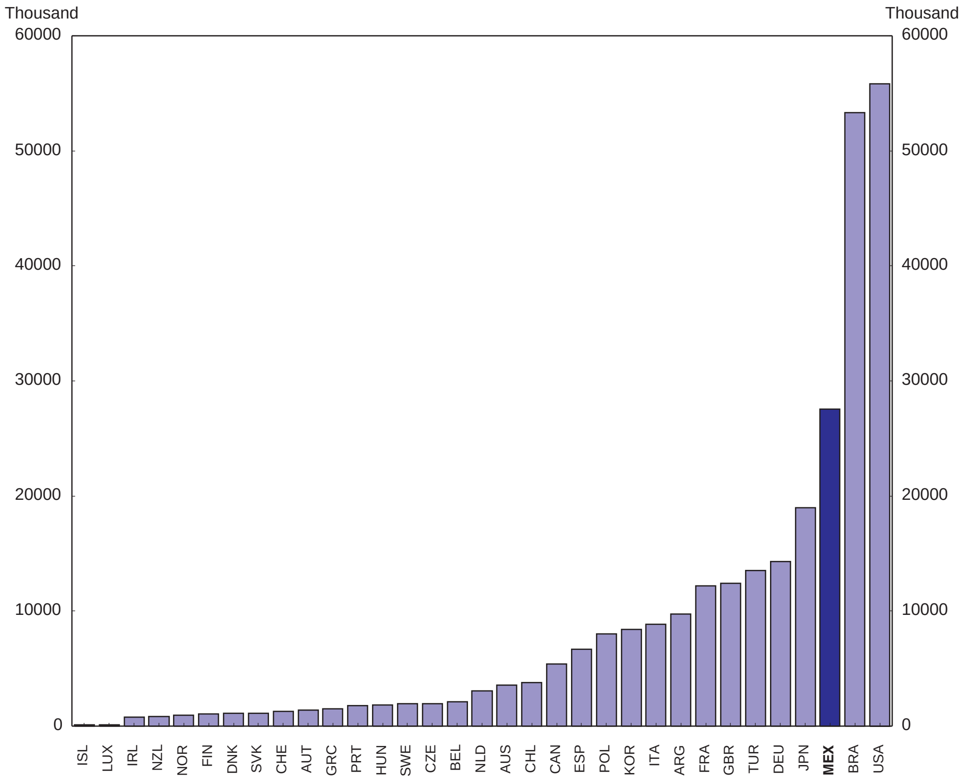
Delivering services to one of the largest school-age populations in the OECD

Education has been a policy priority for several decades in Mexico, with a focus on increasing school enrolment in primary education and, more recently, in secondary education. As a result, the average duration of schooling was brought up from 2.6 years in 1960 to close to 8 years in 2004, and children entering school now are expected to stay in the system for close to 13 years. The illiteracy rate was reduced from more than a third of the population to 8.5%. This quantitative increase in education is impressive given the huge demographic pressure the education system faced and the difficulty of reaching that part of the population living in small remote rural communities. Overall, the number of students enrolled has risen fivefold since 1960 and education services now cover 30 million students, with 92% of them in basic and upper secondary education (see Annex 2.A1). Measured by the number of students enrolled in these two levels, Mexico has the largest education system in the OECD after the US (Figure 2.1). For instance, there are more school-aged children in each of the 6 largest Mexican states than in Greece or Portugal.

Primary school has become nearly universal, but enrolment in secondary education remains much lower than in other OECD countries (at 86.1% in lower secondary and 52.9% in upper secondary, see Table 2.A1.2). Moreover, the quality of education services has not increased in line with quantity: dropout and repetition rates are high,[3] and the achievements of Mexican students measured by national and international tests are significantly lower than in other OECD countries (see for instance Figure 1.8 in Chapter 1).

Figure 2.1. **Number of students enrolled in school in OECD countries and selected Latin America countries**

From preschool to upper secondary in 2001



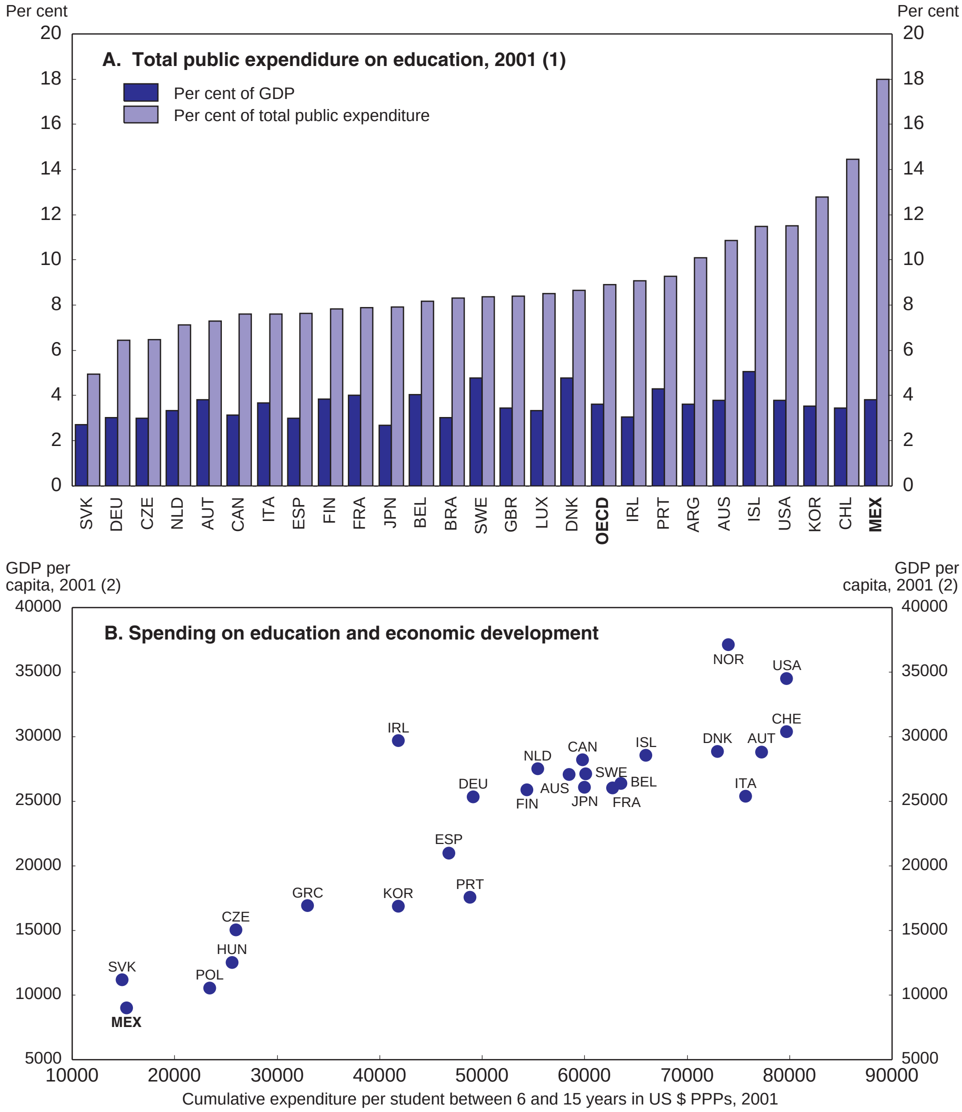
Source: OECD, Education database.

Hence, the education system does not yet provide Mexicans with the skills they will need to face international competition.[4] Some quality reforms, mainly concentrated in basic education, have been proposed in the past 15 years but they have been insufficient and their implementation has proved difficult. Quality reforms are indeed usually more complicated to design than programmes to increase coverage, and they are usually politically harder to implement.[5]

Education, especially at the basic education levels, is provided mainly by the public sector. More than 90% of students in basic education are registered in public schools. The share of private schooling is higher in upper secondary education (about 20%), and tertiary education (about one third) but overall it has a much smaller role than in most countries in Latin America.[6] Both the states and the federation run upper secondary education institutions.[7] Education is the largest single public expenditure item, which is in line with the challenge it represents for the country (Figure 2.2). One of the key reforms of the past 20 years was the 1992 decentralisation that gave states the responsibility for providing basic public education services.[8] The way public financing is channelled to states is described in detail in Chapter 5. Each state can decide on the rules to allocate spending to lower levels of government. Their autonomy is however limited by the large share of transfers that goes to the payment of wages (see below).

Figure 2.2. **Total public expenditure on education**

Primary, secondary and post-secondary non-tertiary education



1. Public expenditure includes public subsidies to households for living costs, which are not spent on educational institutions. 2000 for Brazil; 2002 for Chile.
2. In US dollars, at constant prices using 2000 purchasing power parities (PPPs).

Source: OECD, *Education at a Glance* (2004), Table B4.1; *Education at a Glance*, various issues; OECD National Accounts database.

In absolute terms, spending on education remains low compared with other OECD countries. Although total spending on primary and secondary education increased by 36% in real terms between 1995 and 2001 and total spending per student increased by 25%,[9] Mexico's cumulative spending on education per 15-year-old student is, at US$15 312, the second lowest among the OECD countries after the Slovak Republic. This is broadly in line with Mexico stage of development but might not suffice to allow rapid catching up. For instance, the current education budget cannot finance the planned generalisation of preschool and the much needed expansion of secondary education. And, beside insufficient coverage, international comparisons point to a lack of all types of inputs in the education system.[10] This does not imply that spending more on education will erase the human capital gap. Though a necessary condition for the provision of high-quality schooling, increased spending alone will not guarantee better outcomes. And weaknesses in spending efficiency have to be addressed before spending more. A law was passed by Congress in 2002 targeting public spending on education at 8% of GDP by 2006 (compared with 5.1% in 2001), but it was not accompanied by the in-depth reform which is required to improve the quality of services. The powerful and well organised teachers' union, *Sindicato Nacional De Trabajadores De La Educación* (SNTE), gathers 1.4 million education professionals. It is a necessary partner in the reform process, as it is a key player in public education, especially in wage negotiations and assigning teachers' positions. It could play a critical role in improving quality: however, it has so far given priority to raising members' salaries and expanding teaching staff.

Spending better

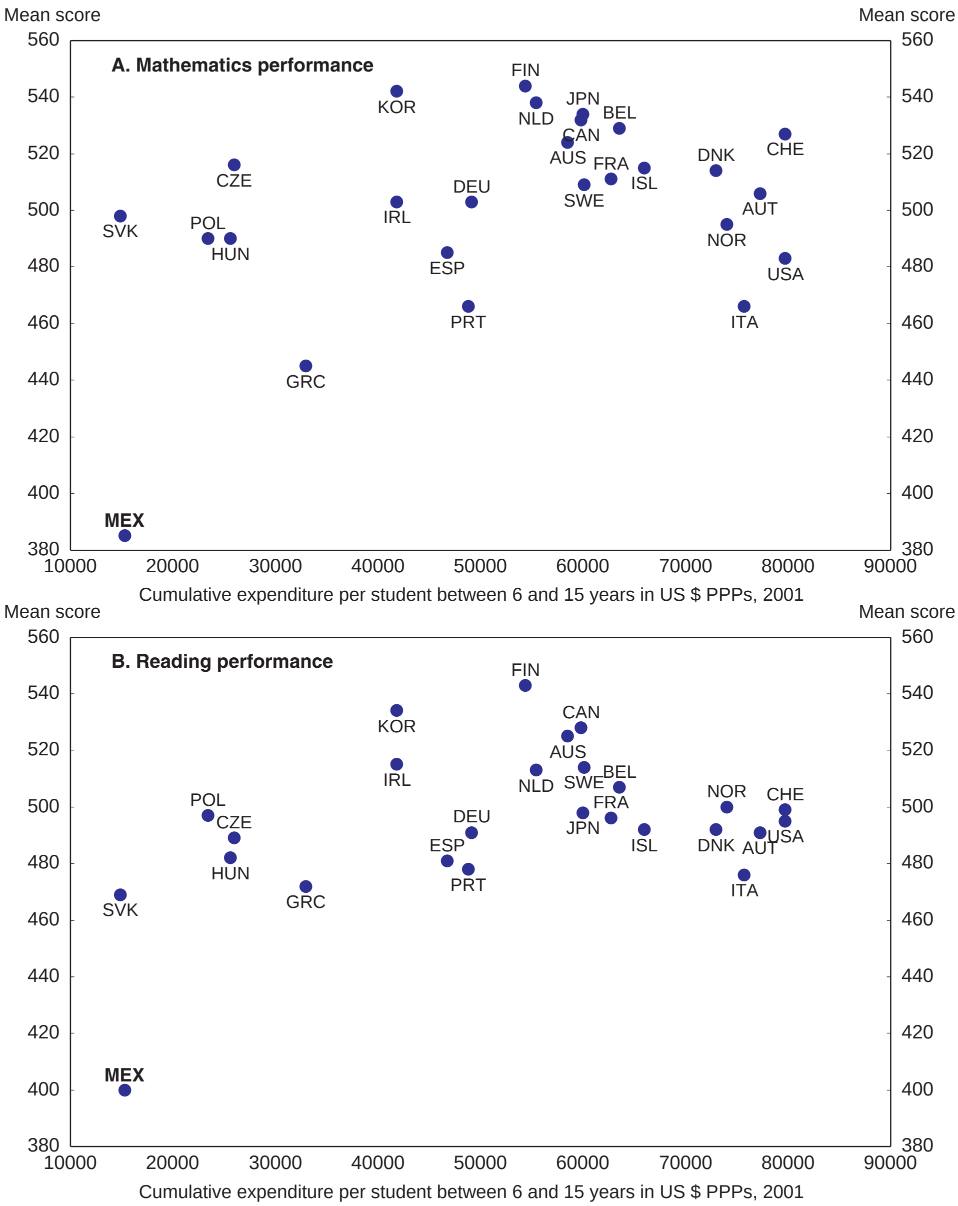
Even after adjusting for differences in spending, the quality and coverage of education services are poor in comparison with other countries.[11] With the same or only slightly higher spending per student, eastern European countries achieve much better results at PISA (Figure 2.3). While increases in expenditure cannot be expected to translate immediately into better outcomes and the accumulation of expenditure matters, Mexico's lag also reflects weaknesses in the allocation of resources and the productive use of these resources. Against the background of limited additional financial resources, efficiency gains are essential so as to spend more in areas where it is needed without increasing the total cost of public education by the same amount.

Improving the allocation of resources[12]

A striking feature of education spending in Mexico is that most of it goes to current spending and most current spending at primary and secondary levels goes on teachers' salaries. As a result, the share of salaries in total spending is the highest in the OECD (above 90%) and the shares of capital expenditure and of other current expenditure, such as teaching materials, are consequently well below the OECD average (Figure 2.4). In recent years, increases in wages have absorbed the lion's share of expenditure increases, amplifying this feature. Mexico is the OECD country where teachers' wages increased the most in real terms between 1996 and 2002. The way salaries are negotiated with the union, first at the federal level, and then topped up at the local level in some state level negotiations, contributes to this trend. Paying teachers more makes a teaching career more appealing and should thus attract better professionals in the future, but this does not guarantee quality increases: although low in absolute terms, teachers' wages relative to GDP per capita are already among the highest in the OECD, as is usual in a lower-income country, but also among the highest in Latin America. Moreover, when teachers' wages are compared with wages of comparable professionals, they seem fairly paid.[13]

Expenditures other than teachers' pay are also essential to the quality of teaching. Besides, they can also play a decisive role for the motivation of teachers by improving their working environment. There is an important backlog of all types of investment from basic equipment to ICT.[14] The role of schools in providing skills in using new technologies is more critical in Mexico, where less than 10% of households have access to a home

Figure 2.3. **Spending per student up to 15 years old and PISA results, in 2003**

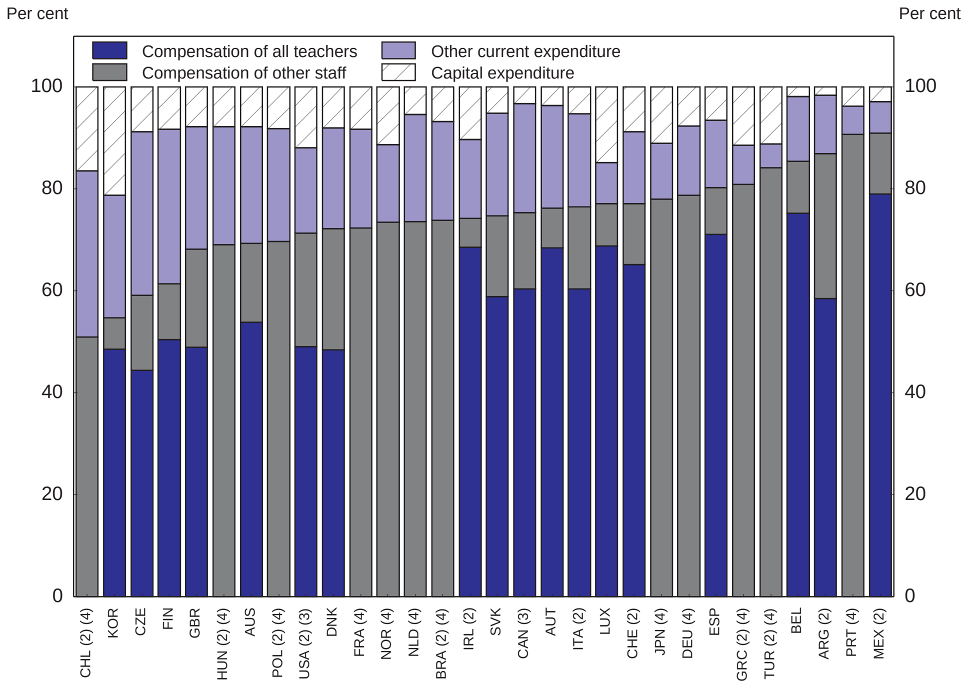


Source: OECD, *Learning for Tomorrow's World: first results from PISA 2003*; OECD, *Education at a Glance* (2004).

computer, than in other OECD countries. However, students' access to these is limited, even at the upper secondary level.[15] Although some of the best performing countries at PISA have much higher numbers of teachers per student than Mexico, this is not always the case (for instance Korea has on average as many students per class as in Mexico).[16] On the other hand, they all have a much larger share of their budget allocated to investment or non-wage current expenditure (for instance Australia, Finland and Korea) and better access to ICT. The quality school programme "*escuelas de calidad*" launched in 2001 to increase quality for primary education and covering now 22 000 schools (see Box 2.1) allocates additional resources to non-wage expenditure, including teachers training, but its scope is

Figure 2.4. **Distribution of total and current expenditure on educational institutions**[1]

By resource category in primary, secondary and post-secondary non-tertiary education



1. In 2001. Brazil: 2000; Argentina: 2002.
2. Public institutions only.
3. Excludes post-secondary non-tertiary.
4. The breakdown of compensation of teachers and compensation of other staff is not available.

Source: OECD, *Education at a Glance* (2004), Table B6.3.

very limited. *Enciclomedia* launched in 2004, as well as *Red Escolar* and *Edusat* are other examples of federal programmes directed at non-wage expenditure. In particular, *Enciclomedia* digitalises textbooks for the primary level and connects them to each other and to other sources. The government targets the equipment of all the classrooms for 5th and 6th grades of primary education by the end of 2006. This programme should give incentives to teachers to update their skills.[17]

It is virtually impossible to change the structure of expenditure in the short-term, *but it is important that additional financing to education be allocated in priority to non-wage expenditure.* This implies, in particular, resisting pressure for rises in teachers' real wage and taking advantage of changes in enrolment patterns. When more students attend upper secondary education, it would be efficient to have on average slightly larger size classes than now with better teaching material; therefore the need to hire new teachers will not be fully proportional to the increase in coverage. Similarly, when the cohorts attending basic education shrink, instead of systematically reducing the size of the classes it would be preferable to not replace all the retiring teachers so as to create some room to increase other spending. Fundamental changes in the way wages are negotiated in the education system are also necessary to improve the structure of expenditure.

Box 2.1. **Quality school programme (*Escuelas de calidad*)**

Escuelas de calidad was launched in 2001 to improve the quality of basic education in poor socio-economic areas by giving competitive grants for improvement and encouraging local decision making. It was initially open to urban schools with low-income student intake only, and from 2003 to all schools. It also contributes to allocate additional spending to non-wage items (acquisition of books and teaching materials, investment and/or maintenance of schools equipment and infrastructure, training of teachers and parents). Schools that participate have to design a medium-term project to improve infrastructure and/or quality of education; and meriting projects receive annual grants to be managed directly by the school. The role of parents is also encouraged.

The programme is co-financed by the federal government (which provide more than 50% of the financing), states, municipalities, and private funds. The total annual cost of the programme is 0.42% of the education budget. Each participating school can benefit from a maximum of 300 000 pesos a year (it receives an initial support of 50 000 to 100 000 pesos, and an additional support equivalent to twice the funding gathered by the school and municipality). In 2003/04, 15 360 schools were enrolled, and about 20 000 in 2004/05 (*i.e.* 10% of all schools).

The programme is monitored through impact indicators of student achievements and schools drop-outs. External evaluations are positive. The main limitation of the programme is its limited scope and the fact that most disadvantaged schools, which do not have the skills required nor the co-financing capacity, cannot participate.

See *http://basica.sep.gob.mx/dgdgie/escuelasdecalidad/* for more details, including the external evaluations of the programme.

Achieving a better balance between spending items would be greatly facilitated if teachers could be moved according to needs, which is not the case. Already, because of demographic changes and the magnitude of external and internal migration flows, some schools are almost empty in some regions, whereas others have classes of over 50 students and are not able to cope with enrolment demand, resulting in the drop-out of students who would have otherwise remained in the system. However, it is very difficult to relocate individual teachers according to needs. Moreover, the way resources are allocated between states and within states hinders any major relocation of inputs. This allocation is not always transparent but rather driven by political interest; when rules exist, they are mainly supply driven, preventing adjustments to compensate for the deficit in inputs and changes in terms of school-age children.[18] *As a minimum, new teachers' positions should only be created in states that have the largest enrolment lags. Within states, mechanism to ensure a better match between the geographical distribution of resources and needs should be put in place.* Some states, Sonora for instance, have already taken steps to improve this matching and this is very welcome.

Making the use of resource more efficient

There are several examples of cost efficient programmes, such as *telesecundaria*, which has been instrumental in increasing enrolment of children in remote areas, or *oportunidades*, which is helping reduce drop-out rates for children from low income families.[19] On the other hand, an obvious example of inefficiency in Mexico is pervasive teachers' absenteeism in some areas.[20] Overall, several improvements could help reaching better outcomes for the same money spent.

Improving the selection and training of teachers

The selection and training of teachers present some weaknesses that are detrimental to the quality of education. Only the younger generation of teachers has the required level of education: in primary schools for instance, 60% of teachers do not have a bachelor degree (*licenciatura*).[21] This is especially the case for indigenous schools and community courses (CONAFE). In secondary education, 70% of teachers hold university degrees but have no training in teaching.[22] Until recently there were no entry examinations to teachers schools (*normales),* nor before starting to teach and the selection and hiring of teachers was to a large extent controlled by the teachers' union. There is also anecdotal evidence that some teaching positions have been sold.[23] According to OECD (2004c), future teachers are selected through exams in only 13 states while the union decides alone on filling new position openings in 3 states and on filling vacancies in 13 states; it shares responsibilities with the state authorities of filling new position openings in 11 states and of filling vacancies in 7 states. The National Agreement for Education Quality signed in 2002 by the Ministry of Education and the union foresaw the generalisation of selection exams but it has not yet been implemented in all states. In the same way, some states are moving forward in the selection of future teachers. For instance, following a local agreement with the teachers' union, Chiapas was the first state to impose a test at the end of the teachers' initial training programmes, while Sonora imposes examinations to those entering teachers' schools. As a result, in those states in particular, the teachers' union has started to lose its traditional control over teaching positions. Important efforts have also been made at the federal level to strengthen teacher's initial training. *Actions in that direction should continue, both at the states and at the federal level.* Besides, there have been efforts to update teachers' skills in the past decade with the implementation of three initiatives the National Program for the Permanent Update of the Teachers of Basic Education (*Pronap*), the National Update Courses (*Cursos Nacionales de Actualización*) and the General Update Workshops (*Talleres Generales de Actualización*), which provide training to half the teaching force every year. On the job training for teachers needs nevertheless to be further strengthened.

Improving teaching practices and contents

Teaching practices also play a central role in education outcomes. In Mexico, teaching is still largely based on rote learning rather than comprehension skills and communication, even at the upper secondary level. This reflects weaknesses in the training of teachers mentioned above, the organisation of classes and outdated curricula. Interactions and cooperation among teachers of the same school are very limited except for some pilot projects (Ministry of Education, 2004). Official hours of teaching are longer than in most other OECD countries but the courses are shorter ranging from 20 to 50 minutes in secondary education, with a significant share of the time not devoted to teaching and frequent cancellations of classes. Moreover, curricula are very prescriptive, leaving limited autonomy to teachers and schools. The lack of integration between primary, lower secondary and upper secondary education levels, both in terms of pedagogy and curricula, has contributed to low achievement and high drop-outs.

At all levels, there is therefore a need to move from prescriptive curricula to outcome based curricula, as was done in most other OECD countries over the past two decades, and continue to seek *a better integration with the other education levels.* An important reform of the basic education curriculum and teacher training degrees was undertaken under the Zedillo Government (1994-2000), but it faced implementation problems and has not fully made it to the classroom. The reform of curricula and teaching practices launched by the current administration goes in the right direction. In particular the reform of lower secondary education (*reforma integral de la secundaria*), which will start to be implemented in pilot schools in 2005-2006, seeks a modernisation of the curriculum, a strengthening of the relationships between teachers and students, an increase in the duration of classes, and changes in the organisation of classes over the different grades and in the organisation of teaching. Further efforts are nevertheless needed, in particular in upper secondary education. Upper secondary education has been neglected up to now and enrolment drops sharply at the end of lower secondary. The creation of an under secretariat for upper secondary is a sign that it has rightly become a policy priority, but *concrete actions are yet to be taken and they should not be delayed, so as to offer more and better services to coming cohorts.*

The transition between school and work also presents some weaknesses. The efficiency of technical education and upper secondary varies from one system to the other [*Colegio Nacional de Educación Profesional Técnica* (*Conalep*) National Technical Professional School, *Centros de Bachillerato Tecnológico Industrial y de Servicios* (CBTIS) Upper Secondary Technological Industrial Centers, and *Centros de Bachillerato Tecnológico Agropecuario* (CBTAS) Upper Secondary Technical Agricultural Centers]. Reforms were launched in 2004 to match better their curricula with the educational needs of the productive sector, and those of the students who encounter difficulties in finding jobs in line with their skills once they have finished school.[24] In this context, the value of school is not obvious to students and their parents, and despite high private education returns, drop-outs due to dissatisfaction with the school system are frequent.[25] *To facilitate the transition between schools and work, the attractiveness and quality of technical and vocational education have to be improved. Apprenticeship, which is almost nonexistent in Mexico, could be developed. And, at all levels, interactions with the business sector should be sought.*

Efficiency enhancing mechanisms are needed

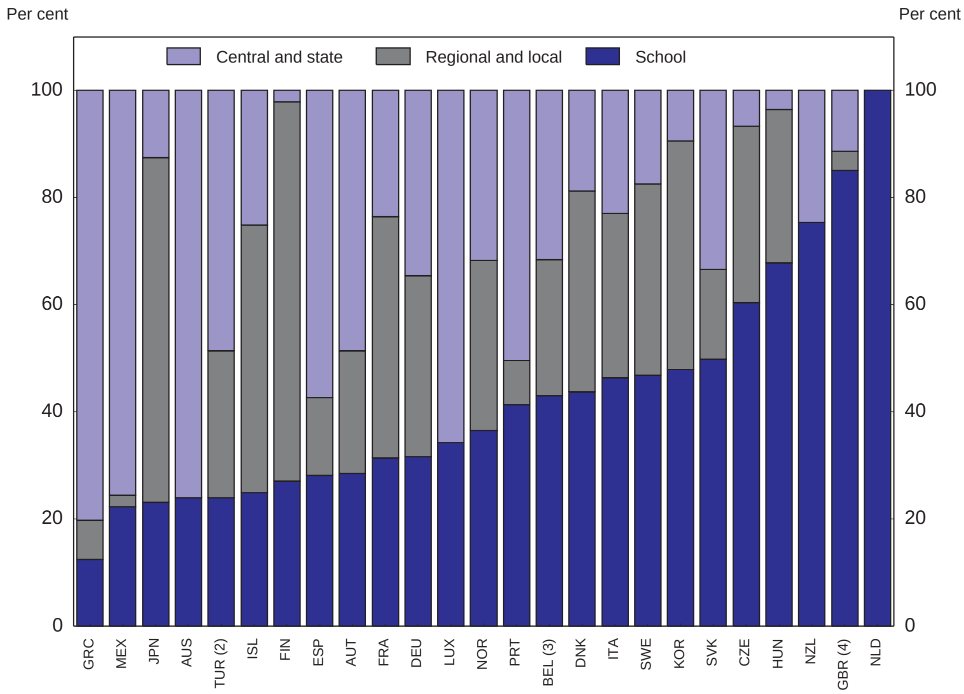
Further improving the selection and training of teachers, the curricula and the organisation of teaching might not be enough. Mexico's education system also lacks most mechanisms identified as efficiency-enhancing in education. Establishing such mechanisms is a necessary condition for the mentioned reforms to be effective. This concerns in particular the devolution of responsibilities within the system and the setting up of appropriate evaluation and accountability schemes.

Putting schools at the centre

There is a presumption that the devolution of responsibilities to local authorities and schools brings efficiency (see OECD 2004d, and 2005a). Although there is no common model, in most countries that performed well in PISA surveys, local authorities and schools have substantial autonomy to adapt educational content and/or allocate and manage resources (this is the case in England, Korea, Finland, Japan, the Netherlands for instance; Australia on the other hand performed above average at PISA with very little devolution of responsibilities to schools) (Figures 2.5 and 2.6). In Mexico, decisions related to education are taken mostly at the central level by the federal government or the state authorities. Schools have some autonomy in the organisation of instruction, but have no autonomy at

Figure 2.5. **Level of decision making in public lower secondary education**

As a percentage of total,[1] 2003



1. Data are ranked in ascending order of the percentage of decisions taken at school level.
2. Data refer to primary education.
3. Refers to the French Community.
4. Refers to England.

Source: OECD, *Education at a Glance* (2004), Table D6.1.

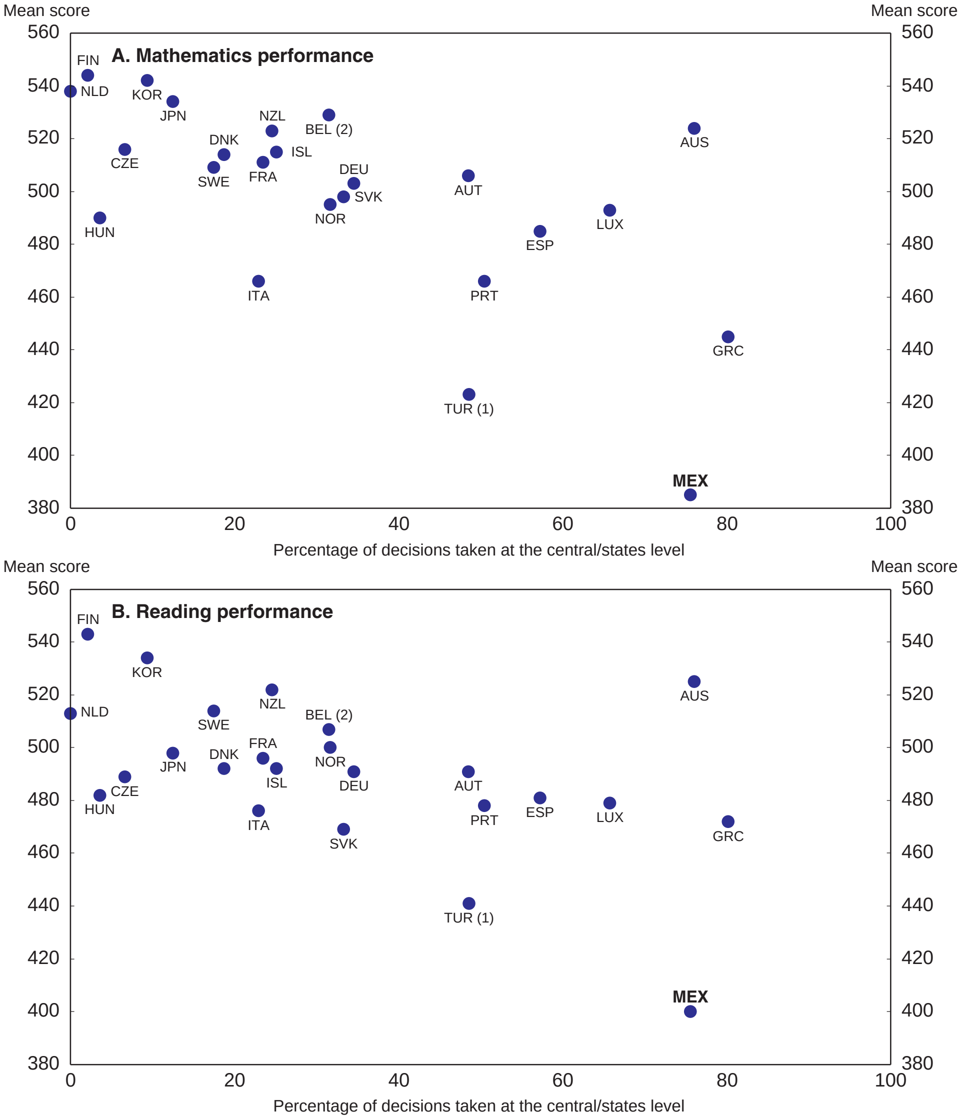
all in personnel management and resource allocation, and only very limited autonomy in planning and structure. Modest steps have been taken to give them more responsibilities. The *reforma integral de la secundaria* gives some autonomy to both the States and schools in designing curricula. *Escuelas de calidad* promotes deeper changes in responsibility devolution, including in terms of resources allocation. However, the scope of these programmes is limited both regarding the number of schools that participate and the means. *Overall more progress is needed in terms of devolution to all schools and local authorities, especially as concerns the use of financial resources and staff management. Such devolution requires accompanying measures. First, schools principals, whose role should evolve from mainly administrative to a role more focused on improving learning processes, need training.Second accountability has to increase.*

Fostering accountability

In education, a focus on outcomes and good evaluation and accountability systems are key to enhance the efficiency of the system, and are a necessary condition for an efficient devolution of responsibilities. Formulating educational goals and standards, and monitoring compliance are widely considered as prerequisites for raising performance levels. Most of the countries that performed well in PISA have developed such systems. In Mexico, the Ministry of Education (SEP) has been evaluating schools and teachers for many

Figure 2.6. **PISA results and level of centralisation of decision making**

2003



1. Data for decision taken refer to primary education.
2. Data for decisions taken refer to the French Community.

Source: OECD, *Learning for Tomorrow's World: first results from PISA 2003*; OECD, *Education at a Glance* (2004).

years,[26] but the evaluation results have mainly been used for internal information and, until recently, were not systematically made public. The creation of INEE (*Instituto Nacional de Evaluación de la Educación*) in 2002 to evaluate basic and upper secondary institutions is a first step in improving the evaluation system.[27] INEE's evaluations are based on samples of schools with the objective of increasing awareness in the public opinion about the weaknesses in the system and helping build a reform agenda. This is extremely important as parents' involvement in schools is still sporadic and their knowledge of who is responsible for the quality of the education their children receive is limited.[28] As in most countries, the real challenges lie in: *i)* feeding data on performance back to those who deliver educational services – the teachers and school principals – and to those who use them; *ii)* establishing reward and support systems based on evaluation results; and *iii)* using the information to design policies and improve practices. To this end, with the collaboration of INEE, several States are developing systematic evaluation system at the state level (The Distrito Federal, Nuevo León, Quintana Roo, Jalisco, Guanajuato, Sonora and Chiapas among others) to complement sample evaluation done by INEE.

Performance linked reward/sanction schemes are very limited. Teacher's absenteeism, although notoriously frequent in rural areas, is barely sanctioned. Neither are there credible sanctions for teacher's weaknesses or outright misconduct despite recurrent anecdotal evidence (the most severe punishment being a relocation to another school under the pressure of parents). Bonuses are given to teachers participating in some specific programmes (*Carrera Magisterial* and the *Programa de Estímulos al Desempeño del Personal Docente de Educación Media Superior y Superior).*[29] But *Carrera Magisterial* has severe limitations. It gives higher value to teachers' background characteristics and training than to students' performance, giving little incentive to teachers with very good or very poor backgrounds.[30] Once promoted, a teacher cannot be demoted; this reduces the incentive to perform for teachers who have reached the highest level of *Carrera Magisterial.*

Several steps should be considered to improve accountability mechanisms within the education system. They include actions to:

- Define and enforce sanctions for teachers' absenteeism or overt incompetence and review *Carrera Magisterial* so as to make it more effective.
- Improve feedback systems to channel the results of the evaluations to those who deliver educational services (teachers, school principals), manage them (state authorities) and use them (children and parents) and ensure that evaluation results are used to influence policy decisions, school management, and users' choice. States experiences in this field could be monitored so as to define best practices across the federation. And there is a need for better articulating all evaluation agencies and efforts.
- Develop a global incentive system for schools. For instance, Chile has developed a school bonus system that fosters cooperation between teachers while avoiding cream skimming by including both outcomes and the socio economic intake of the school as parameters of the system.
- Promote a more active role for parents.

A possible additional step could be to set up a compulsory national examination at the end of lower-secondary, which could be for instance organised by CENEVAL, INEE or another independent institution.[31] Such a examination would have the advantage of: *i)* giving more incentives to students to perform and complete basic education; *ii)* motivating teachers to ensure that students are able to reach the required level to pass this exam; *iii)* giving better signals to potential employers on the level of those who leave schools at the end of lower secondary and thereby facilitate the transition from work to school; and *iv)* providing better information to parents. Such a measure would have to be accompanied by significant improvements in the way the education system deals with low achievers (as discussed below).

Addressing inequalities in education

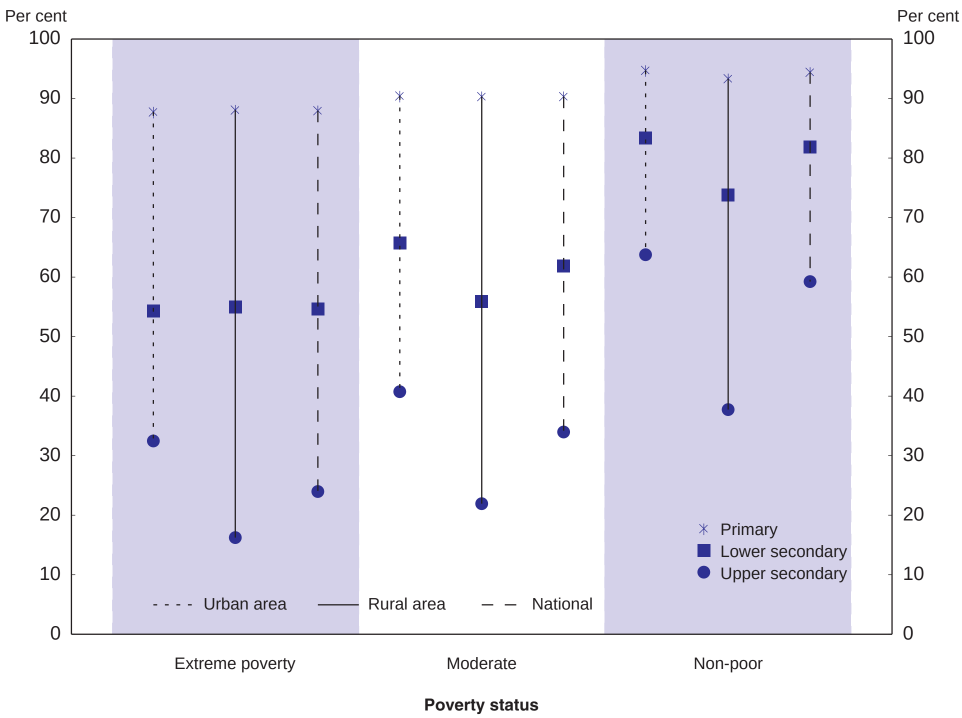
The distribution of income in Mexico is the most unequal in the *OECD and only modest progress has been achieved in reducing inequalities in the last decades (*Chapter 1*). Education,* via *its direct effect on employment opportunities and income, and its positive impact on health, social and economic integration and access to levels of decision-making, can limit the tendency for inequalities in income to repeat themselves from one generation to the next. Therefore, the education system is central in Mexico to reduce income inequalities and reduce poverty*. Equity in education is a wide concept that covers both equity in access to, and ability to stay in the education system, as well as equity in treatment while there (including in terms of quality of the education services provided) and of opportunities when finished.

There are strong inequalities in enrolment and outcomes

Despite progress, especially at the primary school level which has become nearly universal, coverage is still incomplete at higher levels, as many drop out before finishing lower secondary schooling especially in poor rural areas.[32] Surveys show that students' background is the main determinant of achievement of those who remain in the system (Figures 2.7 and 2.8).[33] According to the PISA 2000 survey, 70% of student at the lowest level (level 0) have mothers who either did not go to school or at best finished primary. Fifty-nine per cent of those between levels 2 and 5 have mothers who have at least completed basic education. Eighty five per cent of the students speaking an indigenous language were at

Figure 2.7. **Enrolment rates by poverty status and location**

2002

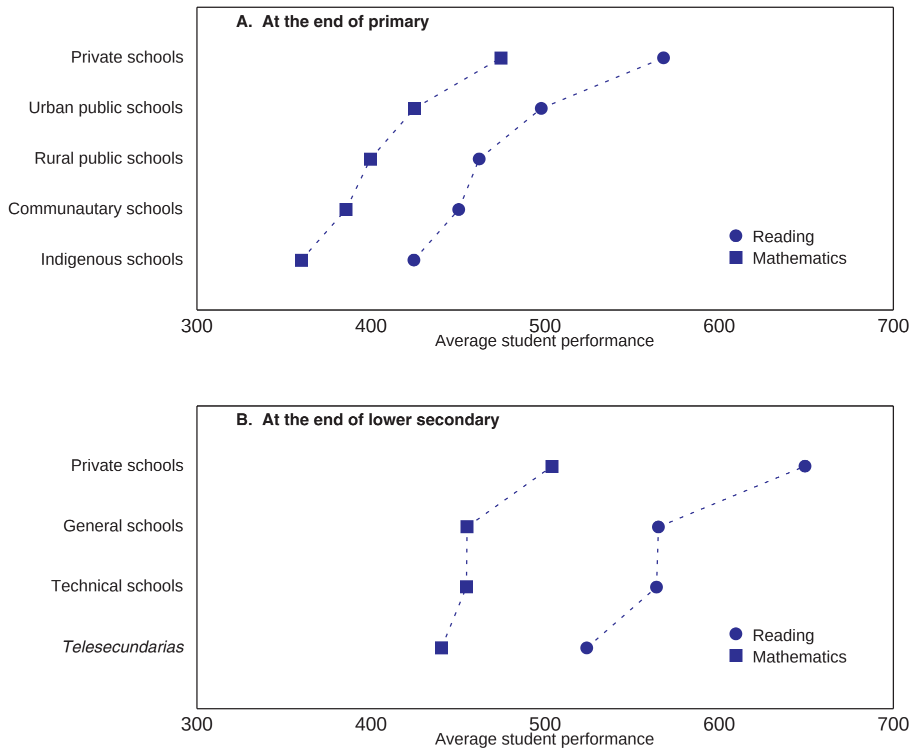


Note: Poverty calculated using SEDESOL's food- and assets-based poverty lines and current income per capita using quarterly income as reported by INEGI. Urban areas are those localities with 2 500 inhabitants or more, using INEGI's classification.

Source: World Bank, *Poverty in Mexico: an assessment of conditions, trends and government strategy* (2004).

Figure 2.8. **Results of national tests by type of schools**

2004



Source: Ministry of Education, *La Calidad de la Educación Básica en México*, 2004.

level 0 and none achieved level 4 or higher. The same evidence appears in national surveys: evaluation of basic education institutions by INEE shows that rural schools, *telesecundaria* and indigenous schools (where children from the poorest backgrounds are enrolled) are the ones which perform the worst. Poor nutrition is often mentioned as a key factor limiting the ability of low-income students to learn.

Strengthening and correcting existing programmes

Several major ongoing initiatives deal with inequities related to social background.

- *Oportunidades* was extended to the poor urban population and to upper secondary students; it is well rated for its effectiveness by development agencies and it is used as a model in other countries.
- *Telesecundaria* (television for lower secondary education) has been instrumental in increasing coverage in remote areas for half of the cost per student of traditional secondary schools (Martínez Rizo, 2004a).
- *Bilingual primary schools* were developed in indigenous areas in the 1980s and 1990s faced with low educational outcomes of indigenous children and as a way to preserve the indigenous cultural heritage. According to Parker, Rubalcava and Teruel (2003), half the indigenous educational disadvantage is explained by a failure to learn Spanish. In

bilingual schools, children are taught to read and write in their mother tongue and then in Spanish. International evidence shows that this approach is usually successful.[34]

- *Preschool education* is being generalised, with the 3 grades of preschool becoming progressively compulsory by 2008. Studies have shown that preschool is a way to ensure that, regardless of their social background, children are ready for school.[35] For instance, PISA 2003 finds that participation in preschool generally has a positive impact on educational achievement later on.
- There are specific programmes targeting *children of migrants* who follow their parents and spend part of the year in their home town and the other part in the United States or in another Mexican state and may encounter specific problems of repetitive adaptation.

These programmes have helped reduce inequities but only slowly. Because of limited data availability, progress in terms of equity is difficult to quantify. Some progress appears at the state level: terminal efficiency, drop-out and repetition rates in rich and poor states have converged over the past 10 years (Figure 2.9). Here again, progress was concentrated in primary education and differences in achievement and enrolment remain large from one state to the other in secondary education.

Some of these programmes present weaknesses that have to be addressed. Although cost effective, *telesecundaria* is confronted with a serious quality problem, partly linked to the qualification of teachers as most did not attend teacher training institutions. The implementation of bilingual schooling also faces difficulties linked to teachers availability and skills: teachers who can speak the indigenous language of the community to which they are assigned do not systematically master pedagogy nor teaching of Spanish as a second language; besides 12% of the teachers do not speak the language of the community where they work (Schmelkes, 2003). Progress in designing the training of primary teachers with a bilingual-intercultural focus has to be sped up and implementation should not be delayed. Another issue is the transition from primary bilingual education to Spanish-only secondary education. Mechanisms should be developed to smooth this transition and reduce drop-outs, while avoiding a segregation of indigenous students.

The new legal obligation to provide 3 years of compulsory pre-school education by 2008 poses even more profound problems. To reap the benefit of the generalisation of preschool, the teaching has to be relevant and of good quality – and so must be the subsequent primary and secondary schooling. If not, most of the potential gains of making preschool compulsory will be lost. In 2001, the Ministry of Education considered that preschool teaching in Mexico did not match the diversity and needs of children. Conditions to ensure quality and relevance of preschool education for all children are still not met now despite efforts to modernise the curriculum since 2002. According to the OECD note on early childhood education and care for Mexico (OECD, 2005b), although official curricula are now more or less in line with recommended methods, teaching practices are not, as a result of excessive child-to-staff ratios and lack of supervision and support to teachers; important additional efforts are needed to raise the quality of existing preschool programmes. In these conditions, pushing all the 3 to 5 years old into preschool is likely to be at the expense of quality; it will also increase already existing inequities between the quality of preschool received by the most advantaged and disadvantaged groups and between rural and urban areas. Moreover, even without taking into account this quality issue, given the overall budget constraints highlighted below in Chapter 4, preschool generalisation diverts scarce resources from the necessary expansion of the coverage and

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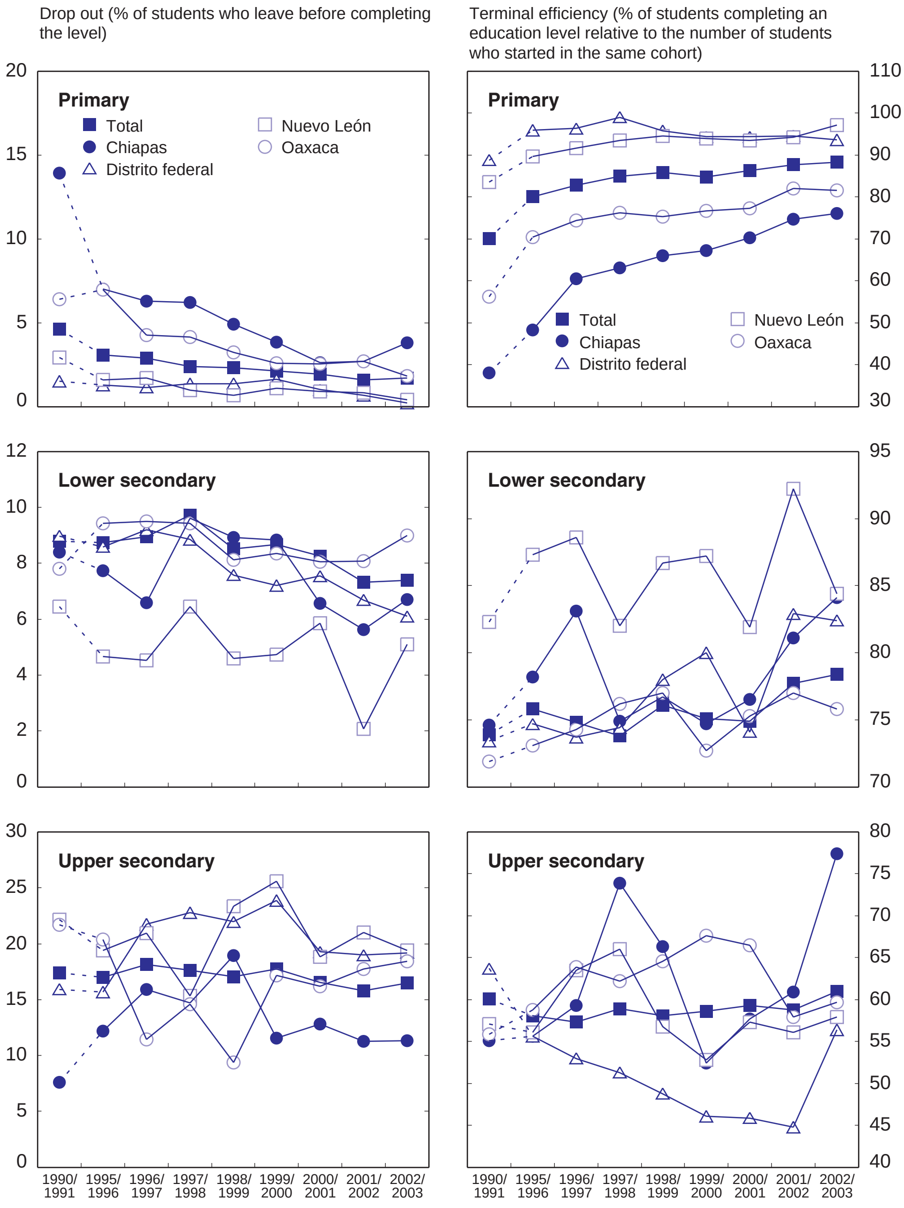
Figure 2.9. **Education performance in selected Mexican States**

Per cent



Source: Ministry of Education, La *Calidad de la Educación Básica en México*, 2004.

quality of secondary education, where quality is still poor and coverage needs are increasing, due to demographic pressures and the success of past policy to increase enrolment in primary education.[36] Several states have already mentioned that they will have to reduce money allocated to secondary education in order to finance preschool expansion and that even then they will not be able to enrol all 3-5 year olds by 2008. Besides, Mexico will be only the OECD country where preschool is compulsory. *In this context, for now, the scope of the programme should be limited, focusing only on the last grade of* *preschool or targeting the areas where preschool is most needed – i.e. for children from low-income (and generally low-education) families.*

Improving the distribution of inputs

While students' socio-economic background explains a large part of drops-outs and difficulties at school, the uneven distribution of inputs to schools, with schools in low income areas being characterised by poor public infrastructure and less qualified teachers, also plays a role (see Treviño Villarreal and Treviño González, 2003).[37] Beside the unequal allocation of public resources across schools, for which only anecdotal evidence exists, further inequities are generated *de facto*. In high and middle income areas, parents usually finance what cannot be paid for by the state (including computers and school renovation) and are able to bring pressure to have non-performing teacher transferred to other schools. On the other hand, rural areas (in particular indigenous schools and *telesecundarias*), where parents' involvement is low, cumulate poor infrastructure, poorly qualified and often absent teachers and students from difficult backgrounds. Besides, the financial incentive to attract and keep good staff in remote disadvantaged areas is ineffective and should be reviewed.[38] *The fundamental issue remains the allocation of financial resources in the system, which should be more based on needs*. Recommendations on this particular point are discussed in Chapter 5.

Addressing needs of low achievers

The countries that perform best in PISA (in particular the top performer Finland) are those which devote most efforts to not leaving under-performing students behind. Apart from scholarships for low income students via *oportunidades*, there are no clear mechanisms in Mexico to take care of low achievers and prevent repetition and drop-outs. Teaching is usually provided for the average student and is not able to respond to class diversity in terms of age, interest and ability (see Velez, López-Acevedo, 2004). Repetition is seen as the best way to correct lags in learning, and students repeating a class do not receive any special support. However, empirical evidence has shown that grade repeating has negative or no consequence at all and several countries have abandoned such policies (the Nordic countries and the UK for instance).[39] In Belgium, a key difference between the successful system in the Flemish community and the less successful one in the French community is precisely the attitude *vis-à-vis* repetition. *Efforts are needed to replace systematic repetition by special support to students in need.* The reduction of repetition rates would increase the number of places available in schools to meet demand and it would result in more efficient spending. Increased devolution of responsibilities to schools, as recommended above, should also help them to adapt to diverse environments, and thereby reduce some inequities.

Overall assessment

Overall, despite an impressive increase of enrolment, some clear deficiencies of the education system are behind the limited progress in closing the human capital gap. Resources are insufficient given the needs, but more importantly they are inefficiently allocated and used; curricula do not match students and labour market needs; equipment is in short supply, there are weaknesses in teacher training, school administration and teaching practices. The authorities, both at the federal government and state level, seem to have a clear understanding of the weaknesses of the system; these are clearly stated in

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Box 2.2. Summing up of the main recommendations in education

Better balance spending

- *Find a better balance between wage and non-wage expenditure:* Resist pressure for unjustified rises in teachers' real wage. Take advantage of changes in enrolment patterns to reallocate a larger share of additional resources to non-wage items that, although essential to quality, are lacking. Give absolute priority to states that have the largest enrolment lags when opening new teaching positions.
- *Review mechanism of financial and human resource allocation* so as to make it more in line with needs.
- *Give more priority to lower and upper secondary education* where quality does not match the needs of students and the labour market and where enrolment is bound to increase following demographic pressures and the success of past policy in making primary education universal.
- *Review the generalisation of preschool.* This programme is diverting resources away from the needed expansion of secondary schooling and its potential gains might be lost since it is still doubtful that the children who really need it can be enrolled in good quality and relevant preschool programmes. For now, the scope of the programme should be limited to the last grade or to targeting children from low-income background.

Ensure better value for money

- *Improve the quality of teachers.* In consultation with the professionals of the sector, continue to strengthen teachers' selection and training. Define and enforce sanctions for teachers' absenteeism and overt incompetence. Ensure that the financial incentive scheme, *Carrera Magisterial*, fulfils its aim.
- *Continue to modernise curricula and teaching methods*, seek a better integration between education levels as well as more interaction with the productive sector.
- *Devolve more responsibilities at the school level* to adapt to local conditions and needs, while raising the accountability of all participants in the education system.
- *Ensure that evaluation results are used* to influence policy decisions, school management, and users' choice.
- Promote a *more active role for parents, and civil society* in general.
- *Consider the setting up of compulsory national examination at the end of lower-secondary*.

Address inequity in the education system in a better way

- *Enhance the quality of indigenous bilingual education and telesecundarias*, improving teachers training and selection.
- *Set up a better framework to take care of low achievers* instead of relying only on repetition to repair lags in learning.

official documents (by the Ministry of Education and INEE) and are more and more widely communicated to parents. The government has launched some reforms to improve the performance of the system and most projects are going in the right direction and should produce positive results on the quality and efficiency of the system. The quality school programme, for instance, constitutes a major step in introducing a new approach in education by giving more responsibilities to schools, promoting quality improvement and directing additional spending to non-wage expenditure. It is hoped that this could trigger a change in the education culture in Mexico. Encouraging experiments to improve quality, efficiency and equity are also taking place at the states level. In many cases, agreements on reform have been easier to negotiate at the sub-national level. The federal government should ensure that successful experiences are shared among states.

There is nevertheless a risk that current efforts will mainly expand further the coverage at lower level but without the quality improvement needed for the country to reap its full benefit, or in some cases at the detriment of quality. To facilitate effective implementation of the reform programme aiming at offering the entire population a quality and relevant education, it is important that the global strategy mixes measures with a immediate and visible impact with deeper efficiency and quality reforms which have more diffuse benefits and are likely to raise resistance or opposition. This has not been the case so far. The recent decision to increase spending on education by several percentage points of GDP and to generalise preschool were taken without putting in place the right incentives for efficient delivery of services. Efforts are needed to better promote and discuss the advantages of the reforms with education professionals, so that they can feel that they "own" the reforms rather than having these imposed without consultation.

Progress towards better quality education could be facilitated by pressure from civil society, including from those who have immigrated to the US and already support Mexico's development through remittances. This implies continuing to enhance the evaluation system and dissemination of these evaluations. Besides, the union can play a critical role in increasing quality. It has to be a partner in the reform process. So far, it has focused on promoting teachers wages and increasing teaching positions. But, as shown in this chapter, the quality of education in Mexico does not depend only of these parameters. The union can also help change the culture and put an end to unacceptable practices such as the sales of teaching position.

Notes

1. About 20% of children live in households in which revenues cannot cover nutritional needs and minimum spending on education (INEE 2004).
2. Primary education is provided in 43 different indigenous languages. The 6 main indigenous languages spoken in Mexico account for about two thirds of the total indigenous population.
3. In grade 3 of primary education, for instance, about one tenth of students have repeated at least twice and more than one sixth have repeated once. The drop out rate is 7.5% in lower secondary and 17.6% in upper secondary.
4. Beside PISA, national tests also show large inadequacies. For instance, in 6th grade close to 60% of students are below the acceptable level for reading (see Quesada García *et al.*, 2004). According to the Ministry of Education (see *Secretaría de Educación Pública*, 2004) at the end of upper secondary 38% of the students were below the national standards in reading and 90% in mathematical reasoning.
5. As argued by Corrales (1999) resources invested in expanding the coverage of the education system produce visible gains for most actors and losses for very few, if any. On the other hand, quality reforms, aiming at improving efficiency and the academic performance of students, imply increased teacher productivity, penalising teachers' inadequate performance and giving greater autonomy for schools; hence they imply real or perceived losses for some "insiders", while their positive impact is less visible in the short term.
6. The share of private school is much higher in the Distrito Federal (DF) than in the rest of the country (about 20% for basic education for instance). Private schools attract mainly high income groups who turn to private services as a response to low quality of services in public education. Indeed, private schools do much better than public schools at PISA but this effect disappears when

the socioeconomic background is taken into account. A key factor behind the lower share of private schooling it that it is not affordable for most of the population. This reflects the magnitude of income inequities as well as the absence of public subsidies (that exist in other Latin American countries, such as Chile and Argentina for instance). A few autonomous schools have appeared in indigenous areas as response to mismatching between public services provided and local needs.

7. The *Primera Convención Nacional Hacendaria* noted some unwelcome competition between the two systems and called for reforms including further decentralisation. The decentralisation has just started for technical upper secondary services but not for the general upper secondary ones.

8. States are responsible for the administration and operational management of basic education and teacher training. They are also in charge of defining the local content of the national curriculum. Municipalities are in charge of maintenance and equipment of schools and states have to provide them with the financial resources to fill these tasks. The Federal Government is responsible for planning and developing programmes in basic education and in teacher training, and updating and distributing free text books. The Federal Government also runs community (CONAFE) and bilingual education programmes as well as the education component of the poverty alleviation programme *oportunidades*. The Distrito Federal (DF) was not concerned by the decentralisation process till 2005.

9. The gap between spending per tertiary student and spending per primary student is the largest such gap among OECD countries; it has decreased slightly in recent years, as spending per tertiary student has declined reflecting higher enrolment.

10. OECD, *Education at a Glance,* 2004.

11. Even after correcting PISA results by cumulative expenditure per student, Mexico remains at the bottom of the OECD. See OECD (2004a).

12. Chapter 5 provides more details and recommendations on several points related to relations across levels of government.

13. Using the INEGIH survey López-Acevedo (2004) shows that teachers in basic public schools are better paid early in their professional lives than other comparable individuals and that they face little uncertainty regarding their future standard of living. In these conditions, salary increases are unlikely to be a crucial factor on recruiting and retaining better teachers in the public schools.

14. For instance 9% of primary schools and 5% of lower secondary schools did not have electricity in 2004. 12% of primary schools and 8% of lower secondary had an earthen floor. Laboratories and library are insufficient at all levels, including upper-secondary. Spending needs in basic infrastructure alone are estimated at 44 billion pesos (which represents 1.5 times total public capital spending on education over the period 2000 and 2004).

15. The ratio of students per computer is among the highest in the OECD and upper secondary students' access to email or internet is far behind. In 2001, Denmark, Sweden, Norway and Finland had a ratio of five students or fewer per computer and, on average, more than 90% of computers were connected to the Internet. Portugal, Spain and Mexico had the highest number of students per computer (over 14), and among the lowest percentages of computers connected to the Internet (53%, 61% and 27%, respectively). Moreover where computers are available, they are often outdated (as mentioned by 70% of principals in Mexico). In many cases, too, teachers do not know how to use the computers as a pedagogic tool (see OECD, 2004b).

16. In fact the PISA survey was unable to detect a significant relationship between class size and student performance.

17. The other two programmes also promote the use of ICT in the education sector. *Edusat*, the Educational Television Satellite Network, supports not only telesecondarias but also all levels of education in Mexico with its 9 TV channels and more than 30 thousand located reception points in Mexico. It also covers the south of the United States, and part of Latin America. *Red escolar* was launched in 1998 to promote the use of internet, emails, and educative CD's.

18. One exception is the Fund of Multiple Contributions (FAM) which is demand driven but represents only 1% of federal spending.

19. *Oportunidades* began under the name PROGRESA in 1997, with the goal of developing human capital of poor households by increasing the demand of health and education services. Monthly monetary transfers and nutrition support are provided to poor women and children in return for increased use of education and health services. The programme provided financial support to 5 million households in 2004. (See OECD *Economic Survey on Mexico,* January 2004, Annex 3). Parker (2004) finds a significant favourable impact on enrolment as well as on the reduction repetition and drop-out rate.

20. According to Velez and López-Acevedo (2004) several studies have concluded that, in rural areas, only 20 to 55% of prescribed teaching hours are effectively taught.
21. See INEE (2004).
22. See OECD (2004c).
23. For instance, according to a recent survey from *Este País*, one third of teachers admitted that buying teaching positions was a common practice.
24. See Mexico's National Education Programme for 2001-2006. The 2004 IMD World competitiveness yearbook also ranks Mexico 55 out of 60 in a survey on how the educational system meets the needs of a competitive economy.
25. 39% of the children of 6 to 14 years who work say that they left school because they did not like to study. This high figure might hide various factors, including the little social value the family grants to the education of children. (INEGI, 2004).
26. Besides, CENEVAL (*Centro Nacional de Evaluación para la Educación Superior, www.ceneval.edu.mx*) created in 1994 organises national entrance examinations to upper secondary school and tertiary education. The results of these examinations contain also valuable information on the performance of secondary and upper secondary schools and students.
27. INEE (*http://capacitacion.ilce.edu.mx/inee/acerca.htm*) has already published several evaluation reports on basic education. In the case of upper secondary education, the diversity of institutions makes systematic evaluation more difficult. A wide range of evaluation reports are summarised in INEE (2003).
28. Besides according to the survey by *Este País*, despite the relative effective low quality, most parents seem happy with the education their children receive.
29. Teachers' incentive programmes include the teacher career programme *Carrera Magisterial* created in 1992 to increase quality of basic education by encouraging teachers to continue their professional development. 63% of teachers were enrolled in 2004. An other example is the programme of performance incentives for teachers in upper secondary and tertiary education (*Programa de Estímulos al Desempeño del Personal docente de educación media superior y superior)* introduced in 1997 operates through a point system that is used to calculate cash bonuses given in reward for good performance.
30. According to OECD (2004c), summarising the views of actors involve in this process, this programme has only encourages greater attendance in training as a way to accumulate points. López-Acevedo (2001) shows that although a teacher's enrolment in the programme has a positive impact on learning achievement, the higher the level reached by the teacher in *Carrera Magisterial*, the lower the student learning achievement.
31. An examination entrance into upper secondary schools is already in place and organised by CENEVAL a non-profit association (EXANI-I). It is proposed on a voluntary basis to students who wish to pursue upper-secondary education and cannot play the role of a final examination at the end of basic education.
32. According to the World Bank (2004) 57% of the 13-17 year old of the bottom quintile were enrolled in schools in 2000 compared to 90% of the top quintile. The gap had nevertheless been reduced slightly compared with 8 years ago. The southern indigenous population has on average only 2.2 years of schooling.
33. According to OECD PISA, the impact of the socio-economic background is not high in Mexico compared with other OECD countries but the result is biased by the fact that it refers to the 58% of 15-year-olds that have managed to remain in school and have reached at least the lower secondary level.
34. According to UNESCO (2005), evidence shows that starting instruction in the learner's first language improves learning outcomes cost-effectively, reducing grade repetition and dropout rates. In the most successful models, after the first few years of schooling, a gradual transition to the second language takes place.
35. According to UNESCO (2003), in the early 2000s only 22% of the low-income families surveyed in Mexico City and Chiapas were able to send their children to formal childcare centres compared with 58% of higher-income families.
36. The generalisation of preschool requires enrolling the creation of about 2.5 million places for children in preschool by 2008 (on the top of the 3.6 places existing in 2002) (OECD, 2005b).

37. OECD (2004b) shows also that Mexico is, with Switzerland, the country where the disparities in student to professional personnel are the highest, with the ratios of student per teachers in the worst staffed schools over three times higher than in the most generously staffed schools.

38. Example of such schemes in other OECD countries can be found in *OECD Education at a glance* 2004.

39. See OECD (1998) on this issue; details on the use of repetition in Mexico can be found in Martínez Rizo (2004b).

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ANNEX 2.A1

Background information

Table 2.A1.1. **Panorama of the education system (2003/2004)**

Educational level	Compulsory	Theoretical age	Students (1 000)	Teachers (1 000)	Schools (1 000)
Basic education	**Yes**	**3-14**	**24 304.4**	**1 060.1**	**205.5**
Pre-school	Yes[1]	3-5	3 742.7	169.1	76.1
Primary	Yes	6-11	14 781.3	559.5	99.0
Lower secondary (*secundaria*)[2]	Yes[3]	12-14	5 780.4	331.6	30.3
Upper secondary	**No**	**15-17**	**3 443.7**	**242.1**	**11.9**
(*educación media superior*)		–			
Technical occupational		–	359.9	31.6	1.6
Senior High School *bachillerato*[4]		–	3 083.8	210.6	10.3
Higher education	**No**	**18-24**	**2 322.8**	**239.9**	**4.6**
Higher technical		–	72.3	. .	. .
Teacher's college		–	155.5	17.4	0.5
University		–	1 951.3	199.1	2.7
Graduate school		–	143.6	23.5	1.3
TOTAL			**30 070.9**	**1 542.2**	**222.0**

1. Pre-school education was made compulsory from 2004 school year onwards, starting with the last year. Two years of pre-school will be compulsory in 2006, and 3 years in 2008.
2. Includes secondary for workers and telesecundaria.
3. Since 1993.
4. Includes general and technological senior high school.

Source: Ministry of Education.

Table 2.A1.2. **Enrolment rates 2003/2004**

	Gross[1]	Net[2]
Preschool (4-5)	87.2	76.2
Primary (6-11)	108.4[3]	99.4
Lower secondary (12-14)	86.1	72.4
Upper secondary (15-17)	52.9	39.5

1. Gross = population in the level/population of theoretical age.
2. Net = population of theoretical age in the level/population of theoretical age.
3. Includes students older than 11 and younger than 6.

Source: Ministry of Education.

Table 2.A1.3. **Spending per student**

Annual spending, 1 000 current pesos

	2000	2001	2002	2003	2004
Total	11.1	12.6	13.4	14.2	14.9
Public	10.2	11.7	12.4	13.1	13.8
Federal:					
Preschool	7.6	8.4	8.9	9.4	9.9
Primary	6.9	7.7	8.1	8.5	9.0
Lower secondary	10.6	11.7	12.4	13.1	13.8
Technical	10.7	11.8	12.6	13.1	13.7
Upper secondary	15.3	16.9	18.0	18.8	19.6
Tertiary	34.1	37.7	40.3	42.0	43.8

Source: Ministry of Education.

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Chapter 3

Improving conditions for business and investment

This Chapter proposes a number of policy measures which, in addition to human capital development, are the most promising to achieve higher productivity growth in Mexico. Many reforms have been undertaken over past years, but the benefits were less than expected, suggesting that some key elements were missing. The business sector would benefit from a reduction of regulatory and administrative burdens. Steps should also be taken to lift barriers to entry, including for foreign direct investment, and to foster effective competition throughout the economy: enhancing market access to potential competitors and ensuring a level playing field through better competition and law enforcement are likely to encourage investment and innovation. Framework conditions for financing should ensure that even domestic-oriented firms of small and very small size have access to formal financial services in order to invest and grow. Finally, measures that facilitate labour mobility are needed to help transform human capital improvements into income gains.

Mexico has undertaken a wide range of reforms over the years to improve productivity and growth, but there has not yet been a substantial improvement in either. Part of the reason may be that the implementation or depth of some reforms was incomplete. Another may be the failure to reap the benefits from strong complementarities between structural reforms which OECD experience indicates to be important for enhancing growth. If not enough progress is achieved in some areas, for instance education, labour market reforms and the quality of law, then the benefits derived from more open product markets may not be realised fully.

In Mexico, human capital development is a priority (as discussed in Chapters 1 and 2). Other promising lines of action are to go further in opening up product markets and reducing obstacles to entrepreneurship. Measures facilitating both the creation and the exit of companies and reducing the administrative overheads of running a business are required. Removing legal barriers to investment, including foreign direct investment, would also contribute to enhance productivity growth by offering opportunities for learning from international best practices. Another contributing factor is a financial system that efficiently channels resources to profitable investment, including by smaller enterprises. Finally, easing restrictive employment protection for workers in the formal labour market would improve workers' mobility, be conducive to innovation in areas of technology and managerial skills and would raise the demand for more skilled labour. It would also help to reduce the scale of informal activities. Recommendations are summarized in Box 3.2 at the end of the Chapter.

Impediments to business and investment

Mexico has a large number of very small firms, many family-owned and run, generally oriented to the domestic market, and a small number of large firms, including major exporters. Entrepreneurial activity is high. Firm dynamics show entry/exit rates which are relatively high by international comparison. Considering the economy as a whole, entering firms are generally small, as in many other countries, and on average they grow significantly over time (*cf.* Bartelsman and Scarpetta, 2005). But a large proportion of micro and small firms operate in the informal sector and the share of self-employment is high. This pattern may result from the existence of strict or cumbersome regulations and the need to pay taxes and social security contributions perceived as costly in view of the quality of public services, so that "entrepreneurs" (who are both the owner and are actively involved in the business) are reluctant to expand and operate more visibly, avoiding risks (and rewards) associated with formal activity. In a country where there are many micro and small enterprises, the issue is not the lack of entrepreneurship, but the lack of innovative processes – reflecting "old style" management, or poor access to financing, or both, as well as *de facto* toleration of informal activity.

Regulatory and administrative burdens remain relatively costly[1]

Steps have been taken to simplify rules and procedures and to reduce the complexity of the licence and permit system, notably through the development of "one-stop shops", with a view to facilitate the development of the formal sector. New legislation has been passed to push regulatory reform forward and a number of improvements have been achieved. Federal agencies now have to open their files to the public. A federal register of formalities and services *(Registro Federal de Trámites y Servicios)* has been established and any new regulatory procedures not published in this on-line inventory is automatically cancelled;[2] entrepreneurs and their associations have been invited to collaborate in the effort. A one-year moratorium was imposed on new regulations in May 2004, acting like a "filter" on regulations and an opportunity to streamline and prioritise the government's regulatory activity; the Moratorium, which resulted in a sharp reduction in the number of new regulations, has been extended till November 2006, at the private sector request. Stronger institutions are now in place, including the Federal Regulatory Improvement Commission, COFEMER.[3] Its decisions, however, have often faced resistance from entrenched vested interests. The Regulatory Impact Analysis (RIA), which is elaborated by ministries and regulatory agencies and submitted to COFEMER for review, can play an important role to ensure the quality of new regulations. Much remains to be done however to strengthen the RIA process. In 2003, Mexico was still among countries where the cost of doing business was relatively high, both in relation to other OECD countries and in relation to other emerging economies. Aggregate measures of product market regulations in OECD countries put Mexico in the "relatively restrictive" country group (Annex Figure 3.A1.3).

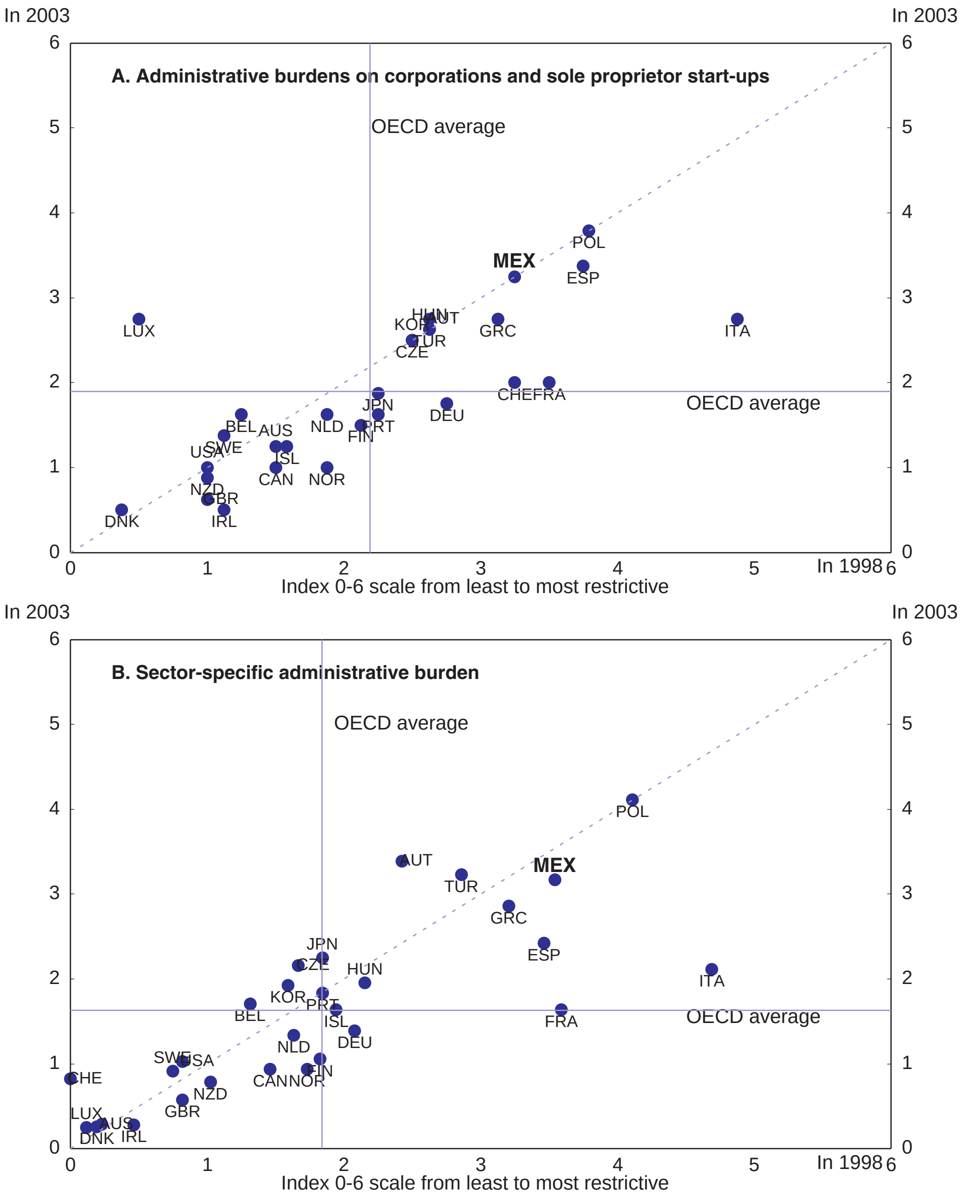
There appears to be scope to ease barriers to entrepreneurship both on a general basis – as illustrated by still relatively high administrative burdens on corporations and sole proprietor start ups – and on a sector-specific basis (Figure 3.1). The introduction of the new fast-track system for start ups (SARE) developed since 2002 is helping to reduce the complexity of administrative procedures with a view to facilitate creation of enterprises. The new system has started to be implemented in several municipalities, which together account for one-third of GDP and almost one fourth of the population. Where the system is operating, the burden for creating firms has been considerably reduced (from 52 days in 2000 to 2 days in some cases, according to private business experts).[4] But the system is not applied in every important municipality yet; and, where it is not applied, administrative burdens remain cumbersome. At the same time, other countries have been making rapid progress as well in cutting red tape, so that Mexico's relative attractiveness to business may not have improved a great deal.

Much progress has been made regarding state control of business operations, where Mexico is now situated in the "middle of the road" with respect to both the scope of public ownership and the involvement of the state in business operations. However, there are still relatively restrictive barriers to foreign direct investment (FDI) in place, taking the form of restrictions to foreign ownership in several sectors, such as electricity, fixed line telephony and airline transportation (Figure 3.2).

Businesses still face high transport and telecommunication costs and electricity supply is limited

To meet expected demand, the *electricity sector* requires large scale investment for expanding and modernizing the transmission and distribution network. The liberalisation of the sector undertaken over the 1990s has allowed only limited participation of the

Figure 3.1. **Barriers to entrepreneurship**

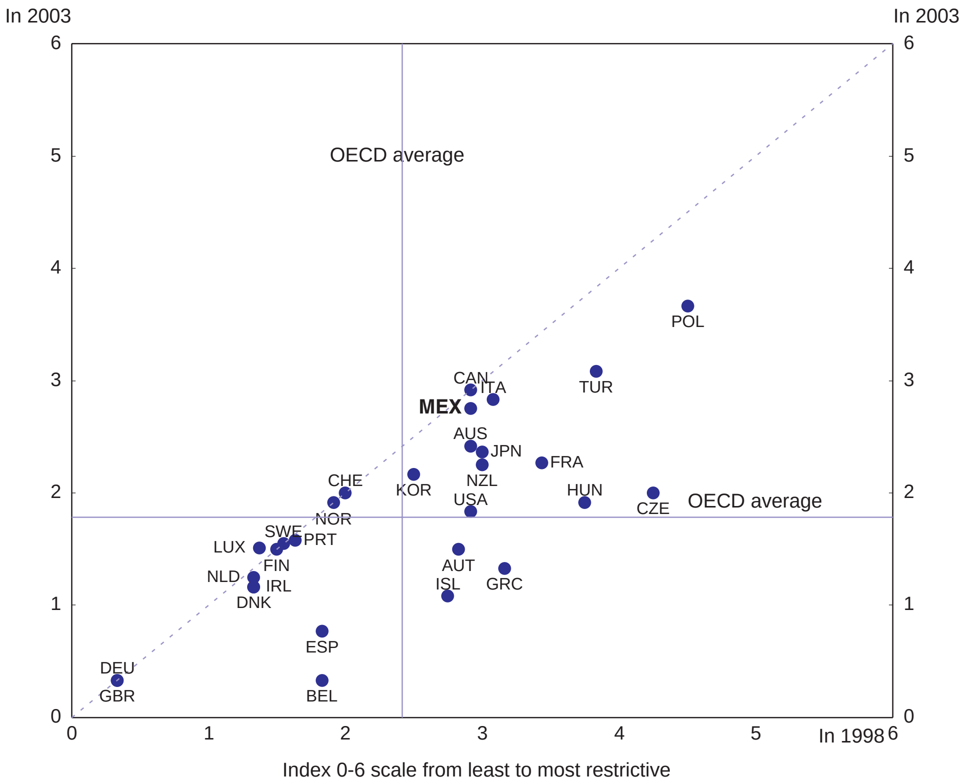


Source: OECD, *Economic Policy Reforms, Going for Growth, Structural Policy Indicators and Priorities in OECD Countries* (2005).

private sector in generation. Under current legislation, including the Constitution, private investment is allowed in electrical generation capacity for self supply and small-scale cogeneration, in which cases excess production must be sold to the national power companies, and for independent power producers – *productores independientes de energía*. Over recent years, investment needs have been partly financed by hybrid private-public partnership schemes, where projects, after a cost-benefits analysis, are financed and built by the private sector, having a deferred impact on the budget (PIDIREGAS) and creating liabilities for the public sector (Chapter 4). Although demand for electricity has been met

Figure 3.2. **Barriers to foreign direct investment**[1]

Ownership barriers



1. The indicator system summarising information on barriers to foreign ownerships in OECD countries is explained in Chapter 4 of OECD, *Economic Policy Reforms, Going for Growth, Structural Policy Indicators and Priorities in OECD Countries* (2005).

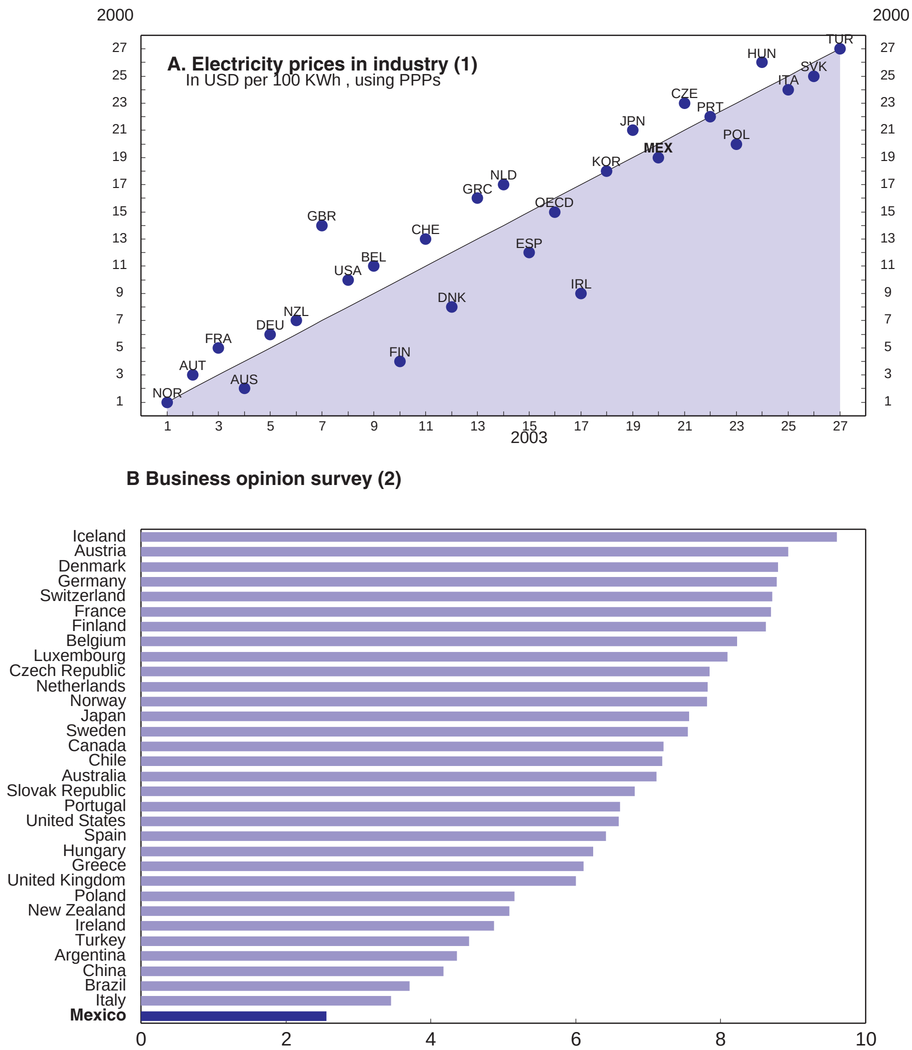
Source: OECD, *Economic Policy Reforms, Going for Growth, Structural Policy Indicators and Priorities in OECD Countries* (2005).

and the frequency of power cuts has declined, prices for industry users are relatively high *vis-à-vis* other OECD countries (Figure 3.3).

Telephone charges have declined substantially over the past years. However, Mexico remains one of the OECD countries with the highest charges, alongside the Czech Republic, Hungary, Poland and Turkey (Figure 3.4), and although the number of users has been increasing rapidly, the density of services (for the combined fixed and mobile telephony) is one of the lowest in the OECD.

Mexican transport infrastructure is insufficient and costly. In *road infrastructure,* an important problem is the lack of coordination between the states and with the Ministry of Communication and Transport (officially recognised by the *Convención Nacional Haciendaria, 2004).* Inadequate coordination between levels of government creates problems in the planning of the network; and the fact that responsibilities are not clearly defined contributes to poor maintenance of existing roads. Road freight is relatively costly, because of the predominant share of micro businesses which operate with obsolete trucks and hence have high maintenance and fuel costs.[5] Mexican *ports,* which were privatised in the late 1990s, suffer from efficiency problems and are relatively expensive by international

Figure 3.3. **Energy infrastructure indicators**



1. Ranking for 29 OECD countries excluding Canada, Island and Sweden. Countries in the shaded area have below average progress. Although comparable data are not yet available, several OECD countries have recorded substantial declines in electricity prices since 2003, the latest decline in Mexico occurring in January 2005 for both industry and household use.
2. "Is the energy infrastructure adequate and efficient?" The highest value indicates the most positive perception.

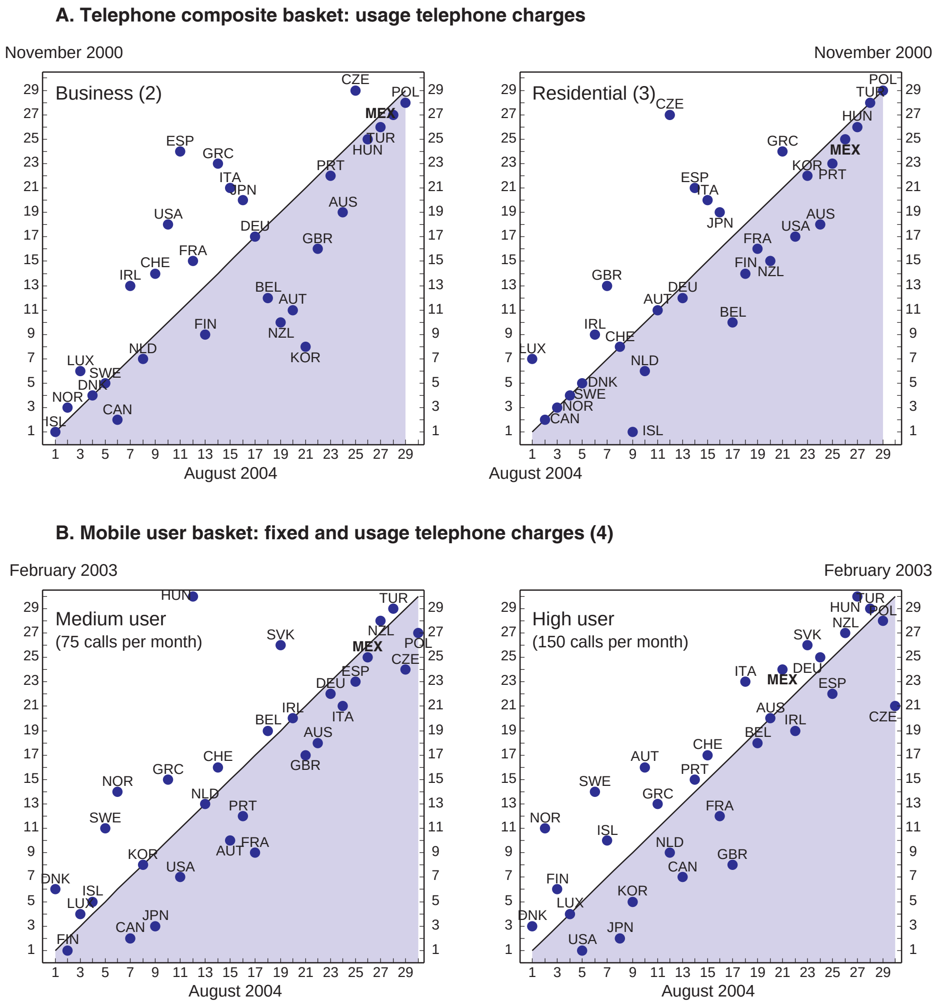
Source: IEA, Energy Prices and Taxes database; *IMD World competitiveness Yearbook* 2004.

comparison. Poor coordination in customs, sanitary controls and other formalities are an important factor in the high costs of handling and storage.

In *rail freight transportation*, the restructuring and privatisation process in the late 1990s has made the sector more productive, at least for the major lines. Major investments have been carried out since then, especially in the Northeast railroad which carries almost two-thirds of Mexico's rail freight; but inefficiencies are constraining the use of rail. Territorial separation in the privatisation process sought to enhance intra-railroad competition by ensuring that the main cities and ports were served by more than one railroad. However, because of large cost structure discrepancies initially and the lack

Figure 3.4. **Telephone charges in OECD countries, 2000 and 2004**

Rankings of OECD basket of usage telephone charges in ascending order (lowest price = 1)[1]



1. Ranking for 29 OECD countries excluding Slovakia. Usage charges adjusted based on current purchasing power parities. Countries in the shaded area have below average progress. Calls to mobile network and international calls are included.
2. VAT excluded. The basket includes 3 600 fixed line calls, 360 mobile calls and 216 international calls per year.
3. VAT included. The basket includes 1 200 fixed line calls, 120 mobile calls and 72 international calls per year.
4. VAT included. Includes calls to fixed networks, to other users on the same network and to other users on different mobile networks.

Source: OECD, Telecommunications Database.

of clear and objective regulations, the private concession holders have been involved in serious disputes. Some have undertaken anti-competitive practices, setting excessive and discriminatory rates, limiting access conditions and refusing to provide interconnection and right of way.[6] The disputes among private operators have severely harmed traffic across the various regional lines, especially on long distance routes. Users have had to use alternative (longer) routes or alternative means of transportation, such as road freight, despite much higher unit costs on long distances. Manufacturers, in particular, are losing competitiveness because of excessive transportation costs and delays.

In a broader international comparison, Mexico does not fare well *vis-à-vis* many other Latin American countries or even China. Electricity prices are much higher in Mexico than in most Central American countries and China [*cf.* Chapter 1, Box 1.3 and Estevadeordal, Devlin and Rodríguez (2005)]. Mexico also has much higher mobile telephone costs than China, while fixed telecom costs are only slightly lower. Finally the cost of shipping a container to the United States is higher from Mexico than from Costa Rica or Honduras, despite a shorter distance, pointing to inefficiencies in Mexican ports. These business costs weigh on Mexico's competitiveness, complicating foreign trade and reducing the country's relative attractiveness to foreign direct investment.

Ineffective judiciary system

Poor rule of law generates high transaction costs for individuals and business alike. Mexico does not fare well on the usual indicators of integrity and independence of the legal system, enforceability of contracts and estimated degree of corruption in civic and public life. The 2003 poll conducted by *Transparencia Mexicana,* estimated at more than 100 million the number of bribes or other acts of corruption in the 12 months to October 2003.[7] The financial cost of corruption for companies is generally passed on to the final consumers. According to the 2004 "poll of polls" of Transparency International, Mexico is ranked in the "critical corruption level" (Figure 3.5, Panel B) with practically no improvement in the perceived level of corruption since 1995.[8] Some progress has been made in improving security over recent years, as illustrated by the marked reduction in the number of hold-ups on federal highways, but the population remains dissatisfied with the performance of the police.[9] In 2004, the Mexican police was perceived as one of the four most corrupt among 62 countries covered by the Transparency International Global Corruption Barometer.

The Federal Law of Transparency and Access to Government information, enacted in June 2002, constitutes an important step. The new law applies at the federal level. It requires the Executive, Legislative and Judicial Powers, as well as autonomous federal agencies, to make their information public. Improving availability of government information should enable the public to have more control over government.

Difficult financing of smaller businesses

Following a reform process, which started in 1999, the financial system is in good shape; supervision and regulatory frameworks are close to good practices in other countries. Foreign ownership has increased in the banking sector over recent years.[10] There is increasing competition in the credit sector, both among banks and as a result of the development of non-bank intermediaries (SOFOLES). After a protracted period of decline and stagnation, direct bank credit to enterprises finally resumed in the latter part of 2004 in a context of stronger growth and investment.[11] Besides credit from banks and from new financial intermediaries, companies have been increasingly using marketable private bonds (*certificados bursátiles*) to finance themselves. While larger companies can often access foreign banks or issue debt, however, small enterprises continue to be affected by the lack of bank credit. The main source of external financing for small firms remains suppliers credit (Figure 3.6). Typically, firms oriented to the domestic market also have more difficulties than export-oriented firms. Such asymmetries are probably inevitable, given the higher risks of lending to smaller enterprises.

The development of the "no-repayment culture" (*cultura de no pago)* in the aftermath of the peso crisis, partly a response to the poor legal framework, contributed to the

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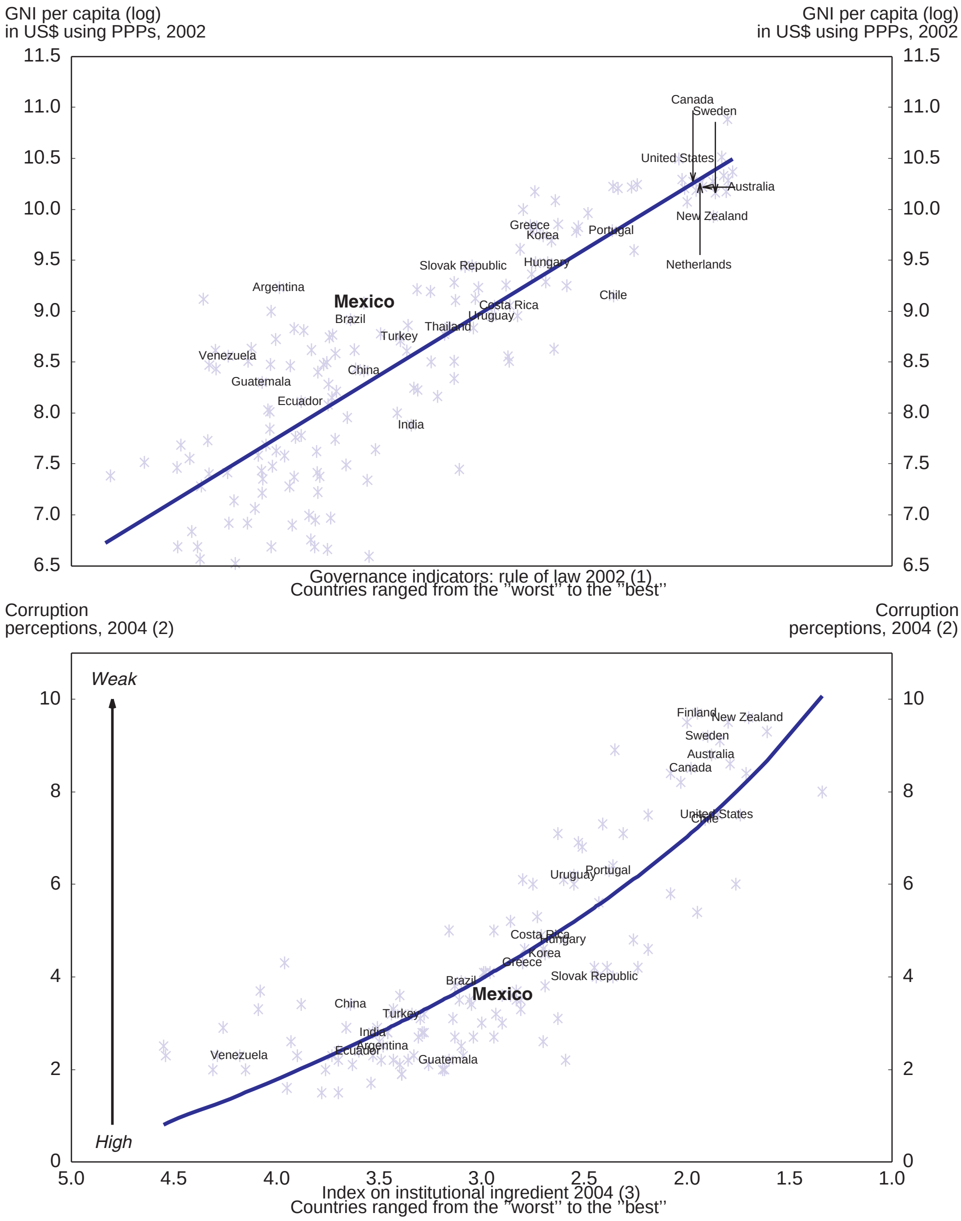
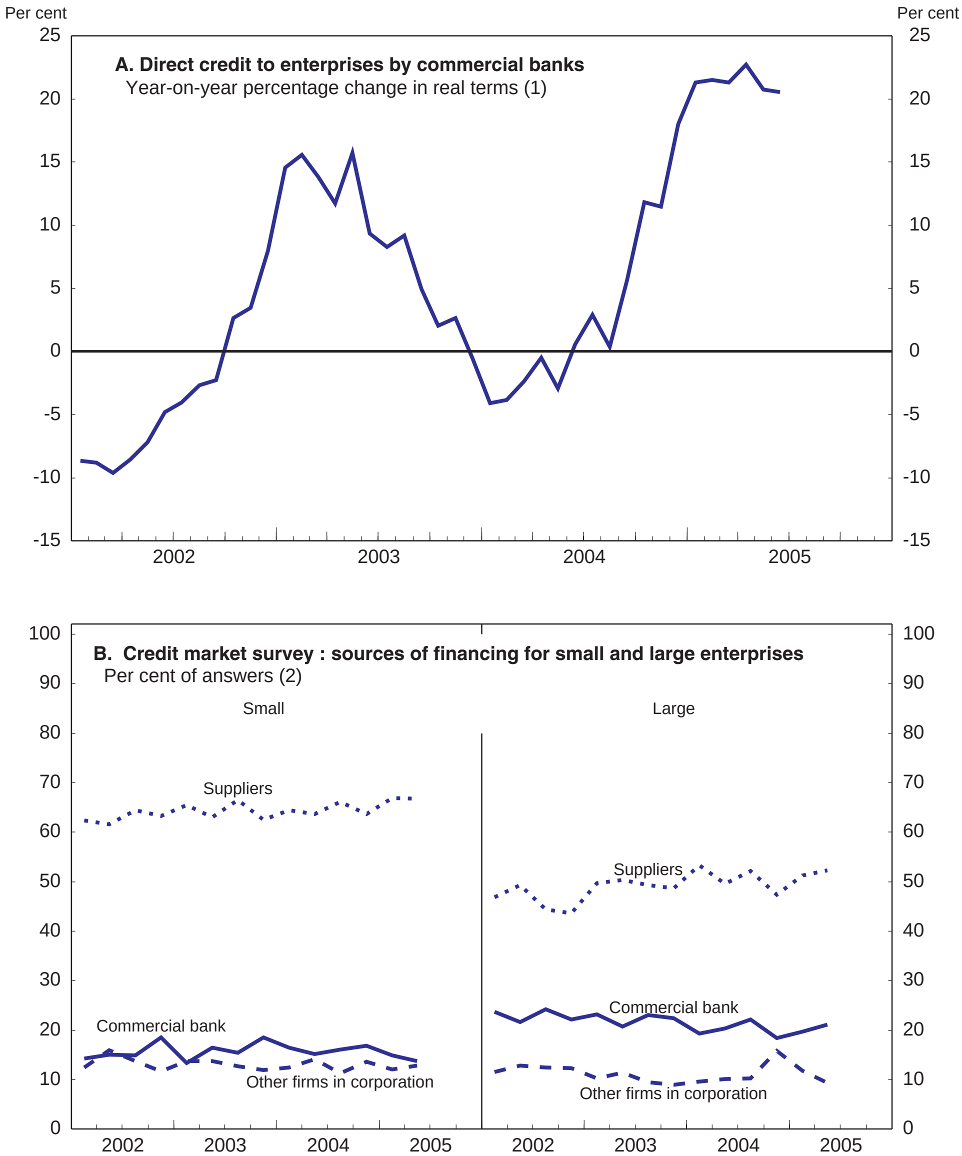
Figure 3.5. **Governance indicators**



1. The rule of law represents the extent to which agents have confidence in and abide by the rules of society. This indicator includes perceptions of the incidence of both violent and non-violent crimes, the effectiveness and predictability of the judiciary, and the enforceability of contracts (World Bank).
2. The corruption perceptions index is a poll of polls, reflecting the perceptions of business people and country analysts, both resident and non-resident (Transparency International).
3. Composite index of 10 factors: trade policy, fiscal burden of government, government intervention in the economy, monetary policy, capital flows and foreign investment, banking and finance, wages and prices, property rights, regulation, and informal market activity (The Heritage Foundation and Dow Jones Company).

Source: World Bank, *2003 Governance Indicators*; The Heritage Foundation and Dow Jones Company, *2005 Index of Economic Freedom*; Transparency International, *Corruption Perceptions Index* 2004.

Figure 3.6. **Private sector financing: bank credit**



1. Deflated by the consumer price index. Direct loans to enterprises and individuals with an entrepreneurial activity.
2. Nationwide sample with responses from at least 500 firms, including medium and very large firms. The size was established considering firm sales in 1997: 1-100 million pesos for small firms, 501-5 000 million pesos for large firms.

Source: Banco de México.

reluctance of banks to increase credit. In addition inadequate rules to recover guarantees made it difficult for financial institutions to assess risk appropriately and undertake lending. Today, although a new legal framework for bank guarantees has been put in place, remaining uncertainties on its application compound the risk of lending (Box 3.1). Regarding the repossession of collateral, the abuse of *amparo* proceedings (an appeal mechanism seeking interim court orders to stop administrative actions) impedes the functioning of the law and creditors still find it difficult to recover guarantees in case of

Box 3.1. **Reforming the legal framework for bank guarantees**

The reform of the *Miscelánea de Garantías Bancarias* was approved in April 2003, to improve the legal framework for the granting of collateral and to establish an expeditious judicial process for the execution of judgments.* The reform has the objective of providing legal certainty to both debtors and creditors. Under the revamped credit contract, the "pledge without transmission of ownership", the debtor maintains material possession of the pledged goods and can continue to operate business during the conciliation stage in case of bankruptcy. A simplified procedure was introduced, under which parties can agree on undertaking non-judicial execution procedures for repossession of pledged assets. The objective is to allow faster repossession of collateral. The new framework also established that the Federal Civil Procedures Code supersedes local civil codes, in order to harmonize proceedings and avoid legal discrepancies, which can be the source of uncertainties, during litigation.

The new legal framework has succeeded in imposing new obligations on banks to provide clearer information on their credit conditions. Changes to the "General law on credit Instruments and operations" have sought to prevent debtors from engaging in practices that delay or obstruct the creditors' repossession, for instance by selling the guarantee. In case of obstruction, the debtor would be forced to incur the costs it may cause for the creditor. However, in practice, the new framework has not led to full enforceability of contracts. Creditors are still often unable to recover in a clear and efficient way the assets pledged if debtors fail to fulfill their financial obligations. Debtors often have recourse to *amparo* proceedings an appeal mechanism, widely abused, which delay judicial decisions. (Annex 3.A3 provides examples of dysfunctional use of *amparo* lawsuits). In the end, even if the creditor wins the lawsuit, a period of time has elapsed, during which the value of the assets used as guarantee depreciates. Costs, delays and risks associated with abuse of *amparo* proceedings raise the effective cost of credit to business and deny credit at the margin.

* Seven related laws were amended in this reform: *Ley General de Títulos y Operaciones de Crédito, Código de Comercio, Ley de Instituciones de Crédito, Ley del Mercado de Valores, Ley General de Instituciones y Sociedades Mutualistas de Seguros, Ley Federal de Instituciones de Fianzas* and *Ley de Organizaciones y Actividades Auxiliares del Crédito.*

non payment of debt. Because of these risks, creditors are reluctant to lend and/or impose high interest rates.[12] Shortcomings in the application of the bankruptcy and credit guarantee law and in credit risk assessment create asymmetries, since they affect smaller (domestic market-oriented) firms more than larger ones.

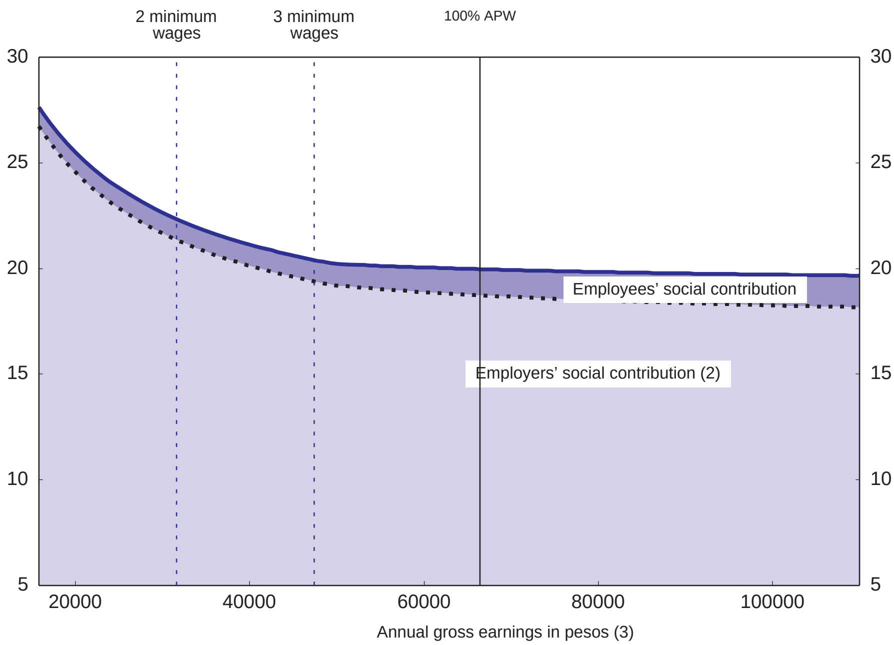
Strict labour legislation hampers mobility and creates incentives to informality

The labour market is characterised by low unemployment and relatively high participation rates, but the existence of a large informal sector implies that many workers have only rudimentary social protection and do not pay tax, while those working in the formal market (insiders) benefit from more developed social protection and are subject to taxation. The informal sector is primarily a by-product of widespread poverty, lack of basic skills of a large share of the population, and absence of a social safety net and is thus not comparable with the "grey sector" in more advanced OECD economies. One of the characteristics of the sector is that it expands in economic downturns because it provides the only option for people laid off in the formal sector (shocks in the agricultural sector also induce migration to urban areas and informal activities). Integration of the informal economy is thus a complex issue that goes beyond tighter controls and even beyond tax structure (and actually, from a taxation point of view, most informal activities are of a subsistence nature and would thus not represent an income tax base, at least in the short term). While stronger enforcement of existing tax and regulatory obligations should be a component of a strategy to foster registration of informal activities, it is also essential to recognize economic factors that create incentives for many unregistered activities and adjust public policies accordingly.[13]

Institutional settings and regulations contribute partly to informal activity, even though broad labour market indicators do not provide much evidence of the distortions.[14] While the minimum wage is very low and labour taxation, measured by the average tax wedge, is relatively small, there are additional contributions (such as the payments into the housing fund, INFONAVIT and the payroll tax which was eliminated in 2003 at the federal level) and generous fringe benefits, which contribute to raise non-wage labour costs. Furthermore, the social security pattern means that employers' contribution rates are higher for employees earning less than the "average production worker" (Figure 3.7), who are also those with lower-than-average productivity. As a result, the "cost of formality" for

Figure 3.7. **Employers' and employees' social contribution**

Per cent of gross labour costs, 2004[1]



1. Gross wage plus employers' contributions, for a single worker.
2. Includes contributions made by employers to the retirement Fund (SAR) and the housing Fund (INFONAVIT) as well for discharge and old age insurance.
3. The first left point on the scale refers to the minimum wage. The APW line is the income received by the "Average Production Worker".

Source: OECD Tax equation database 2000-2004.

those workers is higher. This "cost" buys social services. If health services (and pensions) provided by the private sector social security institute, IMSS, are valued less than the contributions, and the non-insured population also benefit from minimum services – two conditions that appear to be filled in Mexico – workers have little incentive to join the formal sector, or remain in it.

The restrictiveness of employment protection legislation is close to average for employment on regular contracts, but is relatively tight for temporary work. In many other OECD countries with restrictive employment legislation, fixed-term contracts are subject to less restrictive regulations, so that they are used more widely to avoid strict regulations. In Mexico informal labour also fills that role. In sum, institutional settings for the labour market and their interaction with social security contribute to labour market segmentation, hamper mobility and distort the allocation of labour.

Creating a more business friendly environment

Reducing administrative burdens

Efforts made in the last couple of years to reduce the burden of regulations should continue. Better coordination among the three levels of government, including information sharing and elimination of duplication in tasks, and the possibility to carry out all procedures in a one-stop shop, where the programme is introduced, have been the main factors of improvements. The scope of application of the SARE programme for start ups should be broadened to cover all municipalities of a relevant size and be applicable to more types of businesses. Alleviating still cumbersome administrative requirements for starting up a business would contribute to the shift of activities away from the informal sector into the formal sector.

The Federal Regulatory Improvement Commission (COFEMER) needs to get more involved. Despite adequate new legislation to push forward regulatory reform at the federal level, enforcement is not yet very strong. The location of COFEMER in the Secretariat of Economy, which as an institution has no authority over other ministries, should be reconsidered. Comparable agencies in some other countries, such as Canada or the United States, are located in more influential ministries.

There is a need to extend regulatory reform to the state and local level. At the local government level, processes are more complex than at the federal level – numerous federal laws create attributions and obligations for municipalities and numerous and very detailed regulations apply to these *municipios*. Reducing the number of rules will reduce the opportunities for corruption. COFEMER is providing technical support and carrying out regulatory improvement activities at the state and municipal levels. All states have signed co-operation agreements with the federal level, but only very few municipalities have, except in the context of the SARE programme.[15] There are some innovative experiences in some states.For instance, the state of Chiapas in the south of Mexico has put in place the so called "express government" (*gobierno express*) where machines can almost instantly produce a number of administrative services (*e.g.* car registration plates, driving licences): over one year, 140 000 services were thus provided to citizens. The state of Sonora, in the north, introduced "centres for fast enterprise creation" starting early 2004, to simplify procedures along lines similar to the "one-stop shops" of the SARE programme.[16] Extending regulatory reform broadly across all states, including those slow in implementing reform programmes, should be a priority.

Improving the legal environment for business

Bankruptcy rules

Well-designed bankruptcy rules raise output by reallocating physical assets and employment to more productive firms, while poorly performing firms exit the market. To be effective, the legal environment for business, notably the bankruptcy legislation and the guarantee law, must be stable, predictable, equitable and transparent. Predictability is achieved by providing clear and precise rules, which are applied consistently, assuring certainty and discouraging litigation. Equity is achieved not only through equal treatment but acknowledging the differences among creditors and, most of all avoiding fraud and "favouritism". Transparency is achieved during the course of insolvency proceedings, when interested parties have sufficient information for instance to enable them to exercise their rights under the law.

The 2000 Bankruptcy Law was meant to provide a more predictable and transparent mechanism for orderly and effective liquidation proceedings, with equitable and lawful distribution among creditors, but it has been rarely appliedover the subsequent years.[17] By 2003, it had become clear that further reforms were required. This is when the legal framework for secured transactions (*Miscelánea de Garantías*) was improved but, as seen above, its application has remained difficult because of delays and obstruction during litigation. Regarding bankruptcy procedures, more needs to be done to increase transparency and provide equitable treatment across companies.

Rule of law

To improve the "rule of law" (*estado de derecho*) at all levels of government, what is needed is: more transparency, safer property rights, a better judicial system and more credible laws that are actually enforced. The recently introduced Federal Law of Transparency and Access to Government Information will take time to deliver its full benefits. Further developing "on-line" government can also contribute to improve transparency and fight corruption. Broader use of internet systems such as "Compranet" for public procurement and for tax administration services helps by reducing opportunities for corruption. More can be done to modernize bureaucratic structures across the country. For instance, Chiapas, besides "express government", also has an "integral acquisition system" which provides on-line information on state government procurement. Positive experiences carried out in some states to enhance transparency should be replicated more widely across the country.[18] Allowing private companies to participate in inspection and monitoring of certain services can also contribute. Another important line of action is encouraging citizen participation. The participation of civil society groups (media, non-government organisation, business groups) can play a pivotal role in enhancing transparency and fighting against corruption.

In order to enhance the effectiveness of policies in several reform areas, problems in the underlying legal and judicial framework will have to be addressed. An increase in resources allocated to the judicial system is projected in the 2005 budget, but past experience shows that increasing resources will not do much by itself to improve the efficiency of the system. The judicial infrastructure was expanded over the past 7 to 8 years, and there is no clear evidence of improved efficiency.[19] Instead of seeking to open more tribunals to deal with the high number of procedures, it is preferable to make legal procedures more simple and transparent. It would also be useful to establish specialised courts with economic expertise to deal with *amparo* cases where the contention concerns economic and regulatory issues. Measures are needed to tighten the rules for using the *amparo* procedure. Precluding abusive use would facilitate the application of good policies and laws, regarding in particular competition policy, the legal framework on bank guarantees and the application of regulatory measures (Annex 3.A3).

Reducing barriers to entry and promoting effective competition

Lowering barriers to entry, including for foreign investors, and ensuring a pro-competitive environment is essential to create conditions where the private sector invests and innovates more. Mexico is in a middle position among OECD countries for attracting FDI. Higher FDI inflows would help boost total factor productivity, through spillover effects. Simulation exercises conducted by the OECD secretariat show that aligning FDI restrictions to those of the least restrictive OECD country (the United Kingdom,) would improve the inward FDI position by close to 50% in Mexico, reflecting the relatively high degree of restrictions on foreign ownership in Mexico (the banking sector, where restrictions on foreign ownership in large banking institutions were lifted in 1999, is a notable exception). The same kind of exercise conducted for competition-oriented policies shows that aligning product market regulations to those of the least restrictive OECD country also has the potential to increase FDI significantly, the benefits for Mexico being larger than for the "middle of the road" countries since Mexico ranks as "relatively restrictive".[20] Removing explicit legal barriers to entry in some sectors will not be enough: there are areas which are in principle opened to competition, but where application of the law is impaired so that there is no effective competition.

Lifting regulatory obstacles to private investment and FDI in several sectors...

In *airlines*, the plan to divest the airlines holding company (CINTRA) had to be postponed, because market conditions were disrupted in the aftermath of 11 September 2001 and the company was in a poor state. In 2005, conditions for the divestiture of CINTRA appear to be in place: Mexico's economic outlook and conditions for the airline industry worldwide have become more favourable; CINTRA became profitable in 2004, despite the oil price rise. The company started regaining market shares on the domestic market, though still not on international markets. The terms of the 2005 privatisation project have been slightly modified compared with earlier projects (Annex 3.A2). The plan is now to split up CINTRA into several groups of assets which are to be sold separately. The first one will regroup one of the major national airlines (*Mexicana*), with a newly-created low-cost carrier as a subsidiary; the second one regroups the other major national airline (*Aeroméxico*), with a strengthened regional airline as a subsidiary. Selling as a third package the company for ground support services which belongs to the two main Mexican carriers is also envisaged. This would be appropriate to avoid discriminatory treatment. The cargo company (*Aeromexpress)* that currently provides cargo services exclusively to the two main carriers is to be divested as well as an independent company or kept as part of the two main groups. *Alas de America*, which provides training to pilots and crew to the two main carriers, will remain owned by both airline groups in equal parts. By splitting up CINTRA into several entities before privatization, the design of the project takes into account competition-enhancing considerations, which is appropriate. Of some concern is the fact that the privatization project limits foreign ownership to 25%, which is at the low end of OECD countries and is well below the level required to ensure control by nationals. It implies that the Mexican airline sector is missing opportunities to benefit from spill-over effects usually associated with FDI.

In the electricity sector, given the importance of the sector for future growth, a coherent reform strategy will have to be implemented. There are constitutional restrictions to private ownership in the generation, transmission and distribution of electricity. Unfortunately the reform of the electricity sector has become a politicised issue. The ambitious reform proposed by the previous administration in 1999 was not approved by Congress; another proposal was submitted in 2002. Its scope is more limited, since it does not envisage privatisation, but would open generation to private producers on a broader scale and allow large consumers to choose their supplier. Still it has not been approved. At some point in the near future, the electricity reform has to be put back on the agenda: legal obstacles to private investment should be removed allowing necessary expansion of electricity supply, with a view to providing business with an increasing and reliable supply of lower-cost energy over the medium to long term, thus maintaining Mexico's attractiveness for FDI.

... and imposing effective competition in others

In the telecommunication sector, the Federal Competition Commission has made clear efforts in accordance with the regulatory authority to address problems of anticompetitive practices by the incumbent.[21] Many of the difficulties slowing the development of effective competition stem from the abusive use of the appeal mechanism (*amparo* procedures). The reform of the Federal Law on Telecommunications proposed in 2002 aimed at reducing TELMEX' control over communication networks. It has yet to be approved. In the meantime, some secondary regulations were amended to improve entry and competition conditions.[22] The reform proposal for the Federal Law on Telecommunications should be put back on the Congress agenda.

In the *rail transportation sector*, the Ministry of Communication and Transport has been unable to resolve the disputes between private railroad companies and to stop anticompetitive practices. It has issued several resolutions establishing the terms for the rights of way and interconnection services and the Federal Competition Commission (CFC) has investigated alleged anticompetitive practices. However, the cases before the CFC are either still in process or pending resolution, because the companies under investigation are using judicial procedures (*amparos*) to avoid resolution. Enforcement of the competition law will not suffice to solve the problem. Because of the weaknesses in the regulations initially established, the regulatory framework should be reviewed across the board.

Financing investment

Reducing the cost of credit

Mexican financial markets have undergone an important and profound transformation in recent years. In 2005, further changes were made to the legal framework which had been revamped over the past few years. The reforms to the legal framework for secured credit transactions (*miscelanea de garantias)*, in particular, are an important step forward because it gives certainty in guarantees to creditors and facilitates the recovery of non-performing loans. But measures are needed for an easier application of the new legal framework. The transfer of assets could become effective, without leaving scope for recourse to *amparos* or judicial decisions, if for instance interest is not paid by the debtor within a given period after a warning notice. To be approved, such changes to the legislation would need be applicable to future lending only and not to past lending.

Providing some certainty in guarantees to creditors is not meant to "protect bankers". It would also help debtors, by increasing opportunities for contracting credit at competitive interest rates; it would reduce the scope of informal credit at exorbitant prices. It would reduce moral hazard problems created by the fact that until now debtors have had little or no risk of losing their guarantees. All in all, it would contribute to building strong and credible institutional mechanisms, thereby improving the "rule of law". It would also be conducive to more competition in the banking sector, as new entrants, including foreign direct investment, would be attracted by prospects of a more dynamic credit market.

Strengthening credit information sharing systems

Information sharing between lenders attenuates adverse selection and moral hazard. Several improvements to the legal framework took place in 2001 and 2002 to promote competition in credit information by making sharing of certain types of information mandatory; and to improve access of individuals to their credit history and allow correction of mistakes.

Currently, there is only one corporate credit recording agency operating in Mexico, and all the major banks (and only banks) hold shares in it.[23] Concerns about unfair use of credit information by the owners of credit bureaus led to some changes. In 2004, legal amendments were made, partly addressing this concern, since a limit of 18% was put on ownership of credit bureaus by users (bank, financial institution, commercial entity). Also the National Banking Commission (CNBV) and the central bank have been given capacity to impose sanctions on financial institutions and on the credit bureaus. To create settings in which new players might enter the market, it would be desirable to impose disinvestment of banks in the credit bureau. Furthermore, to improve efficiency, it would be desirable to broaden the scope of the regulations on information sharing so that non-financial companies, including utility companies, share information with the credit agency.

Improving access to the domestic capital markets

Numerous reforms have been undertaken over the years to improve the legal framework of the securities markets in Mexico. The introduction of the securitised note (*certificado bursátil*) in 2001 has reactivated the private bond market. But capital markets have yet to develop their full potential in financing the corporate sector. A new Securities Market Law has been proposed. The initiative aims at increasing the number of companies listed in the security markets by facilitating the entrance of firms that adopt efficient minority rights, disclosure standards and corporate governance practices (Box 3.2). It also includes general measures to strengthen the corporate governance framework and bring it in line with international best practices and it establishes procedures to improve enforcement of the law. Approval of the initiative would be desirable since it completes the set of financial sector reforms already implemented and it can contribute to increase private equity and venture capital investment in medium-size firms.

Tackling financial exclusion

The CNBV has made some changes to the regulatory and supervisory framework of the Mexican financial system with the objective of improving access to credit for small enterprises. In particular, changes to the legal framework have been aimed at reducing the

Box 3.2. **The new Securities Market Law**

The new Securities Market Law that has been proposed introduces an intermediate enterprise regime in addition to the existing ones. Currently there are two regimes operating: *i)* one focusing on companies listed on the stock exchange, which comes under the 1974 Securities Markets Law ; *ii)* another regime focused on family-owned firms, which dates back to the 1934 legal framework (*Ley General de Sociedades Mercantiles*). Under the new intermediate regime, companies that decide to undertake a public offering will be granted a period of three years to comply with the requirements to go public. Enterprises in this regime will have to adopt efficient corporate governance practices, minority rights and disclosure standards. The initiative is thus expected to encourage private equity and venture capital investment, by assuring investors that they will be able to exercise their rights.

Some of the changes proposed aim at improving corporate governance practices. The initiative will give a strategic and surveillance role to the Board of Directors of a firm and it will give the day-to-day administration of the firm to the CEO (in the current regime the Board is in charge of day-to-day management , and the CEO has no responsibilities in it – although in practice firms do not follow this rule). The entire oversight of the firm is to be given to committees formed by independent Board members, who will replace the "commissiary" (*comisario*) who currently has the oversight "in a limitless way and at all times".

Finally, the new law will improve the enforcement process, clarify violations and establish stricter sanctions for intermediaries who engage in fraud or abuse of insider information.

cost of granting commercial loans to smaller enterprises. The social banking sector also has a role to play in a country where two-thirds of the workforce are not covered by traditional banking services. There has been strong action to strengthen microfinance institutions and expand formal financial services to traditionally "unbanked" individuals. The issue is whether measures are achieving their objectives. The Mexican government implements around 30 programmes related to microcredits, microfinance institutions, guarantee funds, subsidized credits, popular savings, among others, in order to tackle financial exclusion. These programmes, many of which were inherited from past administrations, are located in six different ministries, including the development banking sector. There is a clear need to rationalize the set of programmes.

Against this backdrop, the National Savings and Financial Services Bank, BANSEFI, created in 2002, plays a key role, giving the poorest Mexican families access to safer and more efficient financial services. The popular savings and loan system, which includes many small, dispersed companies, has been put under supervision according to the 2001 Popular Savings and Credit Law (PSCL). BANSEFI coordinates efforts of the "popular banking" sector; it acts as a second-tier bank for participants in the sector and operates as the sector's "central bank". An electronic network, the "people's network" (*L@ Red de la Gente)* is being developed, linking BANSEFI's branches to hundreds of offices of Popular Savings and Credit Societies. Through this network, emigrants can send cash transfers securely and cost-effectively to recipients in some of Mexico's poorest and most remote locations.[24] Likewise, federal money transfers to targeted groups for health, education, and agriculture are already being made through *L@Red*. By March 2005, approximately 1 million savings accounts had been opened for this purpose. Because they receive interest on their accounts, the poorest Mexican families remain in the system and can then access other types of financial services. This is the major permanent impact of the programme.

Summing up

Mexico has made important advances over the past decade to improve the business environment and create a more competitive climate, encouraging firms to adopt better technology or managerial best practices. Significant scope for improvements remains in a number of areas to reach the same good results that have been achieved in several other catching-up countries. In this context, further action is required to promote effective competition and reduce the cost of doing business. The required reforms have been well identified by the government, by experts and by civil society, including business groups. Nonetheless, key reform proposals have been held up by strong resistance from the legislative branch, in particular: the proposed reform of labour legislation, submitted to Congress in 2002, now removed from the policy agenda; the opening of the electricity sector to private investment, which has encountered much opposition; and the Telecommunication Law reform. These key reforms should not be postponed. Detailed recommendations are presented in Box 3.3. The strategy should be broad:

- The business sector at large would benefit from measures ensuring that the regulations that are needed can be met at minimal costs – excessively strict regulations and costly tax obligations tend to be associated with a low level of compliance, notably by SMEs. The Regulatory Impact Analysis (RIA) process, monitored by COFEMER, the Federal Regulatory Improvement Commission, can play an important role in this area, it should be strengthened.
- Enhancing effective competition in certain sectors where it is still low, particularly in the network industries would contribute to bringing down prices for specific services or users to more competitive levels relative to other OECD countries. Mexico lacks a competition culture. The Federal Competition Commission signed an agreement in 2005 with the Federal Office of the Attorney for Consumers, PROFECO (there is no national private sector consumer organisation), for enhanced cooperation, including information exchanges, technical cooperation and advocacy activities. To serve its purpose, this agreement needs to be followed by action and effective communication to convey a clear message about the benefits of competition to the public.The OECD peer review of competition law and policy completed in 2004 identified some specific recommendations to enhance the effectiveness of competition policy and extend its reach to those areas where competition is still incipient. Although some of the changes required can be made by the Federal Competition Commission itself, new legislation to strengthen effective competition is urgently needed.
- The government project "Concrete actions to enhance competitiveness", announced in early 2005, provides a list of measures required to lift competitiveness.[25] The list is specific, which augurs favourably for its application. But the scope of the project falls short of what is needed. It does not include structural reforms which would need a constitutional change, such as electricity, nor those for which discussions in Congress have stalled, such as labour market reform. In the current political context, giving priority to concrete actions in areas where there is no need for legislative approval is welcome.
- Although the proposed changes to labour market legislation did not address the need to ease conditions for entry, exit and contracting, it had several commendable elements

Box 3.3. **Summary of recommendations to improve business and investment conditions***

Lifting regulatory obstacles to private investment and FDI in some sectors...

- Put electricity reform proposal back on the Congress agenda and go further, opening the sector to private investors and establishing a transparent, effective, non-discriminatory and competition-enhancing regulatory framework.
- Implement the privatisation project of CINTRA (the airlines holding company), ensuring that the scheme and regulatory settings are conducive to competition, notably on the domestic market.

... and imposing effective competition in others

- Review extensively the regulatory framework for rail freight transportation and work to resolve disputes among concession holders sop as to improve cost efficiency in the sector.

Reducing administrative costs for business and investment

- Accelerate implementation of measures aimed at facilitating start ups – for instance the use of one-stop shops.
- Promote exchange of established good practices across states and municipalities, particularly in areas that enhance competitiveness, such as starting a business, enforcing contracts, registering property and getting credit.

Ensuring a level playing field for bank credit to the private sector

- Eliminate barriers to lending which create asymmetries, to help create a more level playing field through easier application of the bankruptcy and credit guarantee law and adequate credit risk assessment.

Improving the effectiveness of policies, by ensuring the enforceability of laws

- Tighten conditions for the use of amparo proceedings. This would contribute to effective implementation of policies (application of the Competition Law, enforcement of regulators decisions, application of judicial decisions for repossession of bank guarantees, collection of fines...).

Reforming labour market regulations

- Put the Labour Law reform back on the Congress agenda. Approving the 2002 proposal, although insufficient, would be a useful step forward: *i)* addressing the need to ease permanent contracts regulation; *ii)* allowing probationary periods with a view to facilitate job creation through long-term contracts; and *iii)* modernising the collective bargaining framework.
- Go further, taking measures to broaden scope for using short-term contracts and part-time work, to enhance the adaptability of the workforce. More flexible regulations in combination with improved enforcement of tax and regulatory obligations would help to reduce the scale of informal activities.

* Past recommendations for structural reform, including some of these issues and action taken, are summarized in Annex 1.A2.

and its approval would have been a decisive first step. Several proposals would have made it more attractive for employers to hire in the formal sector, including: the introduction of probation periods; first steps in easing regulations on permanent contracts, by giving some flexibility on working hours; simplification of administrative requirements for SMEs; measures to promote workers training. In addition to the measures listed, other elements conducive to raise formal employment should be considered, for instance easing overly strict regulation on atypical forms of employment (short term contracts or part time work).[26] The postponement of labour market reform is unfortunate. It is both important and urgent to move forward to enhance the adaptability of the workforce and to reduce obstacles to job creation in the formal sector.

Notes

1. The section below identifies and illustrates the key areas where Mexico's performance is lagging. Progress achieved in several other areas is illustrated in selected Figures included in Annex 3.A1, "Background information". In particular, Annex Figure 3.A1.1 indicates a reduction in the complexity of procedures over the period 1998 to 2003, mainly due to the development of one-stop shops. In Figure 3.A1.2 Mexico appears in a middle position among OECD countries regarding state control of business operations.
2. During 2004, the content of 414 formalities in the Federal Register was improved, 184 were eliminated and 153 simplified. The Register is available on line at *www.cofemer.gob.mx*.
3. The Federal Regulatory Improvement Commission, COFEMER, has mandatory authority to review new regulations proposed by federal agencies – *i.e. it must.* It has optional authority to review and propose amendments of existing regulations – *i.e. it could.* (OECD, *Review of Regulatory Reform – Mexico*, 2004).
4. The fast-track system for start ups (*Sistema de Apertura Rápida de Empresas*, SARE) applies to businesses engaged in so-called "low-risk activities". These activities account for a little more than half of all business activities, but 80% of activities carried out by micro, small and medium-sized enterprises. COFEMER has oriented its efforts starting with municipalities which are the most important for Mexico's competitiveness. By April 2005, the SARE system had been implemented in some 60 such municipalities.
5. Almost half of the freight market (in tons-km) is serviced by enterprises with 1 to 5 trucks, the large majority of which is just one truck and one driver; the average age of the fleet is 20 years. Regarding variable costs, although labour costs for operators are less than half those in the United States, higher maintenance costs make road freight more expensive in Mexico than in the US. See IMCO (2005).
6. "Anticompetitive practices in the railroad sector in Mexico", *cf.* OECD: COM/DAFFE/TD 2004)62, September 2004. Privatisation of the four main railroad lines was completed in 1998. Purchases were done through joint ventures, generally with a US railroad company interested in integrating lines across the order. The wide differences in the monetary outlays paid for the original concessions have constituted a major factor of contention among concession holders.
7. It also found that over that period the average household paid 107 pesos (a little less than US$10) in bribes to have access to administrative requirements and other public services (*Encuesta nacional de corrupción y buen gobierno*).
8. The Corruption Perception Index reflects the perception of business people and country analysts, both residents and non-residents. It is a "poll of poll", drawing on 18 surveys provided to Transparency International between 2002 and 2004, conducted by 12 independent institutions.
9. Based on the International Victimization Survey, in which Mexico participated for the first time in 2004, only a small proportion of crimes are declared and put under enquiry. Two-thirds of persons who declare a crime appear to be unsatisfied with the follow up. According to the 2004 *Survey*, 12% of the population with some authority asked for a bribe for services and more than 90 per cent of the victims did not denounce the fact.
10. A detailed review of developments in the banking sector was made in the 2002 OECD *Economic Survey of Mexico* (Chapter IV); a follow up was done in the January 2004 *Survey* (Chapter II).

11. During the late 1990s and early 2000s, banks were making profits without lending to the private sector, through interests received on government debt, including public securities substituted for private debt as a result of the bank rescue programmes (*cf*. Bonturi, 2002).

12. For details on this issue, see Barron *et al.* (2005).

13. Among OECD countries, Turkey experiences a comparable problem of large and expanding informality. *Cf*. R. Gönenç and P. Walkenhorst (2005).

14. Figure 3.A1.4 provides some broad indicators on labour market institutional settings in the OECD.

15. By June 2005, 21 states and 66 municipalities had created regulatory improvement mechanisms – through law or secondary regulation – both related to starts-ups and dealing with general deregulation processes or broad administrative simplification programmes. Nevertheless, it is essential to create proper administrative structures – *e.g.* COFEMER style institutions at the state level – to give institutional stability to regulatory improvement actions at the local level.

16. Based on information provided by the state governments of Chiapas and Sonora respectively. Sonora plans to increase the number of "centres" and the COFEMER is in the process of certification.

17. Some of the main innovations of the legal framework were: first, to limit the conciliation stage to a fixed period of 6 months with a maximum of 1 year in exceptional circumstances; second, companies will no longer be able to declare themselves in "suspension of payments" before they declare bankruptcy.

18. According to a study by the University of Guadalajara, released in December 2004, the three states with the most transparency were Zacatecas, Campeche and Chiapas.

19. There are 77 public employees in courts of justice per 100 000 persons in Mexico, compared with 9 in the United States and 2.6 in the Netherlands. (See Zepeda, 2004).

20. For details on the methodology and cross country evidence, see OECD (2003), *Economic Outlook* No. 73, Chapter VIII, and Nicoletti *et al.* (2003).

21. Past OECD *Economic Surveys of Mexico* and OECD *Competition Law and Policy: Peer Review*, 2004.

22. For instance: *i)* short message services are considered basic telecommunications services, so that interconnection between mobile networks has become mandatory; *ii)* the issuance of "International communication rules" under a Mexico-US agreement, revokes the uniform settlement system and allows competitive commercial negotiations of international settlement rates; *iii)* licences for cable television carriers may include the transportation of telephony signals under a simplified procedure, facilitating the leasing of the network capacity to third parties in order to provide basic telephony services.

23. The Credit Bureau was created in 1996, by an alliance of a credit agency and the Mexican Banking Association. The other two agencies then exited the market, after denouncing anticompetitive practices to the Federal Competition Commission, on the ground that they were unable to obtain information from banks.

24. Issues related to emigrants' transfers to Mexico are discussed in a special chapter on migration the last OECD *Economic Survey of Mexico*, January 2004, Chapter IV.

25. The programme is detailed in the Ministry of Economy Web site *www.economia.gob.mex*.

26. The last OECD *Economic Survey of Mexico* (January 2004) included a more detailed set of recommendations for labour market reform, including the need to consider extending job loss support while relaxing employment protection.

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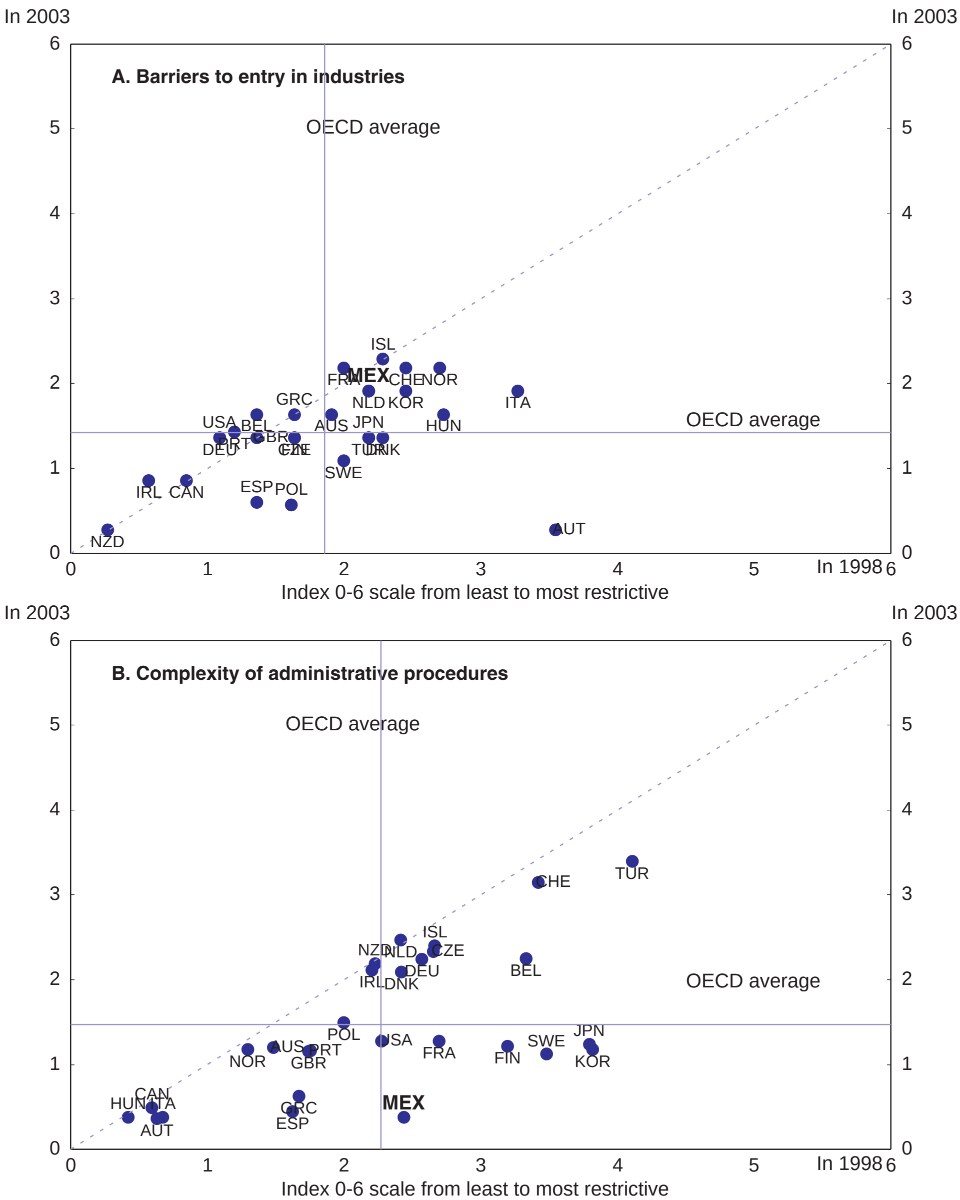
ANNEX 3.A1

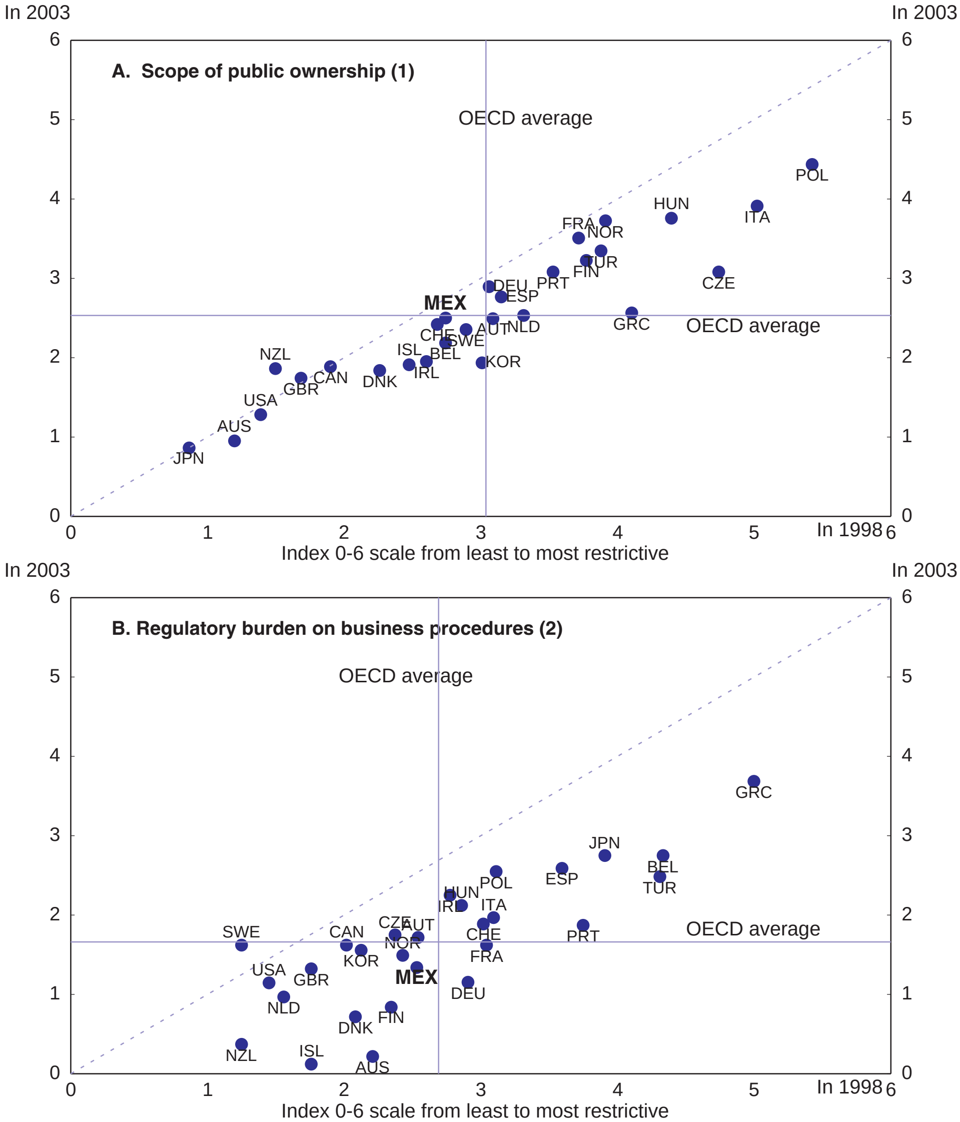
Background information

Figure 3.A1.1. **Barriers to entry**



Source: OECD, Regulatory Indicators database.

Figure 3.A1.2. **State control of business operations**

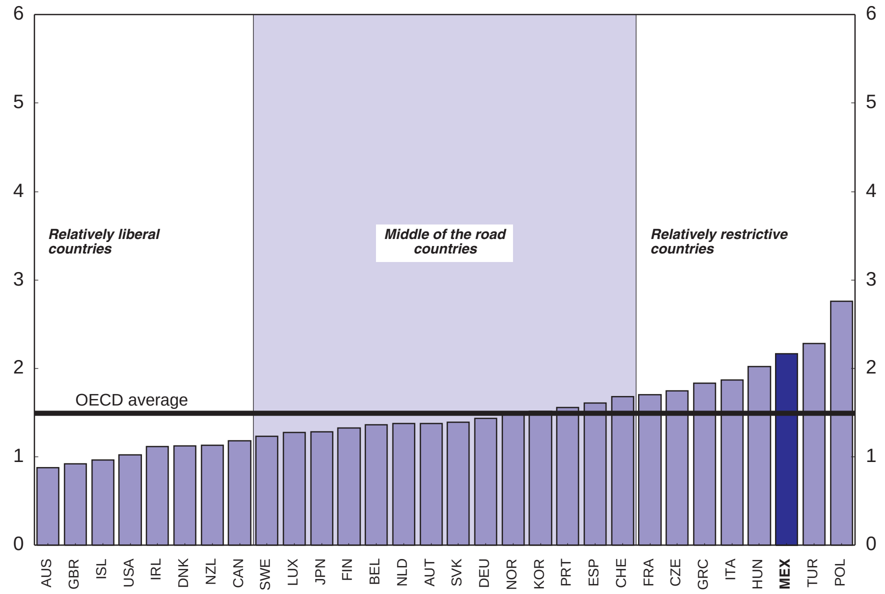


1. Covers scope and size of public enterprise as well as the direct state control over business enterprise (via voting rights or legislative bodies).
2. Concerns the involvement of the state in business operations via price controls or the use of command and control regulation.

Source: OECD, Regulatory Indicators database.

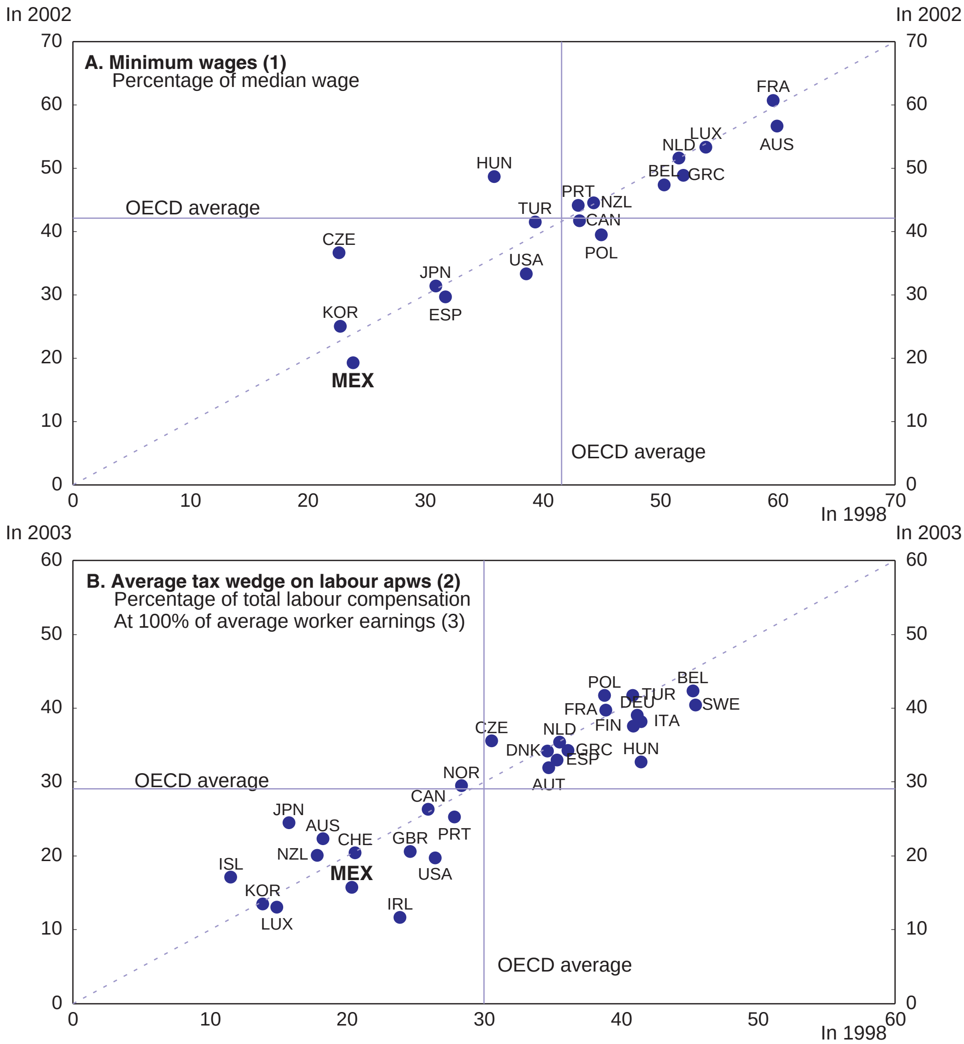
Figure 3.A1.3. **Product market regulation**

Restrictiveness of economy-wide product market regulation, 2003
Index scale of 0-6 from least to most restrictive



Source: OECD, Product market Regulation database.

Figure 3.A1.4. **Cost of labour in comparison**

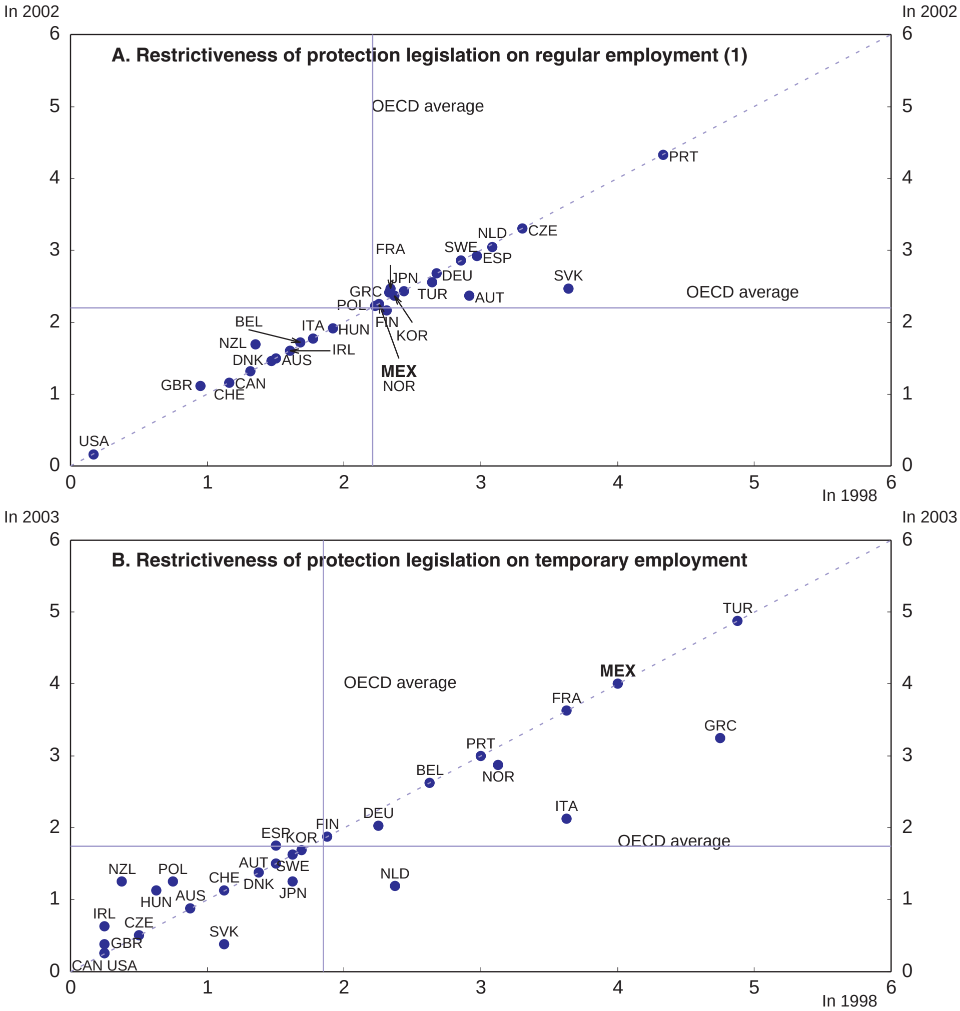


1. Missing countries do not have statutory minimum wage.
2. Measured as the difference between total labour compensation paid by the employer and the net take-home pay of employees, as a ratio of total labour compensation. It therefore includes both employer's and employee' social security contributions. For Mexico, it doest not take into account the employers' contributions to retirement Fund (SAR) and the housing Fund (INFONAVIT) as well as for discharge and old age insurance.
3. Couple with 2 children, average of 3 family types: one wage-earner, two-earner family (100% and 33% of APW) and two-earner family (100% and 67% of APW).

Source: OECD, *Labour Market statistics*, 2004; OECD *Taxing Wages*, 2003-2004.

Figure 3.A1.5. Employment Protection Legislation (EPL)

Index scale of 0-6 from least to most restrictive



1. The figures for Spain and the Slovak Republic differ for 2003 from those reported in *Employment Outlook* (2004) due to a re-assessment of regulation in this area.

Source: OECD, *Employment Outlook*, 2004.

ANNEX 3.A2

Competition issues in the airlines sector: the CINTRA privatisation project

Background

Mexico's two major domestic air carriers, *Aeroméxico* and *Mexicana de Aviación*, which had been privatised in 1989-91, failed in late 1994, and were taken over by creditor banks. In 1995, four airlines including the two main ones were consolidated under a holding company, CINTRA, in which the public sector took a minority holding. The Federal Competition Commission (*Comisión Federal de Competencia*, CFC) taking into account failing firm considerations, permitted the creation of the holding company but imposed conditions that were intended to maintain competition between the two airlines.

Subsequent changes in the creditor banks' capitalisation and ownership in the aftermath of the peso crisis led the government into holding a controlling interest in CINTRA through the IPAB (Institute for the Protection of Bank Savings). In 2000, the IPAB and several creditor banks still holding shares in CINTRA requested the CFC's views on their plans to divest ownership of the airlines to a single purchaser.

1st recommendation of the Federal Competition Commission[1]

The Federal Competition Commission (CFC) views about the divestiture of CINTRA was initially to recommend that the main airlines be sold separately: the two airlines serve 80% of Mexico's domestic airline passengers, and an analysis of 41 major city-pair routes shows numerous markets in which the concentration indices would increase far in excess of permissible levels. The Commission concluded that entry barriers constrained market contestability and that economies of scale did not dictate that only one company could be viable in the Mexican domestic air service market. It therefore determined that the two airlines would have to be sold separately to independent owners, or else the resulting entity would constitute an unlawful concentration subject to attack under the Federal Competition Law (LFCE). In 2003, dissolution of CINTRA was still pending due to adverse economic conditions in the airline industry associated with the events of 11 September 2001 and in Iraq.

The 2004 project and the Federal Competition Commission views

CINTRA submitted a new project to the Federal Competition Commission in October 2004. It envisaged the creation of two new economic agents, one including the main carriers *Aeroméxico and Mexicana*, the other one made of *Aerolitoral and Aerocaribe*, small national carriers. The Commission responded that the concentration could proceed under a number of conditions, including the following:

- The purpose of the restructuring and mergers would be to sell each economic agent to independent competing investors.
- Prior to the beginning of the sale operation, *Aerolitoral* and *Aerocaribe* (which would become the company *Aeronacional*) would have to increase significantly their supply of services in different routes or city pairs on the national territory.
- Third parties service contracts where *Aeroméxico* and *Mexicana* had participation would be subject to conditions preventing them from granting discriminatory treatment.
- The selling of assets by CINTRA or its subsidiaries to third parties was a concentration and it required prior notification to the Competition Commission.

The 2005 privatisation project

By 2005, conditions for restructuring and selling CINTRA had improved, and a new project was launched. After several years of making losses, CINTRA became profitable in 2004, despite higher oil prices. Following a decline in market shares on the domestic market (of a cumulative 10% over the period 2000 to 2003) the two main airlines reversed the trend in 2004, although not on international markets. Despite the recent recovery, CINTRA remains weak. In particular, there is a strong need for new investments over the coming years to modernize the fleet, incorporate new technologies and equipment to remain competitive worldwide and to develop more modern commercialisation technology including via electronic means.

The privatisation project has been slightly amended, to reflect current opportunities in the airline industry. A low-cost carrier has been created. The project foresees restructuring the company in several entities and selling them separately to independent owners, in particular the two major groups which each include one of the major national carriers. The restructuring project approved by CINTRA's Board of Directors foresees the regrouping and sale of assets as follows:

- *Grupa Mexicana de Aviación*, integrating *Mexicana de Aviación* and the newly created low cost carrier.[2]
- *Grupo Aerovias de México*, integrating *Aeroméxico* and a strengthened regional airline, *Aerolitoral*.
- *Servicios de Apoyo en Tierra, SEAT,* that belongs to *Mexicana* and *Aeroméxico*, and is the leader company in airline ground support services. One option envisaged is to keep it as a joint venture with the main groups holding stakes. Another option, which is preferable to avoid that the service provider grant discriminatory treatment, is to divest it as an independent package.
- *Aeromexpress*, the cargo company that belongs to *Mexicana* and *Aeroméxico* in equal parts and provides cargo services exclusively to them is also to be divested. Two options are envisaged: to divest it as an independent company or to let the two main groups keep a participation in it.
- The company *Alas de America* which provides training to pilots and crew for the two main carriers is to be packaged with the first two groups.

The Board has determined that the sale of both airline groups will be carried out as follows:

- A first stage consists of the strategic sale of a control stake equivalebnt to at least 51% of the equity, with the possibility of acquiring up to 100%.
- The balance (*i.e.* up to 49%) would remain in CINTRA's hands, along with minority rights, in particular veto rights over certain strategic decisions, and registration rights to sell its participation in the capital markets through an Initial Public Offering (IPO).
- In compliance with the FDI Law, foreign investors may only participate through consortia with majority of domestic capital and controlled by Mexican investors.
- A single group of investors may participate in the sale of both airline groups, but can only acquire one of them.
- The sale process of the strategic stake, which starts by mid-2005, is expected to be compelted by the end of the year.
- The 2nd stage of the sale process would consist of an IPO, if necessary and based on market conditions.

The design of the project, as envisaged in the 2nd quarter of 2005, looks promising. Unfortunately the Foreign Direct Investment Law limits participation of foreign investors in airlines to a maximum 25% of controlling stocks, whereas many countries set that limit at 49% which allows retaining control by residents.

Notes

1. *Cf.* OECD *Competition Law and Policy in Mexico: An OECD Peer Review*, 2004; OECD *Reviews of Regulatory Reform: Mexico*, 2004.
2. "Click", the first low-cost carrier created in Mexico, will start operating in July 2005 on domestic routes, including the routes until then served by *Aerocaribe*, which is being replaced. Prices are expected to be about 30% lower than prices of major carriers.

ANNEX 3.A3

Excessive use of "amparo" *proceedings undermines the effectiveness of policies*

What the problem is?

Excessive use of "amparo" *action blocks Competition law enforcement; it undermines the effectiveness of regulation, with detrimental consequences in the telecommunication or railroad sectors for instance; it reduces the effectiveness of the new legal framework on bank guarantees; once a fine has become final and payable, it hinders collection of fines.*

The "*amparo*" is a proceeding established in Articles 103 and 107 of the Mexican Constitution to provide citizens with protection against unconstitutional acts of the government.[1] An *amparo* is available to any party who can raise a claim that he is being subjected to an unconstitutional statute or that his due process rights are being infringed. Due process, in this context, has a broad sweep and is not limited to "procedural" issues. Parties can, and do, attack the merits of agency decisions in an *amparo* because the due process clause in Article 16 the Mexican Constitution requires that agency orders articulate the "legal basis and justification for the action taken". This language has been construed by the Supreme Court to permit judicial abrogation of agency action that is arbitrary or capricious, unsupported by substantial evidence, or founded on reasoning that is illogical or contrary to general principles of law. The Supreme Court typically limits itself to cases involving claims of statutory unconstitutionality or conflicts between appellate court opinions, and does not routinely consider ordinary procedural due process cases.

Amparo proceedings have been used by debtors to delay judicial decisions in litigations about creditors' repossession of collaterals in case of non payment of debt. Even if the party filing the *amparo* looses the lawsuit, much time has elapsed. Delays can imply substantial depreciation of the assets pledged. *Amparo* action has also been used by private concession holders in the railroad sector, to avoid resolutions establishing terms of inter-connexion and access. In the telecommunication sector, TELMEX, the incumbent company, has filed *amparos* to challenge proceedings or final determination of the Federal Competition Commission (*Comisión Federal de Competencia*, CFC). The difficulties encountered by the CFC in particular in enforcing its law demonstrate how abuse of *amparo* action hamstrings effective government in Mexico.

The scale of the problem in competition law enforcement[2]

The volume of *amparos* filed against the CFC has increased significantly over the years.[3] *Amparos* are used as the CFC case progresses, from the preliminary phase of investigation – for instance to attack information demands – to the final resolution phase. Some *amparo* actions allege that the Competition Law (LFCE) is unconstitutional on its face, while others allege that the statute has been applied unconstitutionally in the particular case, and still others allege error in the CFC's final decision. The procedural interface between *amparo* cases and the underlying Commission proceeding can become exceedingly complex. As noted, respondents may file a sequence of *amparo*s and Commission cases involving several respondents can result in multiple *amparo*s filed in different district courts.

The *amparo* process delays resolution of the Commission proceedings. Further, when Commission orders are at issue, respondents routinely request, and the district courts ordinarily grant, motions to block the CFC's order during the court's review. While the Commission has been almost completely successful in *amparos* that have reached the Supreme Court, district courts have ruled against the CFC on numerous occasions, typically on points of procedure. There is perhaps a particular bias toward such adverse decisions whenever an *amparo* case involves both procedural issues and a challenge to the merits of a final CFC decision. The district courts are unfamiliar with substantive antitrust issues. Further, Mexico employs a civil law system that has traditionally involved detailed legislative enactments, and courts are unused to dealing with a statute as short and non-specific as the Federal Law of Competition (*Ley Federal de Competencia Económica*, LFCE). By ruling adversely on a procedural point, the court sends the case back to the CFC and avoids the necessity of resolving the antitrust question.

Abuse of *amparos* also makes it difficult to collect fines. Once a fine has become final and payable, it must still be collected, a duty that falls to the fiscal department of the municipality in which the fined party resides. If payment is not made voluntarily, the municipal treasurer must engage an administrative proceeding to issue an order of execution against the debtor's assets, and this proceeding is itself subject to *amparo* review. The result of these procedural intricacies regarding the implementation of competition policy is that the Commission has collected only a tiny portion of the fines ordered.[4]

Are there solutions?

There are not many obvious solutions to the problems presented by the *amparo* process. The right to judicial review can be constrained only by amending the constitution, but altering the constitutional scheme of checks and balances is not envisaged, which is appropriate. Creating specialized *amparo* courts with economic expertise would be useful to hear cases from the CFC and the other agencies that deal with economic and regulatory issues. Consideration might also be given to tightening the judicial standard allowing blocking Commission orders during the *amparo* process. This could be accomplished by amending the *amparo* procedural rules and might dissuade parties from filing *amparos* simply for purposes of delay.

Notes

1. Similar to an injunction, an "*amparo*" (shelter or protection) is a judicial procedure by means of which a party can ask the reparation, suspension or annulment of an act of a government authority that is deemed to violate the complainant's constitutional rights.
2. For detailed analysis and recommendations, see OECD, *Competition Law and Policy in Mexico: An OECD Peer Review*, 2004.

3. In 1997, 15 cases were filed. Since then, the number of cases has risen regularly to 124 in 2001. This yields a total of 513 cases from 1998 to 2002. Of these, 247 were filed in the course of Commission proceedings, while the other 266 were filed as challenges to final Commission determinations.
4. Through 2002, the Commission imposed 493 fines amounting to 330 million pesos (about US$31.3 million). Of that amount, it has collected 9.7% (slightly more than US$3 million) and revoked another 17.1%, leaving uncollected the remaining 73.2% (US$23 million).

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Chapter 4

Strengthening public finances

Fiscal policy has gained credibility, budget targets have been met and the public sector borrowing requirement has come down. But there are important fiscal challenges. The medium-term framework should be strengthened to entrench fiscal rectitude and consistency of fiscal policy over time. In the recent past, a large proportion of extra oil revenue has been spent wisely or saved. Guidelines should be set to deal with the current situation of oil revenues that are high and likely to remain so for some years ahead. These additional resources are not necessarily permanent. Rules should ensure that they serve to increase public sector net worth by reducing the public debt, financing investment and building up a sizeable Oil Stabilisation Fund. There are also development priorities (basic education, health, infrastructure, poverty alleviation) that require additional funding. These recurrent spending needs will have to be financed by permanent sources of revenue. A revenue-enhancing tax reform remains a priority. Non-oil related revenue is low relative to GDP and even with oil-related revenue (about a third of the total) the tax/GDP ratio is one of the lowest in the OECD.

Fiscal policy over the recent years, an assessment

Rigorous fiscal discipline has brought down the budget deficit...

Mexico has made good progress in fiscal consolidation since 1996 and has a good record in achieving budget targets, despite unexpected cyclical developments and volatility in oil-related revenue. By 2004, the financial deficit stood at ¼ per cent of GDP (narrow definition), while the broader public sector borrowing requirement excluding non-recurrent revenue (PSBR) was brought down to 2½ per cent of GDP, compared with more than 6% in 1999 (Table 4.1 and Figure 4.1). Higher-than-budgeted oil revenue (one third of total budget revenue) since 2002 has helped budget execution, while allowing higher public spending. Every year in the budget discussions, an oil price assumption is set and the "adjustment" mechanism to deal with price and revenue surprises is negotiated. For instance, in line with the rules applied in 2004 excess revenue from oil exports was allocated to investment by PEMEX, the state-owned oil producer.[1] Considering the rest of extra revenue – both oil and non-oil related – once discounted to take account of losses in

Table 4.1. **Public sector financial accounts**

Per cent of GDP

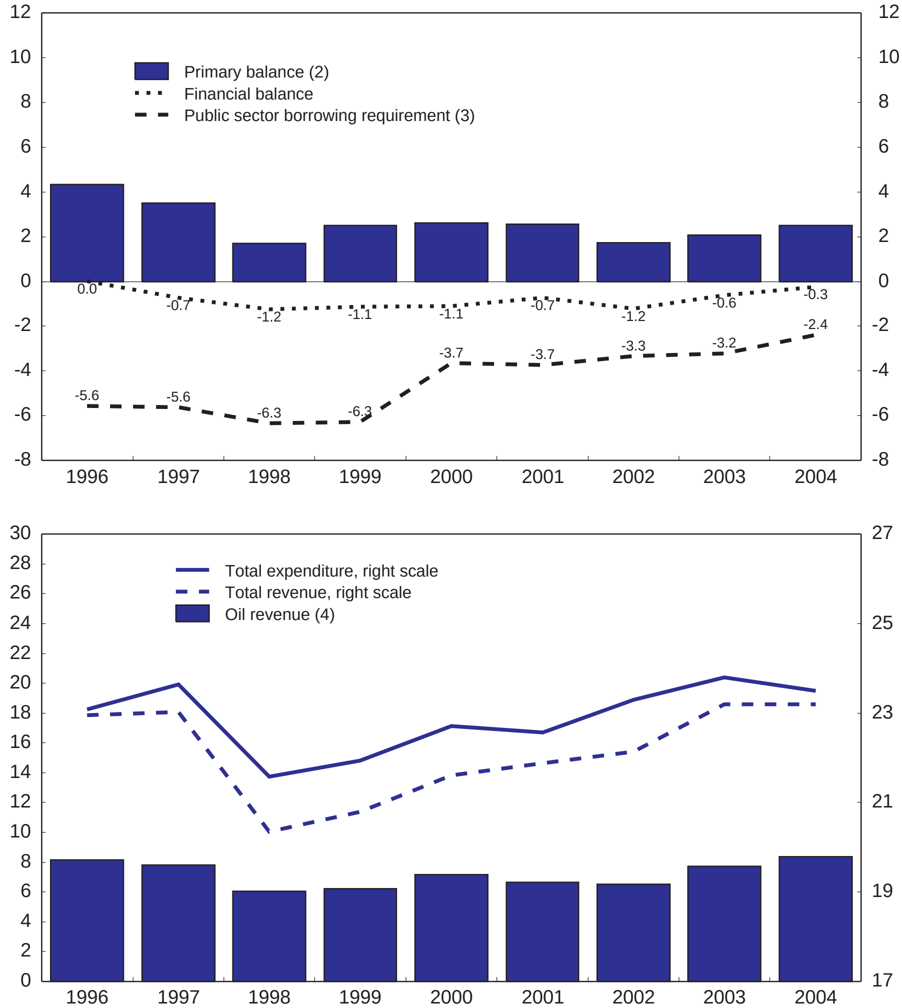
	1999	2000	2001	2002	2003		2004		2005
	Outturn	Outturn	Outturn	Outturn[2]	Budget[1]	Outturn[3]	Budget[1]	Outturn[3]	Budget[1]
Revenue	20.8	21.5	21.9	22.2	22.4	23.2	22.7	23.2	22.4
Expenditure	22.0	22.6	22.6	23.4	22.9	23.8	23.0	23.5	22.7
Financial balance	**–1.1**	**–1.1**	**–0.7**	**–1.2**	**–0.5**	**–0.6**	**–0.3**	**–0.3**	**–0.2**
Primary balance	**2.4**	**2.6**	**2.5**	**1.6**	**2.3**	**2.2**	**2.7**	**2.5**	**2.6**
Memorandum items:									
Interest payments, total	3.6	3.7	3.2	2.8	2.8	2.8	3.0	2.7	2.8
Of which:									
Provisions for support programmes[4]	0.5	1.1	0.7	0.7	0.5	0.4	0.5	0.6	0.4
Cost of IMSS reform[5]	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Revenue sharing	3.1	3.2	3.4	3.4	3.4	3.3	3.4	3.1	3.4
Public sector borrowing requirement (PSBR)[6]	**–6.3**	**–3.7**	**–3.7**	**–3.3**	**–3.3**	**–3.2**	**–3.3**	**–2.4**	**–2.4**

1. Approved budgets for 2003, 2004 and 2005. The target does not include the cost of the Voluntary Redundancies Programme to be covered by an adjustment of the deficit target.
2. The financial balance is affected by the liquidation of BANRURAL (increasing the deficit by about ½ per cent of GDP). The PSBR is not affected.
3. The financial balance and PSBR are affected by Voluntary Redundancies Programme (which amounts to 0.2 and 0.1% of GDP, respectively in 2003 and 2004).
4. Part of the cost of the support programmes for banks and debtors.
5. IMSS is the social security institute for private workers; the total cost of the reform includes both reduced revenues and higher expenditures.
6. Excluding non-recurrent revenue. The PSBR includes borrowing requirements related to direct long-term investment on infrastructure projects (PIDIREGAS), to the agency in charge of administration of the banking sector rescue programme (IPAB), the toll-road fund (FARAC), debtor support programmes and development banks.

Source: Ministry of Finance.

Figure 4.1. **Public sector budget aggregates**[1]

Per cent of GDP



1. The public sector comprises federal government and public enterprises under budgetary control (such as PEMEX). Financial intermediation by development banks is not included.
2. The primary balance is the financial balance less net interest payments.
3. Public sector borrowing requirement (PSBR) includes net costs of PIDIREGAS, inflation adjustment to indexed bonds, imputed interest on bank-restructuring and debtor-support programmes and financial requirements of development banks. Non-recurrent revenues (privatisation) are not included. Further adjustment to include the net non-recurrent capital costs of the financial sector support programmes would increase the PSBR.
4. Includes oil extraction royalties, VAT and excise taxes on oil products.

Source: Ministry of Finance; Banco de México; PEMEX.

some other revenue items and higher non-programmable spending, half of it was transferred to states to be spent on infrastructure (equivalent to about 0.3% of GDP). The other half was distributed equally, to improve the public sector balance, and to build up the Oil Stabilisation Fund. In addition to investment projects in the budget and those funded by extra revenue, the public sector continued to launch investment projects financed and built by the private sector with a deferred impact on the budget (PIDIREGAS). The Voluntary Redundancy Programme, which was introduced in 2003, also induced some additional current spending.[2]

The approved budget for 2005 projects a public sector deficit close to zero (0.22% of GDP) for the narrow definition and a slight decline in the broader PSBR. Total revenue is projected to be lower than in 2004, with no permanent increase in tax revenue in a context where oil-related revenue would decline.[3] The Voluntary Redundancy Programme remains in operation, absorbing some resources, although over the longer run it should give more flexibility and allow savings on the government payroll. Total federal investment budget is projected to amount to 2.4% of GDP, including investment by federal agencies and ministries, the amortization of past PIDIREGAS and the investment budget transferred to states and municipalities. The adjustment mechanism set for 2005 implies that, if revenues are lower than budgeted, there will be general budget cuts or, if the shortfall results from oil-related revenue, resources will be drawn from the Oil Stabilisation Fund. On the other hand, excess revenue from oil exports – generated if oil prices are above US$27 per barrel on average over the year, a likely occurrence on current oil price trends – will be allocated to infrastructure projects in states for half and for investment in PEMEX exploration, production and refining for half. The rest of excess revenue, once deductions are made for other revenue losses or higher non-programmable spending will be used directly for a quarter to improve the public sector balance; another quarter will go to the Oil Stabilisation Fund and the rest will be directed to an investment fund for PEMEX.

… but the underlying fiscal position is not yet comfortable…

Budget discipline is ensured on an annual basis; budget deficit targets are attained and the structure of the public debt has been strengthened. But the underlying fiscal position presents two main weaknesses:first, non-recurrent revenues have served to reduce the budget deficit (both narrow and wider PSBR), a practice often used in other OECD countries; second, off-budget operations have created liabilities and spending pressures are expected to rise as in other countries, because of population ageing in particular. Over the years, Mexico has used higher oil-revenue as well as declining interest payments to increase primary spending and reduce the budget deficit. Furthermore, as in many other OECD countries, it has relied on one-off measures which have helped improve its fiscal position, at least temporarily. For instance:

- The "financial balance" (narrow definition) has included privatisation proceeds and other non recurrent revenue although available information allows constructing the series without non recurrent revenue. And since 2000, the broader "public sector borrowing requirement" concept is published with and without non recurrent revenue.
- Mexico has used various public private partnerships schemes. These have allowed an expansion of investment under the tight budget constraint. Most recent experiences include PIDIREGAS and projects for the provision of services, PPS (see below).
- A tax amnesty was introduced in 2000; as is usually the case with these operations, it brings in additional revenue initially, but it risks fuelling expectations of future leniency.

Some of these operations have merits on their own (seeking efficiency gains for instance in the case of privatisation or public-private partnerships). However, one-off measures, when inadequately reported, tend to obscure the evolution of the underlying fiscal position and reliance on temporary fixes can end up postponing structural adjustment, as experienced in several OECD countries over the past few years (Box 4.1). In Mexico, much progress has been made in recent years to provide a clearer picture of the underlying fiscal position, for instance with the regular publication of the "public sector

Box 4.1. **The underlying fiscal position and the use of one-off measures***

As illustrated by other OECD country experiences, governments often have recourse to one-off measures and "creative accounting" operations that affect the fiscal balance outturn in a given year. Examples of such operations, drawn from experiences in Europe, have been: *i)* privatisation (first round impact), when it is included above the line; *ii)* capital injections into loss making public enterprises, when treated as a financial transaction (below the line) instead of capital transfers; *iii)* public-private partnerships, which initially reduce the deficit and debt (for a given level of investment in public infrastructure); *iv)* tax amnesties, which can serve to broaden the tax base, but may fuel expectations of future leniency. The scale of these operations has varied across countries. Over the 2000 to 2004 period, recourse to such measures has reduced the budget deficit by an average 3 percentage points of GDP per year in Greece, between 1 and 1.5% in Italy and Portugal, and about 0.5% in Belgium and Ireland.

Creative accounting and one-off measures have also been used in OECD countries outside the European Union. Some of the US states for instance – which are subject to relatively constraining budget rules – have had recourse to a number of operations that have improved budget outturns at least for one year: selling off buildings (to lease them back); delaying tax refunds; accelerating collection of fees.

* For more details, *cf*. V. Koen and P. Van den Noord (2004).

borrowing requirement", a wider concept of the public sector deficit, and of corresponding broad public debt data, but there remain some accounting issues. It is desirable to clarify further the evolution of the underlying fiscal position and provide more comprehensive information to the public. An important step would be to publish a consolidated general government account including states and local governments. For the time being, each level of government prepares its own public accounts, which have yet to be harmonised. In the longer run, PEMEX should be separated from the consolidated general government accounts, as is done with the Norwegian Statoil.

... and there is no room for fiscal policy to smooth the cycle

The importance for the budget of oil-related revenue, part of which is subject to volatility in oil prices, has meant that the oil price cycle has often played a more important role for fiscal policy than the business cycle. It has not been possible to calculate indicators of cyclically-adjusted budget balance for Mexico using national account data for the consolidated general government as done for 28 other OECD countries, because of the lack of such data comprising consistent financial accounts at the state and local levels and of the incomplete recording of transactions between the government and public enterprises on that basis. Moreover, there are well-known difficulties associated with the estimation of potential output and hence output gap and structural unemployment. This is particularly problematic for economies experiencing important structural changes such as Mexico over the past 10 to 15 years.[4] Evidence shows, however, that there has been no room for fiscal policy to smooth the cycle during the downturns in economic activity of 1995 and 2001-02. In particular, pro-cyclical spending cuts were carried out during the 2001-02 downturn, in order to keep the budget on target. In 2003 and 2004, on the other hand, revenue increases related to higher world oil prices were transmitted into higher spending. Fiscal policy has also responded to changes in interest payments. Falling interest payments during most of the post-1995 upswing were used to increase primary spending. Conversely, higher interest payments in 1995 and 1999 were offset by cuts in primary spending.

Two main factors contribute to explaining the orientation of fiscal policy: first, it has proven politically difficult to resist pressure for increased spending when revenue (especially oil-related revenue) was high or when interest payments were declining; second, as in other emerging economies, achieving budget targets, even if it requires cutting spending during a downturn, is a priority for policy makers to strengthen credibility.[5] The adjustment mechanism established each year to help budget execution implies pro-cyclical spending cuts in case of revenue shortfalls; on the other hand, it limits pro-cyclical spending increases when revenues exceed budget projections. The adjustment guidelines introduced in 1998 for the first time have thus aimed at stabilising the budget balance, rather than economic activity.

Investment has been affected by spending cuts

Typically in periods of high revenue, investment projects are launched, but when the business cycle or oil price cycle reduce revenue the brunt of budget cuts, in practice, falls on investment because of inertia in current spending. Investment spending cuts were carried out by the federal government at various instances of revenue shortfalls (*e.g.* 1998, 2001). The "stop and go" approach to public investment is inefficient and costly, whether it concerns cuts in projects that carry a high social return or spending freezes on operations and maintenance, which often lead to faster wear and tear of public infrastructure. As it stands, the adjustment mechanism in place does not protect public investment from cuts in case of shortfall, but it ensures that in case of good revenue "surprises", part of the windfall is spent on investment, one-half of extra revenue (tax, non-tax and oil) being channelled to states for infrastructure spending. The way states deal with transfers earmarked for infrastructure (whether budgeted or funded by windfall revenue) is highly relevant to gauge the effective capital formation in the country (Chapter 5). Besides public investment projects, which have been held back by budgetary constraints and are vulnerable to adjustments in case of budget surprises, large infrastructure projects in the energy sector have been undertaken by the private sector, with payment due by the public sector upon completion. By 2005, the scale of these projects (PIDIREGAS) is already larger than traditional public investment (Figure 4.2). These projects once in operation generate an income flow expected to pay for their cost. They are recorded in the broader public debt. Other projects involving private investors have also been used, including independent private producers of energy and projects for the provision of services (*Proyectos para la prestación de servicios*, PPS). Such projects, which are not considered as public debt, involve a long-term contractual obligation of the public sector to pay for the service, subject to annual budget approval.

The Oil Stabilisation Fund has played a limited role only

The Oil Stabilisation Fund (OSF) was created in 2000 to mitigate the impact of fluctuations in public receipts associated with a high dependence on volatile oil incomes. During the "good years", when public revenues exceed budget projections, a fraction of the windfalls would flow into the Fund. In "bad years", when revenues fall short of initial estimates, this would be partly compensated by contributions from the oil fund The substantial revenue windfall recorded in 2000 provided the resources for the Fund creation.

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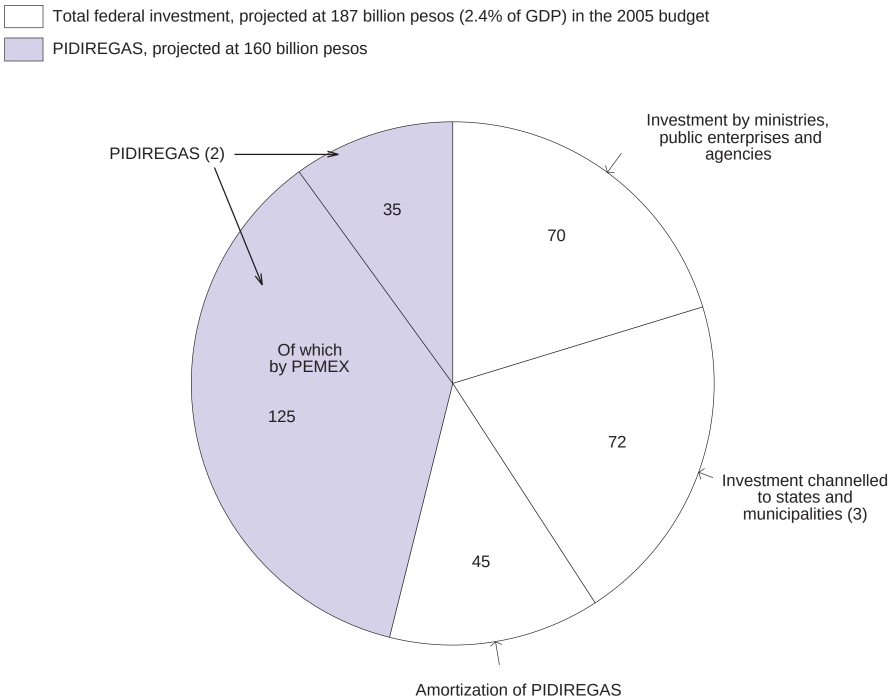
Figure 4.2. **Public investment and public-private partnerships in 2005**[1]

In billion of pesos



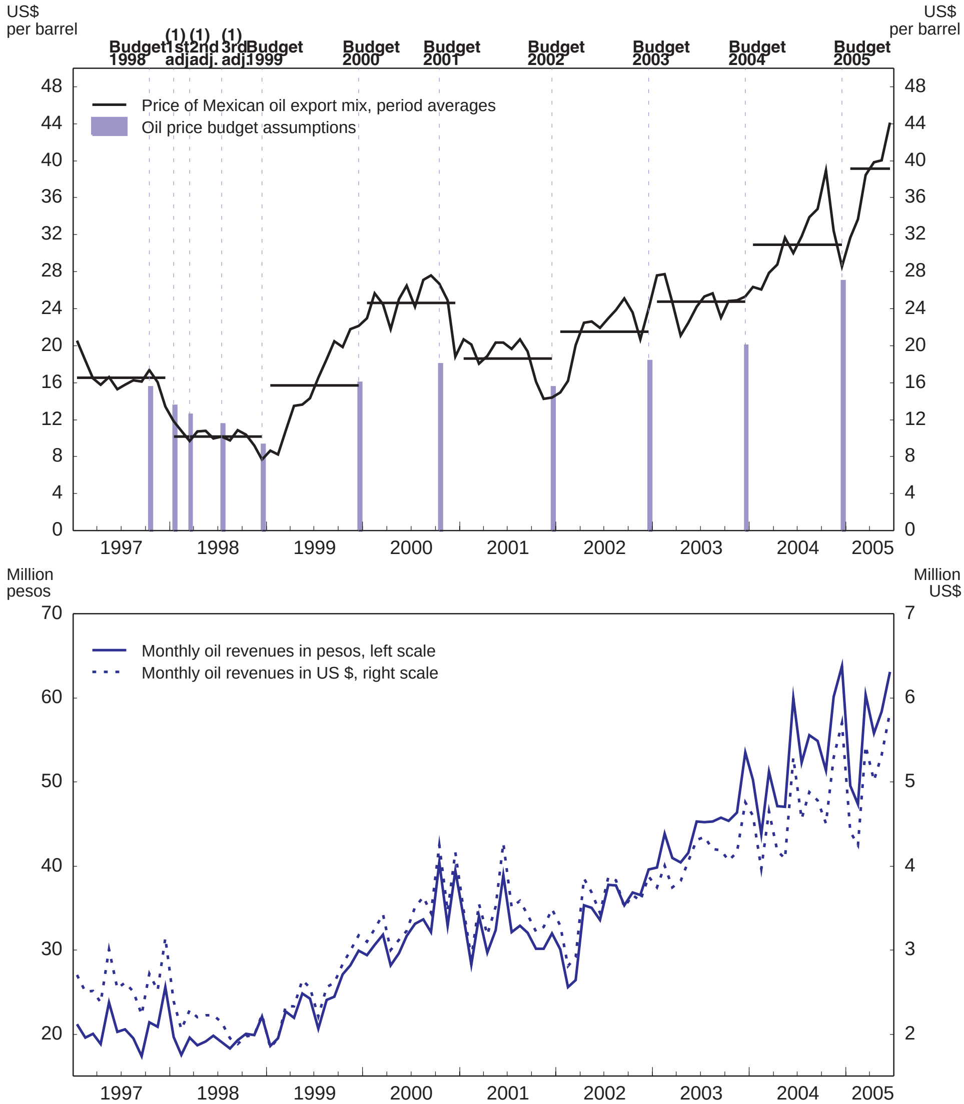
1. Projects for the provision of services, *Projectos para Prestación de Servicios* (PPS), are not shown.
2. Projects financed by the private sector, with deferred impact on the budget.
3. Channelled through Ramo 33 and the PAFEF (Chapter 5).

Source: Ministry of Finance.

In 2003 and 2004, higher-than-expected oil prices permitted a build up of the Fund reserves, while the largest share of excess revenue went to investment and savings, leading to a reduction in the budget deficit.[6] All in all, transfers to the Oil Fund have been highly dependent on the oil price assumption negotiated and retained in the context of the budgetary process (Figure 4.3).[7] It would probably not be appropriate to transfer large amounts of resources in the Oil Fund as long as its existence and rules for its operations are not established by law, because a majority vote in Congress can deplete its resources. For instance in 2002, a transitory measure allowed it to be almost fully depleted. A strong case can be made for establishing a real contingency fund in the law, building up substantial reserves and setting the price of oil in the budget following a medium-term approach (see below).

Besides its lack of legal foundations, the current annual adjustment framework in which the Oil Stabilisation Fund operates suffers from a more fundamental flaw: it is only equipped to deal with short-lived fluctuations in oil prices or the business cycle, but does not protect the economy against a large and persistent adverse revenue shock. What the OSF does is smooth the adjustment of the budget in case of a drop in oil prices. On the other hand, if the price decline was persistent, an adjustment to the budget would still be required: the larger the needed adjustment, the more difficult politically and costly for the economy. This is a major drawback in the current context where the upward shift in oil prices and revenues may be more persistent and thus create the risk of an

Figure 4.3. **Oil prices and budget assumptions**



1. Adjustments made to the 1998 budget assumptions.

Source: Ministry of Finance; PEMEX.

unsustainable current spending spree. In the current setting, indeed, oil prices are bound to be sooner or later incorporated in budget making. For instance, the budget for 2005 is based on an oil price assumption which incorporates about two/thirds of the oil price increase since 2002.[8] As the oil reference price ratchets up, what is considered as "normal" revenue in the budget becomes larger and larger and it can be allocated to core spending programmes, such as basic education, health, poverty alleviation. However these items need predictable funding and should not be subject to the risk of budget cuts in case of persistent oil price decline. To address this concern, the medium-term fiscal framework should be strengthened, including a revamped Oil Stabilisation Fund, long-term spending targets and a tax reform.

Fiscal policy in a medium-term perspective

Fiscal policy and budgeting have improved...

Mexico has already made some substantial progress in improving the transparency of the budget and economic forecasting. It is moving towards outcome-oriented budgeting and more modern financial management (Annex 4.A1). But implementation has been slow, which is not unusual with budget reform experiences in other OECD members. As other countries, Mexico is encountering difficulties in feeding performance-related information into the budgeting process and resource allocation; getting policy makers in the executive and legislative branches to use available information is also meeting some resistance. Besides, Mexico faces some specific challenges: first, arrangements between the legislature and the executive in the budget process need to be clarified; second, it still has a weak multi-year framework for budgeting.

... but the budgetary process suffers from serious weaknesses

In recent years, because of the absence of a single political party majority in the Chamber of Deputies, the legislature has taken a more active role in the institutional decision process. The discussions between Congress and Executive about the approval of the spending budget decree for 2005 resulted in a gridlock, which has yet to be settled, illustrating a number of concerns related to budget making in Mexico:

- The spending budget and the revenue law are consistent. Both the Senate and the Chamber of Deputies are responsible for approving the revenue side of the budget (tax and non tax); then, only the Chamber is responsible for negotiating and approving the spending side of the budget but does not modify the budget balance.
- The absence of clear rules regarding the role of the executive and legislative branches in the budgetary process led to substantial changes in the allocation of spending for 2005, which were vetoed by the Executive Branch.
- There is also a lack of clarity in the respective roles of local, state and federal governments about: *i)* who should be responsible for spending; and *ii)* who should be accountable for the provision of public services.
- Budget negotiations are essentially focused on the short term. Revenue projections are largely based on short term views about the oil price; adjustment mechanisms to deal with revenue surprises vary from one year to the next; spending decisions, including investment projects, are dictated by short term considerations. The current fiscal framework appears ill suited to deal with the challenges posed by persistently but not permanently higher oil prices.

These shortcomings in the budget process and fiscal policy settings should be addressed.

The authorities aim at moving towards a medium-term oriented framework...

The reform proposal for the “Federal Budget and Fiscal Responsibility Law” submitted to Congress in April 2003 is still under discussion. The draft law addresses issues related to fiscal responsibility, setting a balanced budget as a target. It also removes uncertainties associated with the approval process of the budget, clarifies the role of Congress and defines the principles of a multi-annual macroeconomic framework. The draft law introduces a mechanism to set the annual oil reference price on a technical basis (using a medium-term average which smoothes recent developments and incorporates futures prices).[9] The proposal submitted in March 2005 sets rules to distribute extra revenue: 50% would go to the Oil Stabilisation Fund. The rest would be allocated to two other stabilisation funds in equal proportions, one fund to smooth transfers to states and municipalities and the other fund for infrastructure investment by PEMEX. These three stabilisation funds would thus have a legal basis and they would be drawn on only when oil prices fall below the reference price. Once the funds have reached a certain level, established in the law, extra revenue would be used to improve the public balance and to finance infrastructure projects. Allocating additional resources of a non-recurrent nature (*i.e.* those related to persistent but not necessarily permanent oil price shifts) to non-recurrent uses and not to current spending of an essential nature is appropriate. In the current situation of oil prices that are high and likely to remain so for some considerable time, such rules can help protect the welfare of future generations and maintain the net worth of the public sector. The initiative also establishes the existence of the earmarked transfers to states for infrastructure and financial strengthening (PAFEF), although it does not set its amount (Chapter 5).

The reform proposal includes some important principles of medium-term programming and should be adopted without delay. Focusing more on medium-term policy objectives and assumptions would be very helpful, the objective being to improve inter-temporal consistency of fiscal policy. If approved, the new budget law project would require the government to explain how annual budget projections are consistent with medium-term targets, thus helping to ensure that needed, but painful, measures are not postponed. Advertising longer-term fiscal challenges and constraints more transparently, as intended, should help the public better understand underlying public finances weaknesses, thereby helping to gather a consensus for the needed reforms. It should be made clear that there are spending pressures that will have to be financed on a predictable basis in the short and medium term (see section below), while one-third of budget revenue is oil-related and part of this is subject to volatility related to world oil prices.

... but a more drastic approach is now needed

The balanced budget target included in the Budget Law initiative should help ensure responsible fiscal behaviour while better insulating the budget from political pressure and economic shocks. It is a major improvement on the current setting. But a fully-fledged medium-term fiscal framework should go even further than the current proposal. The law proposed does not prevent higher revenue in the high phase of the business or oil price cycle from translating, at least for a part, into permanent higher current spending, nor key spending from being cut in the low phase of the cycle. It might be premature in the case of Mexico to establish the budget target in terms of the cyclically-adjusted (or structural) budget, as done for instance in Chile.[10] In any case, the predominance of the oil price cycle on Mexico's budget revenue dwarfs the impact of the business cycle.

Besides the underlying medium-term forecast of key macroeconomic variables, a fully-fledged medium-term framework should include:

- *a set of mechanisms for a rational allocation of higher, but not permanently higher, oil revenues to limit the risk that "core" public expenditures be subject to budget cuts;*

- *a projection of revenue over the medium term, which errs on the side of prudence, clearly identifying the more predictable component (tax revenue and the "permanent" component of oil related revenue);*
- *rigorous guidelines on the evolution and structure of spending.*

In addition to embedding the OSF in the Law, several conditions will have to be filled to deal adequately with the new oil environment. *The oil reference price used for budgeting should be based on conservative medium-term projections aimed at smoothing the path of public revenues and spending over time.* In practice, it is difficult to pin down a long run reference for oil prices nor is it easy to distinguish between a permanent and a temporary oil shock. The proposed formula because it insulates the annual reference price from political manoeuvring is a major improvement on current practices. It would be appropriate to go even further. Because the cost of adjusting to a lower price is much greater than the other way around, extreme prudence is required in estimating the reference price. Instead of changing the reference price every year according to the formula, it would be prudent once the long-run oil price is defined, to keep it over a period of several years (the number of which will have to be defined).The settings for transferring resources to the OSF and using them over time in a context of uncertain oil prices should be carefully designed. The investment strategy of the OSF also needs to be decided, as well as the fiscal treatment of any Fund earnings. The Norwegian Petroleum Fund and Chilean Copper Fund, though set in different economic contexts, can serve for comparison in setting the rules for a contingency fund (Box 4.2).

Given the current abundance of fiscal resources and the associated risk of a ratchet effect bringing current spending up to ultimately unsustainable levels, there is also an urgent need for clear long-term expenditure targets. There should be current spending limits, the ceiling being set in accordance with the need to protect essential expenditures on human

Box 4.2. **Stabilisation funds: the cases of Norway and Chile**

Norway's Petroleum Fund

Oil and gas resources were discovered in the North Sea in the late 1960s. Exploiting them in the hostile maritime environment has been costly: Norwegian oil and gas production were modest at first. Norway is now the world's third largest oil exporter. The state owns part of the production facilities via the state-owned company Statoil, and a set of profit taxes and special taxes on oil and gas sales by other operators means that most of the economic rent accrues to the state, in much the same way as in Mexico. Until the mid-1990s, net oil export revenue was in effect spent as it was earned, the equivalent of about 4% of GDP being transferred on average to the State budget each year (accounting for less than 10% of budget revenue, a much lower share than in Mexico today) – with considerable annual variations. But with the value of production increasing, and expected to increase for some years to come, it was estimated that the oil revenue was so large that it would be impossible to spend it wisely, and that the structure of the economy would develop in ways making it very difficult to readjust after the oil stopped flowing. Therefore in 1990, the Norwegian government decided to create an investment fund, channelling oil revenues into it, and to transfer only the return to the fund to the State budget. By converting oil assets in the ground into financial assets, Norwegian living standards can be supported by them long after the oil itself is exhausted.

Box 4.2. **Stabilisation funds: the cases of Norway and Chile** *(cont.)*

The "fiscal rule" that governs transfers from the Fund to the government budget states that only the "real return" may normally be transferred. This is defined to be 4% of the market value of the Fund at the end of the previous year. Higher amounts are permitted if the economy is cyclically weak, or if the Fund's value is adversely affected by financial market crises, on the understanding that in subsequent years, there will be a transition back to the underlying fiscal rule trajectory. The Fund remained empty until 1996 because of a prolonged recession and comparatively low export earnings. It now receives all revenues from export sales, channelled *via* the central bank, and invests them in foreign financial assets only. The rationale for this is to insulate the exchange rate from upward pressure, and thus avoid damage to the traded sector. By end-2005, the value of the Fund is expected to reach about 100% of mainland GDP (*i.e.* total GDP excluding the activities of the off-shore oil sector).

The investment policy guidelines are laid down by the Ministry of Finance and there are strict guidelines on the maximum positions that can be taken in individual companies and on the maximum investment risk. At present, 50 to 70% of the portfolio is allocated to fixed-income assets and the rest to equity. By region, 40 to 60% is invested in Europe and the rest in the Americas, Asia and Oceania. Most allowable investments are in OECD countries, but emerging markets are also represented. A small portion of overall fund's assets is allocated to corporations deemed to be environmentally-friendly and, more recently, ethical guidelines have been introduced. There are no investments in tobacco companies, for example. The latest estimates project a maximum size of the Fund at 180% of mainland GDP in 25 years' time. After that time, oil reserves will be exhausted and the value of the Fund (and transfers from it) will gradually shrink relative to GDP.

Chile's Copper Stabilisation Fund*

Chile, the world's largest producer and exporter of copper, provides another example of a commodity price stabilisation fund. The Chilean state owns the largest copper company, Corporación Nacional del Cobre (CODELCO), which passes on all its profits to the treasury. In 2004, CODELCO's revenues represented less than 5% of Chile's GDP and about 14% of the budget revenue (down from 20% in the mid-1980s), a much lower contribution to the budget than oil-related revenue in Mexico's budget. The Copper Fund is a trust account managed by the Central Bank, which is required to generate a specified return. It is overseen by a board, including representatives of CODELCO.

The Copper Stabilisation Fund was created in 1985 to smooth fiscal revenues in face of copper price volatility. Symmetric saving-spending rules were set on the basis of a long-term (10 years) reference price for copper estimated by an independent committee of experts. If the actual price exceeds the reference price, then the difference is transferred to the Fund. If, as in 1998-99 and in the early 2000s, the actual price falls below the reference price, the difference is withdrawn from the Fund and transferred to the government budget. These transfers are not earmarked but allocated through the normal budgetary process: these transferred resources have been used to meet CODELCO's commitment to transfer 10% of its gross export revenue to the military (which is now incorporated in the budget). They have also been used for instance to finance buy-back of public debt.

Besides the Stabilisation Fund, Chile has adopted a "structural" surplus rule in which structural (*i.e.* "cyclically-adjusted") revenues are also adjusted for fluctuations in copper revenues (OECD, 2003).

* See OECD (2004) Budgeting In Chile, 25th Annual Meeting of Senior Budget Officials; Tsalik (2003); and OECD (2003), *Economic Survey of Chile*. See also Davis *et al.* (2003) for arrangements in oil-producing countries more generally.

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capital development, basic health and poverty alleviation, which are recorded as current spending. Higher oil revenue does not eliminate either the need for a tax reform that reduces distortions and enhances revenue. *Additional spending needed to ensure the delivery of essential services over the coming years should be financed by increases in non-oil tax revenue.*

Assessing medium-term spending pressure

There are needs for additional public spending over the short to long term. Spending projections for 2005, despite abundant revenue created by high world oil prices, exemplify some of the rising spending pressures. Already a significant proportion of public spending is committed to public sector pensions. Regarding investment spending, an increasing part is spent on amortization of PIDIREGAS projects.[11] And the share of the investment budget channelled to states and municipalities has increased from 29% in 2000 to 39% in 2005, considering both earmarked grants and additional transfers on account of extra revenue since 2003.[12] As a result, traditional public (*i.e.* federal) investment now commands a smaller share of the budget, while the proportion of off-budget investment continues to rise.

Over the longer run, efficiency gains in delivering services are needed at all levels of the public sector, and they should contribute to improving the quality of services. A better allocation of resources as well would bring benefits both in terms of equity and efficiency. Beyond what can be achieved through these gains, there will be, however, increasing demands made on the budget, including the following:

i) *In education more children have to be enrolled and basic investment shortages need to be addressed*. Considering only quantitative improvements, these items would require additional spending of about 1½ per cent of GDP, close to the objective set by the current administration for 2006.[13] Increases in the system's efficiency are also needed. They could be obtained through appropriate reforms (Chapter 2).

ii) *In health, implementation of the new "system for social protection in health" will be costly*. The so-called *seguro popular* which provides basic health insurance to the currently "uninsured/uncovered" population is officially estimated to cost 0.8% of GDP per year, when in full operation.

iii) *There are pressures from population ageing, resulting from government employees at the federal and state levels*. The reform of the federal government employees' pension regime (ISSSTE), currently under discussion, is expected to cost several percentage points of GDP over a limited number of years. This reform should be approved and implemented rapidly, as higher oil revenue over the coming years could finance the transition cost.[14]

iv) Even for private sector employees, who own capitalized individual accounts since the 1997 IMSS reform, *the minimum guaranteed pension will weigh on the budget*. Because of low rates of return on savings accounts, pension benefits to which private sector workers are entitled are in many cases lower than the minimum pension.[15]

v) *The cost of amortising long-term infrastructure projects built under the hybrid PIDIREGAS schemes is already substantial.* It amounts to ½ per cent of GDP in the 2005 budget and is likely to remain between ½ and 1% of GDP per year for some time.

vi) There are other announced policy priorities which would imply additional spending, for instance for investment in R&D (where the objective is to double spending on R&D to about 1% of GDP).

Strengthening tax revenue

Abundant oil-related revenue has allowed maintaining over the years a low overall income and indirect tax burden and a relatively inefficient tax administration. Non-oil tax revenue is low relative to GDP and, even adding in oil-related revenue (about one-third of the total, part of which is volatile), the Mexican tax/GDP ratio is the lowest in the OECD as illustrated in Chapter 1, Figure 1.12. On the other hand, there are development priorities – basic health, education, infrastructure and poverty relief – that require significant and stable funding. Low tax revenue has meant that the state oil company, PEMEX, has been subjected to excessive and inefficient taxation.[16] Even if the existence of a well established and substantial oil fund allows some smoothing of revenue volatility, it does not replace, nor should it delay, the fiscal reform that is needed to strengthen tax revenue on a durable basis.

Despite many drawbacks in the current system, reforms have been insufficient

Low tax revenue reflects a narrow tax base, while statutory rates are broadly in line with those in other OECD countries. Tariffs and customs rights have been reduced by trade liberalisation; at the same time, numerous exemptions and special regimes have limited the revenue-raising capacity of the tax regime. There have been positive developments over past years: *i)* a widening of the income tax base, in combination with a gradual decline in income tax rates, which is important to maintain Mexico's competitiveness; *ii)* a simplification of the personal income tax with a reduction of the number of brackets; *iii)* much more effective tax administration. Improving tax collection has helped increase tax revenue, both directly and indirectly, because of the benefits for tax compliance from increased perception of fairness. Despite this progress, there are still exemptions, tax deductions and preferential regimes on a broad range of economic activities and income that cause a drag on tax revenue, create uneven incentives across activities and severely complicate tax administration.[17]

The scale of exemptions is particularly striking regarding value-added tax (VAT). Zero rating is applied extensively to goods and services as well as to entire sectors of activity (agriculture and fisheries) while land transportation is exempt. Estimates for the 1995-2001 period show that the total cost of having widespread zero-rating and exemptions might have been as high as 2% of GDP on average. In addition, tax evasion on VAT was officially estimated at close to 2% of GDP in 2000-01.[18] VAT is normally easy to administer and control; it is also an efficient way of ensuring that at least some tax revenue is levied from the informal sector. On the other hand it is an inefficient mechanism for redistribution of income. The various preferential rates and exemptions of the VAT regime end up subsidising higher-income categories who spend more on food, medicine, books and periodicals, health care and education than do the poor.

The priority is to widen the tax base so as to reduce distortions and facilitate administration. Overall, tax revenue remains relatively low. On the income tax, some progress has been made. Given widespread poverty, there is not much room to increase the number of taxpayers under the individual income tax by reducing the threshold for effective taxation.[19] The income tax base could be broadened further, however, by reducing the scale of exemptions and special treatment which still erode the tax base. And on the VAT front, much remains to be done.

The tax initiatives for 2005 have fallen short of what is needed

As in previous years, the main objective of the tax reform proposed with the Federal Income Law for 2005 was to widen the tax base on VAT. This had proved impossible when already proposed in 2000. Since then, in order to try to gather a consensus on the reform, proposals have included options to introduce a sales tax at the state level. One of the most important tax proposals in the initial budget for 2005 was to lower the federal VAT rate, extend the base and give states some discretion over charging a sales tax. This option and others, such as reserving several points of VAT for the states, were discussed in the national convention on public finances (*Convención Nacional Haciendaria*) in 2004 (see Chapter 5). The reform proposal was rejected, while other discriminatory tax measures were taken to raise the required revenue, for instance the introduction of a tax on private aircraft (see Annex 4.A2). This kind of tinkering with the tax system is not unusual. However it cannot substitute for a reform. The new taxes introduced from one year to the next often go against the objective of facilitating business in Mexico and can be detrimental to the country's competitiveness. Furthermore frequently changing the system complicates tax administration and increases compliance costs for taxpayers.

Options for further reform (widening the tax base and improving tax collection)

Options for further reform include first and foremost the widening of the tax base, and then further improving tax administration. On VAT, getting rid of exemptions, zero rating and preferential rates in the border area would bring in substantial additional revenue and reduce the scope for tax evasion. Several options will have to be explored to make the reform politically viable, because of the strong resistance to base widening. One such option would be to retain a preferential rate or zero-rating for a few basic staples (milk, bread, tortilla, eggs) or to provide compensation for the lower income deciles through expenditure schemes, or both. Whatever the option retained, there are large economic gains to be achieved from eliminating or reducing drastically zero-rating and exemptions.

Although everyone agrees about the need to implement a tax reform, there has been no agreement on the kind of reform that should be implemented, and the government has not been able to gather a consensus to approve the reform proposals submitted over the course of past years. The fact that there has been "generous" oil-related revenue over recent years (with higher-than-budgeted oil prices every year since 2000) did not help. The current prospects of high oil prices over the foreseeable future will not help either. But a closer examination of Mexico's oil sector – with backlogs in investment; insufficient production and refinery capacity; low quality of the Mexican oil export mix – does not allow complacency on future trends in oil revenue. A stronger communication effort to promote the tax reform is required. The authorities have mostly focused on the need to raise more revenue on a more stable basis (which in itself is commendable). Policy makers should also address the need to inform taxpayers (hence voters) about the responsibilities (and accountability) of the various levels of government in the provision of public services,[20] and raise general awareness on rising spending pressures to meet commitments for the development of education, health care and pensions. States and local governments would need to share in the effort to raise more revenue nationwide.

Regarding tax administration, some improvements have been achieved. The current strategy to further modernise tax administration includes: *i)* a programme to invest in information technology; *ii)* a fiscal census aimed at improving control of individuals or enterprises without established premises (*no localizados*); *iii)* continuous training of the tax administration (SAT) staff. These projects should continue, but are not enough. More should be done to develop concerted action across levels of government (*e.g.* each level makes separate efforts to keep taxpayers registries). There should be more exchange of information, for instance between the Federal Taxpayer Registry (*Registro Federal de Contribuyentes*) and states registries for the payroll tax. To simplify tax collection, it would be desirable to define a single base for personal income tax, social security contributions and the contributions to the housing fund (Infonavit). Fostering an image of the SAT as a more effective and fairer entity can contribute to reduce tax fraud.

Clearly, while seeking to raise more revenue through base broadening and better collection, the government will also have to show improvements in spending effectiveness. In particular, since much of spending responsibility has now been decentralised to states and municipalities, it is important that the settings of decentralisation provide the instruments for better cost-effectiveness of spending at those levels of government (Chapter 5 discusses this issue). At the federal level, measures taken to rationalise the public administration (through the Voluntary Retirement Programme for instance) and to move towards more "outcome-based" budgeting can help.

Securing fiscal discipline in an oil-producing country: synopsis

As noted above, the project to reform the budget law would institutionalise automatic mechanisms to adjust spending in case of revenue shortfall or to allocate additional revenue, obtained during the year, including capitalising reserves in the Oil Stabilisation Fund. However, in a context of durably high oil revenue, these rules are not sufficient. The formula to establish the oil reference price in the Budget Law initiative allows some smoothing over time but it is not sufficient to prevent persistently high oil prices from translating into permanently higher current spending. This is illustrated in a stylised way in Panel A of Figure 4.4, which shows stylised options for budgeting in conditions of oil revenue that is high, but not necessarily permanently so.

The methods used in budget preparation and execution have been greatly improved over recent years, but they are not fully adequate on the spending side: they do not include systematic and stringent evaluation of spending programmes except for public sector investment projects which are subjected to a cost-benefit analysis; they have not delivered the capital accumulation that is needed; they have not allowed building up a large Oil Stabilisation Fund. The proposed budget law is an important step forward and it should be approved; but it will need to be complemented by binding fiscal rules to ensure responsible behaviour on the spending side. The balanced-budget target that is proposed implies that spending will be consistent with income, but it does not address possible problems in the structure of spending. In the current situation of oil prices that are high and likely to remain so for some time but not for ever, it is necessary that all extra resources are saved or spent wisely and do not translate into higher spending of a recurrent nature. The proposed formula to establish the annual oil reference price might not be as prudent as required. Once a prudent long-term oil price reference has been established, it should be maintained over several years and extra revenues arising from prices above the reference (*i.e.* revenue of a persistent but not permanent nature) should be used in ways that improve public sector net worth: capitalising the Oil Stabilisation Fund, reducing the public-sector debt, financing pressing infrastructure needs at the federal, state and local government levels as well as PEMEX (Panel B).

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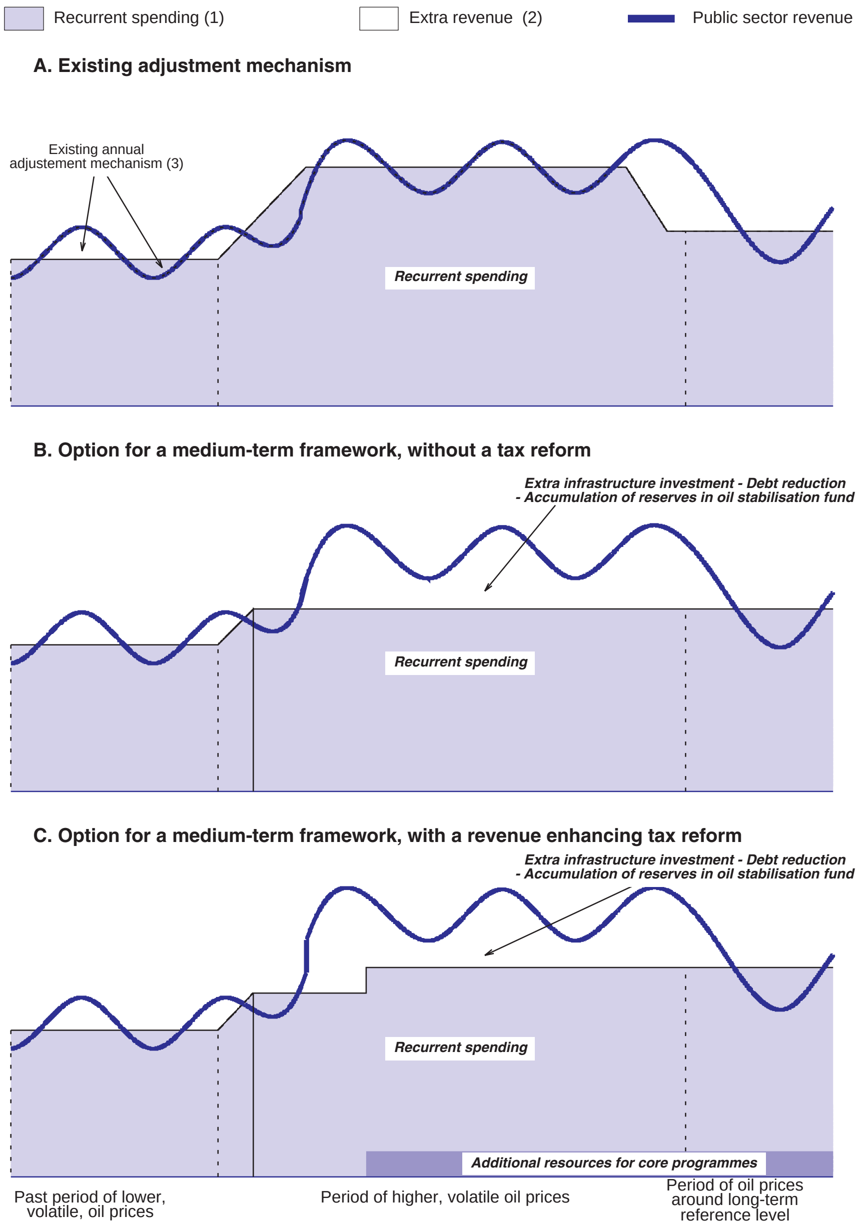
Figure 4.4. **Adjusting to higher oil prices: stylised options**



1. Recurrent spending is current spending plus core investment spending.
2. Extra revenue is total public sector revenue minus revenue financing recurrent spending.
3. The annual adjustment mechanism implies *i)* cuts in spending and desaccumulation from oil stabilisation fund, (OSF), if oil revenues are lower than projected; *ii)* increases in spending, accumulation of reserves in the OSF and debt reduction, if oil revenues are higher than budgeted.

Source: OECD Secretariat.

Additional resources required to finance higher spending of a recurrent nature (basic education and health for instance) should be obtained through a revenue-enhancing tax reform (Panel C). All levels of government, not just the federal government, should be involved in raising more revenue, as discussed in the next Chapter. Efficiency gains and

Box 4.3. **Recommendations for strengthening public finances**

Medium-term approach to budgeting

- The proposal for a "Federal Budget and Fiscal Responsibility Law" should be approved.
- Settings for a fully-fledged medium-term approach to budget making include a comprehensive set of multi-year objectives, and projections. Stringent analysis on cost-efficiency of spending is an integral part of budget execution. Care should be taken to address these concerns in applying the new law, when approved.
- The proposed formula for setting an annual reference price is a major improvement on current practices. It would be appropriate to go even further: because it is difficult to assess the long-run price of oil and the costs of adjusting to lower prices are large, the oil reference price underlying the budget should be based on deliberately prudent projections and remain unchanged over a period of several years (the number of which will have to be defined).

Creating a well-established Oil Stabilisation Fund

- The Oil Stabilisation Fund should be established by law, as proposed, and rules for its operation should be carefully designed so that it can fulfil its objective of insulating the budget from oil revenue uncertainty and volatility.

Guidelines on the use of higher oil revenue

- In the current situation of oil prices that are high and likely to remain so for several years, guidelines should be put in place to ensure that extra resources are saved or spent wisely, as proposed. The oil price rise should be treated as a transitory (or persistent but not permanent) shock.
- Extra resources of a non-recurrent nature should be oriented to non-recurrent spending. Guidelines should be set to ensure the following allocation: *i)* capitalising the Oil Stabilisation Fund; *ii)* reducing the public sector debt; *iii)* financing infrastructure investment by the federal government, states and municipalities as well as PEMEX. The proposal addresses these concerns, although what is to be considered as extra resources should be defined more prudently (see considerations on the oil reference price above).

Increasing tax revenue while reducing distortions

- The most promising option for tax reform is to widen the VAT base, so as to reduce distortions and facilitate tax administration. Compensation of low-income categories could be introduced at the same time, either through direct transfers or by retaining zero rating or a preferential tax rate on a few basic staples.

Current expenditure ceilings

- There should be a current spending limit. Under the ceiling, core current spending (poverty reduction, basic education and health) needs to be protected; it should not be subject to oil-revenue volatility.

Pressures for additional spending

- Over the short to medium term, there are needs for additional funding of core programmes in education and health in particular. Financing should come through durable and predictable revenue increases, *i.e.* as a result of a revenue-enhancing tax reform or a mix of revenue-enhancing solutions.

The public sector employees' pension system

- The public sector employees' pension system (ISSSTE) reform should be passed and implemented without delay. The transition cost would be felt for a limited number of years. In the current context of high oil revenue, its financing would not squeeze other spending. The reform would contribute to strengthen the underlying fiscal position, which is important because oil revenue abundance may not be permanent.

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outcome-based budgeting should also contribute to improving the quality of public services. Some additional resources for core spending programmes could also be obtained from a political decision to reduce subsidies, limit fiscal exemptions and cut fiscal expenditure.

Detailed recommendations to strengthen public finances are presented in Box 4.3.

Notes

1. Under the ARE (*aprovechamiento de recursos extraordinarios,* excess profit fee), proceeds from the additional tax levied on PEMEX when oil prices rise above the reference price in the budget were allocated to investment in PEMEX.
2. The budget deficit target was set excluding exceptional spending on the Voluntary Redundancy Programme, estimated at 0.2% and 0.1% of GDP respectively in 2003 and 2004. Adjustment to the deficit was authorised to cover for this cost. The programme is expected to allow annual savings of about the same order of magnitude on account of redundancies. The number of federal government employees participating each year in the programme has reached 12 000 to 15 000 persons.
3. As usual during the annual budget discussions, much attention was attached to the oil price assumption underlying the budget. The initial government proposal of US$23 per barrel in 2005 was revised up to US$27. The price of the Mexican oil export mix is typically US$10 to 15 lower than the WTI-mix price or Brent oil price projected by the OECD, reflecting lower quality. In 2004, the oil export price (for the Mexican mix) averaged US$32 *vs.* a budgeted US$20, implying a large positive "surprise" on oil revenue. The OECD projections released in May 2005 assume that world oil prices will on average be US$10 per barrel higher in 2005 than in 2004.
4. Details on the OECD methodology to cyclically-adjusted budget balances and revised fiscal elasticities for 28 OECD countries are presented in Girouard and André (2005). On Mexico, attempts to calculate the fiscal policy stance, based on public account data, include: IMF (2003); Sidaoui (2004) and Meshcheryakova (2004).
5. See *Fiscal Adjustment in Latin America: Trends and Challenges*, Papers presented to a Conference at the OECD in November 2004 (forthcoming).
6. According to the rule established in the budget for 2003 and for 2004, the proportion of the revenue windfall that went into the fund was 25% of extra revenue, discounted to take into account losses on other revenue items.
7. Transfers to the Oil Stabilisation Fund (OSF) amounted to 11.5 billion pesos in 2004, compared with 6.3 billion in 2003, *i.e.* a cumulative 0.3% of GDP over two years. Part of the oil fund resources were used to buy "options" in 2004 to cover against risk of a future fall in world oil prices. As of March 2005, the balance in the OSF amounted to close to 12 billion pesos (0.2% of GDP).
8. The oil price assumption for the Mexican mix in 2005 – at US$27/b – is 11 dollars higher than the 2002 price, whereas the oil price at the end of 2004 was already almost 18 dollars above 2002.
9. In the Budget law initiative, the oil reference price would be set as the minimum value between *a)* average prices in the past 10 years and futures 3 years ahead, and *b)* the average price of the futures for the year being budgeted, times a factor of 0.84.
10. Measuring potential output and output gaps is difficult, estimates could be erroneous and procedures to calculate budget aggregates on a cyclically-adjusted basis are not straightforward. Estimating cyclically-adjusted budget balances *ex post* would be useful to assess the policy stance, but basing policy decisions on highly uncertain measures would be problematic.
11. These projects consist mostly of PEMEX infrastructure investment projects constructed by the private sector, but financed by public sector debt. The revenue flows generated for PEMEX by these capacity-enhancing projects finances the amortisation of the investment; but at the same time the older PEMEX installations are generating less and less revenue, so that there is a net additional cost to the budget.
12. Transfers to states for investment are channelled through traditional earmarked grants (*ramo* 33) and the more recent Program to Support the Strengthening of Federal Entities, PAFEF (*ramo* 39), which all include an investment component. As from 2003, part of revenue in excess of budget projections is also channelled to states for infrastructure. See Chapter 5.

13. The estimate includes both investment needs and what is required to bring enrolment of 5 to 14 year-olds up to the OECD average.

14. Under the proposed reform, pension contributions would be channeled to individual accounts, allowing portability. The transition generation would receive a bond recognising as debt their accrued pension rights, maturing at the time corresponding to the retirement age of the worker. There are also liabilities associated with various pension regimes: for state employees, development bank employees and IMSS staff (social security institute for the private sector). See *Convención Nacional Haciendaria (2004).*

15. The fact that low-income workers are entitled to the minimum pension after 24 years of affiliation represents a disincentive to remain in the formal sector and continue to contribute to the pension funds. The costs for the budget from minimum pensions were heavily underestimated when the reform took place in Mexico as in Chile (2003 OECD *Economic Survey of Chile*).

16. Under the fiscal regime in place, PEMEX has not had enough resources for undertaking its development projects, even though recently part of extra oil revenue was set aside for PEMEX investment on exploration and capacity extension. A new tax regime was approved by Congress in June 2005 (see Annex 4.A2).

17. Under the individual income tax regime, there are exemptions for fringe benefits; medical, dental, hospital costs, and since 2002, medical insurance premia and contributions to retirement savings accounts are deductible from the tax base. There is a "simplified" regime, *i.e.* a reduction in taxes for income received by individuals from agriculture, livestock, forestry and fishery. This tax reduction is being brought down from 44.8% in 2005 to 42.9% in 2007.

18. The VAT regime has a standard rate of 15%, a 10% rate in the border area, zero-rating for food and medicine and there are numerous exemptions for goods and services that are consumed by the population at large. Evasion is measured as the difference between the theoretical revenue collection, based on the special treatment and exemptions included in the law, and actual VAT collection. Estimates are made by the *Centro de Investigación y Docencia Económicas, CIDE.* See also *www.cefp.gob.mx*.

19. Formal sector employees start paying positive income tax when earning incomes somewhat above 3 minimum wages. About 50% of the population (and 40% of households) is below that threshold, which corresponds broadly to the threshold of poverty in Mexico. For details on poverty and income distribution, see Chapter I, Table 1.3 and Annex 1.D in OECD *Economic Survey of Mexico*, January 2004. See also Ministry of Finance (2005).

20. According to *Survey* results, the population at large is poorly informed about who is accountable. Only the population with higher education (and higher income) has some knowledge of the level of government providing services, such as education (basic and higher secondary), health care, poverty alleviation, security… and these income categories are not very likely to be users of public services (see Hernandez Trillo and Torres Rojo (2004). See also Chapter 5.

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ANNEX 4.A1

*Reforming the budget process**

Role of the Congress and the Executive in the budget process

The Chamber of Deputies participates with the Senate in the approval of the Federal Income Law, which sets the size of the budget deficit and expected revenues for the year ahead. Over the period 2002-04, Congress approved a deficit which was strictly in line with the proposal of the executive; in the 2005 budget, a small difference emerged (less than 0.1% of GDP). The oil price assumption on which the budget is based is an important part of the negotiations about revenues. Once the income law has been approved by both the Chamber of Deputies and the Senate, the Chamber of Deputies turns to the expenditures budget (*Presupuesto de Egresos*). It cannot modify the budget balance or raise new revenue to increase spending. It can modify the draft budget reducing overall expenditures or specific expenditure items. In principle, it can re-allocate spending across programmes, departments, or spending units. The basis for this is in the legislation – which is the case in half of OECD countries; in the others, the rules are inscribed in the Constitution.

There is no formal pre-budget debate in the legislature before the budget proposal is submitted to the Chamber of Deputies, which is not unusual in the OECD. The various steps of the budget preparation are now spread over several months. The process, which ends in September, starts earlier than was previously the case; and the Budget Committee at the Chamber of Deputies participates in the preparatory stage of the drafting. Another recent improvement, made through a constitutional reform passed by Congress in 2004, lengthens the period for the approval process: instead of a few weeks only, a period of nearly 3 months is being allowed between the submission of the draft budget (to be made by 8 September) and the date for approval (15 November, which is extended to 31 December in case of non approval). The process has been streamlined thanks to the use of modern information systems.

In general, the Chamber of Deputies approves the budget with minor changes only – as is the practice in most OECD countries. There is still no provision to be applied if the budget is not approved by the end of the legislation. In practice, with a divided Congress since 1997, this had not occurred, and the budget had always been approved in time. However, for the 2005 budget, a legal dispute occurred between the Executive and the Chamber of Deputies in Mexico concerning several aspects of the approved budget

* The information is based on official sources (Ministry of Finance) and the OECD/World Bank Budget Practices and Procedures Database 2003. See also I. Joumard *et al.* (2004), “Financing the effectiveness of public spending: experience in OECD countries”, *Economics Department Working Paper* No. 380.

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for 2005. The case was submitted to the Supreme Court which ruled on the matter in May 2005; its decision was that the Executive Branch has faculties to veto the budget, one of the issues under discussion. The Court did not rule on the limits the Chamber of Deputies has when modifying the Executive's Budget proposal.

Moving towards "outcome-based budgeting"

Mexico has been moving towards outcome-based budgeting. The aim is to set and report on targets and to use these in internal decision making processes taking place in ministries and government agencies. The full implementation of such a process is long. OECD experience shows that while performance targets are included in the budget documentation of two thirds of the countries, only about half of those monitor performance against the targets. Furthermore, the extent to which results are actually used in decision making is very limited.

Major steps have been taken, most of which starting in 2001, with a view to simplify and clarify the budget. The steps have included: *i)* widespread use of information technology; *ii)* better defined objectives and setting performance targets; *iii)* more aggregate and focused information for the budget presentation. Although the coverage of the programme is not as extensive as in some other OECD countries, Mexico's system combines outputs and outcomes measures; results are reported to the legislature and the executive.

Multi-year budgeting

The annual expenditure budget submitted to the legislature does not contain multiyear expenditure estimates, in contrast to practices in more than two-thirds of OECD countries. When a new administration comes in, it presents a 5-year financing programme the PRONAFIDE, that backs up the National Development Plan established for the 6-year term. Typically the PRONAFIDE only states targets and ceilings for the medium term, not for each year. It was usually not revised during the planning term (only after a new administration took office). The last programme, presented in 2001 for the current presidential mandate, and updated with the 2004 General Economic Policy Guidelines showed two scenarios, one with a fiscal reform, one without. It contained multi-year macroeconomic forecasts but fell short of a comprehensive medium-term framework.

Steps have been achieved to improve planning for public investment spending and to ensure more systematic use of cost-benefit analysis. However, the medium-term framework for capital budgeting should be strengthened. At present, the legislative may authorize multi-year capital projects, but these are subject to the budgetary availability of the following years. And they are subject to "stop and go" (the adjustment mechanism for the annual budget it is a second best given the constraints). The objective of the government is to avoid windfall revenues being spent on current outlays, but there is no protection from cuts in case of shortfall.

The reform of the "Federal Budget and Fiscal Responsibility Law"

The proposal for a reform of the "Federal Budget and Fiscal Responsibility Law" addresses some of the shortcomings of the current framework for multi-year budgeting. It aims at setting fiscal responsibility rules and regulating the approbation process of the Budget. The fiscal responsibility principles that are proposed include: *i)* establishing a multi-annual macroeconomic framework, *ii)* mechanisms to allocate "additional" oil-related revenues or to adjust spending in case of shortfalls; *iii)* a rule of budget equilibrium. The *macroeconomic framework* itself would comprise several elements which are currently missing, most notably, guidelines for economic policy, annual objectives, public finance projections for the current year and 3 years ahead, evaluation of fiscal performance over the previous 3 years, evaluation of the budgetary impact of new laws and regulations whether proposed by the Executive or Congress. Under the *budget equilibrium rule*, the government is able to present a budget with a deficit only under exceptional economic or social circumstances, and it has to define the actions to take in order to restore budget equilibrium and the time horizon. The proposal also establishes mechanisms to deal with revenue surprises and introduces a formula to set the price of oil on a technical basis.

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ANNEX 4.A2

Main tax measures for 2005[1]

Income tax

- The corporate income tax rate is lowered to 30% in 2005 (29 in 2006 and 28 in 2007) – *passed*.
- The top personal income tax rate is lowered from 33% in 2004 to 30% in 2005 (coming down further to 28% in 2007); other changes will become effective in 2006: reduction of the number of brackets to 2, with income under a certain threshold being exempted (in replacement of the salary credit) – *passed*.
- The globalisation of income, whereby tax payers add to their income dividends, stock market earnings and real interests, facilitates tax control and improves equity.[2]
- States are given the option of taxing individuals on wage income and income derived from business or professional activities, renting or selling real estate – levying a tax between 2 and 5% (*impuesto cedular*) – *passed*. By April 2005, three states had already legislated on this tax, a fourth one stated its intention to do so.
- Business can reduce their taxable fiscal profits by the amount of profit sharing they pay to their employees (*participación de los trabajadores en las utilidades*) – *passed*.
- Introduction of rules to limit the proportion of a company's debt finance relative to equity (thin capitalisation); such rules are in place in many other OECD countries – *passed*.
- Corporate groups will be allowed 100% consolidation for enterprises under the fiscal consolidation regime (*regimen de consolidación fiscal*), which places Mexican corporations on a level playing field with foreign firms – *passed*.

VAT

- Proposal to lower national VAT rate to 12% and give states discretion over establishing a state tax on final consumption of certain goods and services – *rejected*.
- Proposal to extend VAT to food and medicine – *rejected*.
- Change to VAT regime for small tax payers (the value added coefficient is lowered from 20 to 15% for sale of goods, from 50 to 40% for services) – *passed*.

Other taxes introduced

- Charging private aircraft (charter and business) for the right to use Mexican airspace – *passed*.
- New tax charged on cruise ship passengers – *rejected*.

Tax administration improvements

- Updating the registry of taxpayers (*Programa de Actualización del Padrón de Contribuyentes*); developing relations with largest taxpayers (the "customer relationship management" project).
- Since 2003, individuals with business activities and a maximum income of 4 million pesos that are subject to the intermediate regime, in addition to their Federal income tax payment, must pay a 5% tax on their profits to the State where their income is earned. This payment can be credited against the Federal income tax. States have the right to conduct audits in order to ensure taxpayers' compliance.
- Small taxpayers (under the small tax payer regime, REPECOS) must pay their tax liability to the states where their income is earned if the state has signed a Collaboration Agreement for tax administration (*Convenio de Colaboración*).
- Modernising processes, using information systems and cross checking of registries, *i.e.* exchange of information takes place between the SAT and the social security institute (IMSS). However, coordination between the Federal SAT and the States is insufficient (*e.g.* States have their own registries of taxpayers, but there is no systematic exchange of information).
- Facilitating compliance of taxpayers by simplifying tax legislation, and developing possibilities to use the internet to fill tax returns and payments.

Notes

1. Based on Ministry of Finance information. Details on the current tax system and changes in the system from 2002 to 2005 are listed in *El Ingreso Tributario en México*, February 2005, Centro de Estudios de las Finanzas Públicas, Cámara de Diputados, see *www.cefp.gob.mx*.
2. Financial institutions are now obligated to provide information about their clients investments to the tax authorities.

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Chapter 5

Getting the most out of public sector decentralisation

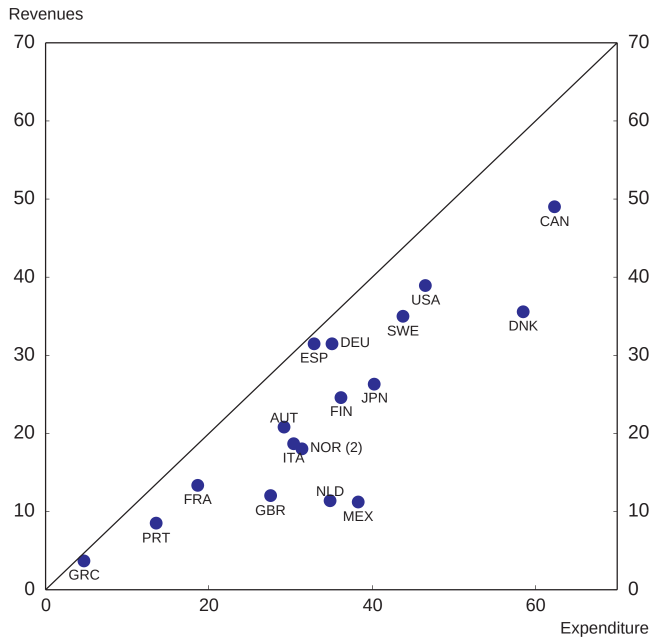
Enhanced autonomy of sub-national governments has spurred innovative management. Spending assignments across levels of government, however, often overlap and/or are not yet fully understood by most citizens. Sub-national governments' accountability is further reduced by the heavy reliance on federal transfers while their use as collateral for states' borrowing potentially undermines the role of financial markets in disciplining fiscal behaviour. Getting the most out of decentralisation would thus require making sub-national governments more accountable so as to provide cost-effective public services and promote fiscal sustainability. Decentralisation should also be more consistent with the aim of improving interregional equity in obtaining access to core public services.

The recent devolution of spending responsibilities to sub-national governments could potentially benefit the citizens in that local authorities are better placed to judge relative priorities and means of satisfying them. But the current system does have flaws. Most importantly, there is a profound imbalance between sub-national governments' spending and financing autonomy. Sub-national governments now account for a high share of public spending, with significant autonomy to run into deficit and debt but the tax system is still very centralised (Figure 5.1). In addition:

- Although devolution has given rise to fruitful innovations in managing public services, sub-national governments still lack some flexibility and incentives to provide public services in a cost-effective manner. Overlapping responsibilities between jurisdictions and the design of earmarked grants may also be leading to sub optimal spending and/or quality control in some areas.

Figure 5.1. **Sub-national governments' share in general government revenues and expenditure**

Per cent, 2003[1]



1. Or latest year available: 2000 for Japan, 2002 for Denmark and Mexico. Revenues include direct and indirect taxes as well as non-tax revenues received by regional and local governments and are expressed as a share of revenues received by the general government. Expenditure corresponds to total expenditure by regional and local governments expressed as a share of general government expenditure. Transfers between governments are netted out.
2. Mainland only. Data exclude revenues from oil production.

Source: OECD, *National Accounts*; Statistics Norway; Statistics Canada; US Bureau of Economic Analysis.

- The system of federal government transfers to sub-national governments has largely perpetuated disparities in access to core public services across jurisdictions. Earmarked grants received by each state largely reflect actual spending at the time of the decentralisation, which tended to be higher in richer states. Likewise, the degree of fiscal equalisation achieved through the revenue-sharing system is limited since this was designed to compensate states for relinquishing their taxing powers to the federal government – thus richer and oil-producing states receive more, on a per capita basis, than poorer ones.
- Information on the use of financial resources by sub-national governments is scant, reflecting a lack of auditing co-ordination between federal and sub-national governments, as well as a still too limited role of auditing bodies at the sub-national government level.
- States and municipalities have few political incentives to raise more tax revenue even though public spending in some areas is sub-optimal.
- State and local government finances are volatile. Carry over provisions of unspent transfers are limited, leading to inefficient spending with the risk of a ratchet effect.
- Rather loose fiscal rules and ineffective market mechanisms contribute to hamper fiscal discipline, with the unfortunate precedent of the federal government bailing out sub national governments.

This chapter identifies policy options to deal with these issues and improve fiscal relations across levels of government. The first section reviews economic and political forces shaping the decentralisation process. The following three sections present the main issues related to current spending, revenue assignments and existing instruments to secure fiscal discipline. The final section provides conclusions and policy recommendations.

Forces shaping fiscal relations across levels of government

The democratisation process has spurred demands for more powers at a sub-national level

For most of the past 70 years, the Institutional Revolutionary Party, the PRI, had the monopoly of presidential power, a majority in Congress and among state Governors. It began to lose its monopoly in the late 1990s. The new political situation, with president and state governors but also state governors and mayors being affiliated to different political parties in an increasing number of cases, has reinforced demands for more autonomy at the sub-national government level. Congress also plays a more active role than hitherto in the budget process, for example in being able to increase transfers to sub-national governments (Webb and González, 2004).[1]

Ensuring fiscal sustainability

Although sub-national governments have received higher federal transfers since the early 2000s, their debt has again embarked on a rising path, although admittedly from a low level. Estimates on implicit liabilities associated with states' pension systems for public employees are also worrisome and reforms to put these systems on a sounder financial footing have not been particularly ambitious. The generalised bail-out in the wake of the 1995 peso crisis, combined with the lack of clarity in each government tier's responsibilities for delivering core public goods, may raise expectations among lenders that the federal government will come to the rescue of states in financial difficulties. At this juncture, it is therefore of paramount importance that sub-national government budget constraints are hardened and sub-national government incentives to raise their own tax revenues are strengthened.

The relatively favourable fiscal and monetary environment conceals tensions about long-term fiscal sustainability. Although on the rise, interest rates are currently low by historical standards, reducing the current cost of borrowing for sub-national governments. On the fiscal side, not only has the new political set-up allowed sub-national governments to capture a growing share of the country's revenues but the overall pool of national public revenues has risen as oil prices have soared. An increase in financial resources is necessary to meet development spending needs in most deprived areas. In particular, implementing health care coverage for the non-insured population (*Seguro Popular*) is expected to cost about two-thirds of a percentage point of GDP per year by 2010. Likewise, additional resources are needed in the basic education sector managed by the states so as to improve enrolment rates and educational outcomes (Chapter 2). However, financing permanent spending through revenues which are currently high but may not necessarily remain permanently so may ultimately threaten fiscal sustainability.

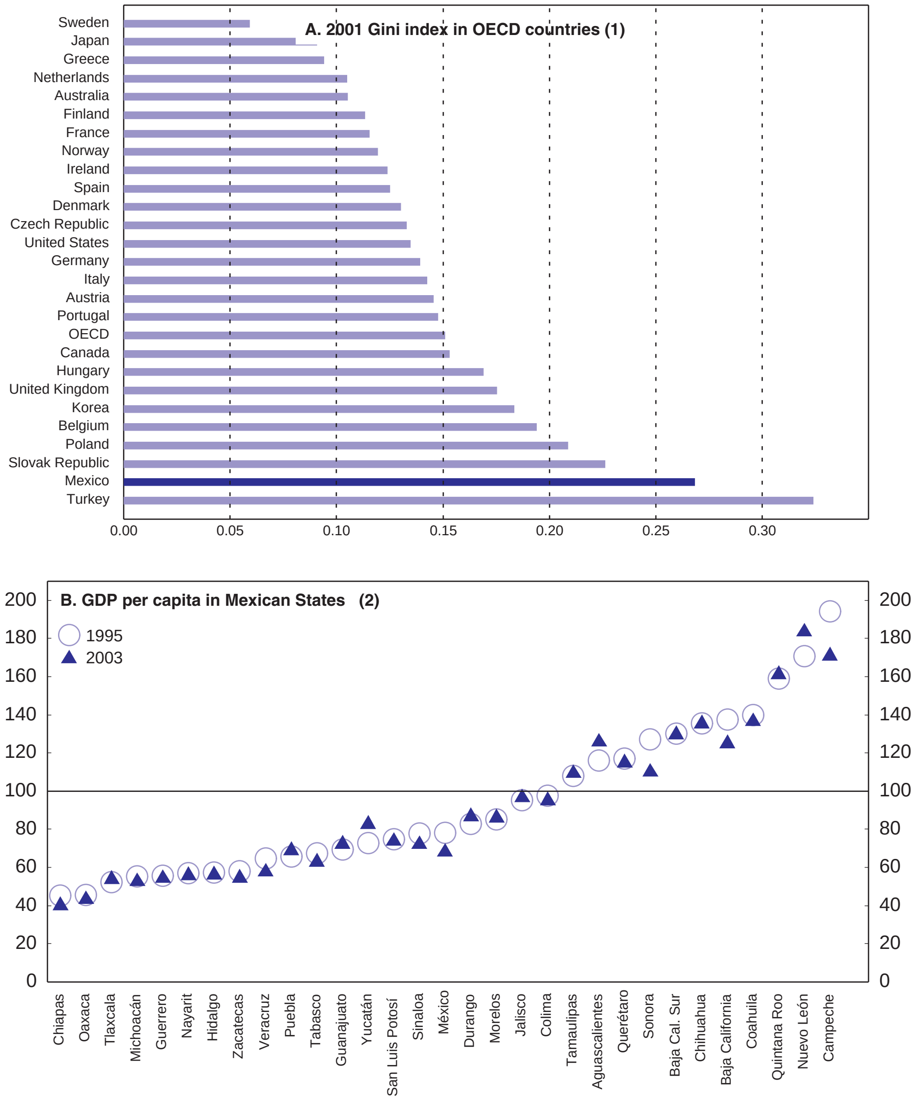
Addressing sizeable disparities in regional development levels

Disparities in development levels across jurisdictions are high by OECD standards and have not changed much over the past decades (Figure 5.2).[2] Endowments in basic public services (*e.g.* for health care services, water provision and electricity) also differ considerably in Mexico and are inversely correlated with measured social and economic exclusion. The process of trade liberalisation initiated in the mid-1980s has exacerbated regional disparities, since those states initially endowed with higher levels of human and infrastructure capital have been able to attract foreign investment inflows and exploit agglomeration effects, while the proximity to the US market has been another key advantage for Northern states.[3] These disparities in regional development levels complicate the choice of a tax base to be used locally, since some bases are distributed across regions more unequally than others. Addressing them further calls for a strengthening of fiscal equalisation schemes across jurisdictions.

Spending assignment issues

The devolution of responsibilities to the states since the early 1990s has concerned core spending programmes, namely education and health care (Box 5.1).[4] At the municipal level, the last major devolution – water provision and treatment – dates back to the early 1980s. Overall, sub-national governments' share in general government outlays rose from 11% in 1990 to about one third in 2003, *i.e.* about the average of the OECD area. While one of the main objectives of this decentralisation process was to bring decisions closer to citizens, it has had to be balanced against several others, most notably: redressing some of the wide regional disparities in public services; upgrading their quality which is, for many of them, low by OECD comparison; and minimising the risk of a sub-optimal provision of services whose benefits are shared across several jurisdictions. In practice, the federal government has retained most of the regulatory powers and finances core sub-national governments' spending programmes (in particular health care and education) through earmarked grants (*aportaciones*) although sub-national governments have complete discretion on how they spend the resources transferred to them through the revenue-

Figure 5.2. **Regional dispersion in GDP per capita in OECD countries: an international and time perspective**



1. Gini coefficient with GDP per capita in territorial units weighted by population (209 regions for Mexico). 2000 data for Mexico, Norway and Turkey.
2. GDP per capita relative to average national GDP per capita (= 100). States are ranked in ascending order of the GDP per capita in 1995. The Federal District is not shown here, its per capita relative GDP was 245.0 in 1995 and 269.1 in 2003.

Source: OECD, OECD *Regions at a Glance* (2004); Inegi; Conapo.

sharing arrangement (*participaciones*) and their own taxes. This section assesses the benefits and limits of this decentralised approach for the delivery of public services, largely drawing on the experience in the education and health care sectors.

Although limited in scope, decentralisation has spurred innovations in management...

One key positive feature of the decentralisation process has been the introduction of promising managerial innovations in some states to better suit local needs.[5] A few of them

Box 5.1. **The sharing of responsibilities across levels of government for key public services**

The management of several core public services has been transferred to sub-national governments since the mid-1980s, a process which gained in importance in the late 1990s. However, allocation of expenditure functions to sub-national governments is more a delegation of federally-controlled budgetary functions than a substantial granting of autonomy in programme design.

Health care services. State Health Services are open to all Mexican citizens but the majority of users are those not covered by social security institutions (*i.e.* about half of the population, including those working in the informal sector and the unemployed). A first wave of decentralisation was carried out during the period 1984-88 but its coverage remained limited both in terms of states concerned (14) and of flexibility in day-to-day management. The decentralisation process resumed in the period 1996-98: all states and the Federal District of Mexico were given responsibility for managing health care services and acquired more flexibility in the use of federal government resources (in particular by suppressing the line-budgeting approach). The federal government has retained control, however, of most regulatory functions and establishes standards and quality controls. Negotiations on salaries and employment conditions have also continued to take place at the federal level, between the national unions and the federal Ministry of Health. Parallel to the states' health care services, the federal government finances the *IMSS-Solidaridad* programme which aims at providing health care services in the most deprived areas. In addition, the System for Social Protection in Health (SPSS) that came into effect in 2004 created a family insurance (*Seguro Popular*) to ensure that all individuals have access to health care insurance. Although implemented by the states, the cost is to fall largely on the federal budget.

Basic education. In 1992, the responsibility for operating the basic education system and of training teachers was transferred to the states. Federal school facilities and employees (about 700 000 federal teachers) were put under state administration. The federal government has, however, retained almost exclusive control over plans and programmes of study, compulsory and optional subjects, choice of (free) text books, the length of the school year and the assessment of education outcomes. Annual wage adjustments for all teachers are negotiated first between the federal government and the national trade union and then at the state level. Municipalities are responsible for the maintenance of primary education infrastructure while the states are responsible for the building of new infrastructures.

Anti-poverty programmes. Responsibility is shared across levels of government, although the *PROGRESA/Oportunidades* programme managed by the federal government accounts for the lion's share. This programme aims at developing human capital of poor households through an integrated approach, giving direct cash payments to eligible families as incentives to increase use of education and health services and to promote food consumption. States and municipalities receive earmarked grants (FAIS) from the federal government – about 0.3% of GDP in 2004 – to fund social infrastructure in selected areas (including water drainage and sewerage, urbanization, electricity, basic health and education infrastructure, rural roads, housing improvement).

Water. Responsibility for water distribution, drainage and the sewerage system was transferred to municipalities in 1983 (together with public lighting, garbage collection, public markets, cemeteries, public parks and public safety). The federal government, however, contributes up to 45% to the financing of water infrastructure.

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(including Chiapas and Jalisco) have introduced a modern budgetary and payment information system which simplifies the registration and control of financial operations, thus reducing the scope for corruption. Chiapas also created a system (*gobierno express*) to provide administrative services and ease tax compliance for individuals and companies, reducing the common practice of charging bribes for "queue-jumping".[6] Some states have improved the selection of teachers which used to be largely controlled by trade unions by introducing a formal examination either to enter teacher training colleges (*e.g.* Sonora) or on completion (*e.g.* Chiapas). A new approach for improving public service delivery in remote areas is being developed; breaking from the traditional top-down approach, it is based on consultations and negotiations across levels of government and with the civil society (OECD, 2005a). Successful experiments in one state are also increasingly diffused to other states, helped by the regular meetings of federal and state spending ministries.[7] As an example, the interesting experiment of providing education loans to needy families in the state of Sonora (*Instituto de Crédito Educativo de Sonora)* has been replicated in five states since 1999. Likewise, pilot programmes of health care family insurance system in some states in the early 1980s preceded the institutionalisation in 2004 of a popular insurance system (*Seguro Popular*), which now covers all states, in the context of the Social Protection in Health reform. This suggests that experimentation at the sub-national level has a role to play in designing public policy nationwide.[8]

Decentralisation has resulted in a segmentation of information. There is now a lack of data on the total amount of public spending on primary education. Similarly, in the health care sector not all states provide information on their own contribution to health care services, so that breaking down national public spending by main categories is difficult (Moreno Jaimes, 2001). This loss of information complicates the identification of national priorities and appropriate policy response to achieve them.

... several factors have limited effective autonomy and accountability at a sub-national level

All three levels of government have concurrent obligations for important services. As examples, the federal government finances university and hospital infrastructure, while the states are responsible for maintenance. Likewise, municipalities are responsible for maintaining school buildings while federal and state governments carry out the vast majority of capital investment. In the health care sector, the IMSS-*Oportunidades* aimed at providing health services to inhabitants of deprived areas is financed by the federal government and partly overlaps with the states' health services. In this context, each level of government can blame the other for not doing its part, resulting in under-provision of some services and poor cost-efficiency of public spending programmes. A recent poll survey indeed suggests that a large majority of the population does not really know what the responsibilities of each government level are (Hernández Trillo and Torres Rojo, 2004). The accountability of sub-national government representatives is further diminished by the no re-election rule – the governors of the 31 states are elected for non-renewable 6-year terms and mayors of the 2 450 or so municipalities are elected for three- or four-year non-renewable terms. This rule partly reflects a concern that checks and balances were too weak in the past to mitigate the powers of patronage provided by elected office. Still, the re-election ban greatly reduces incentives for elected officials to initiate beneficial programmes that have up-front costs and major long-term benefits. Examples at the municipal level include the updating of the land register so as to improve collection of the real estate tax or investment in water facilities.

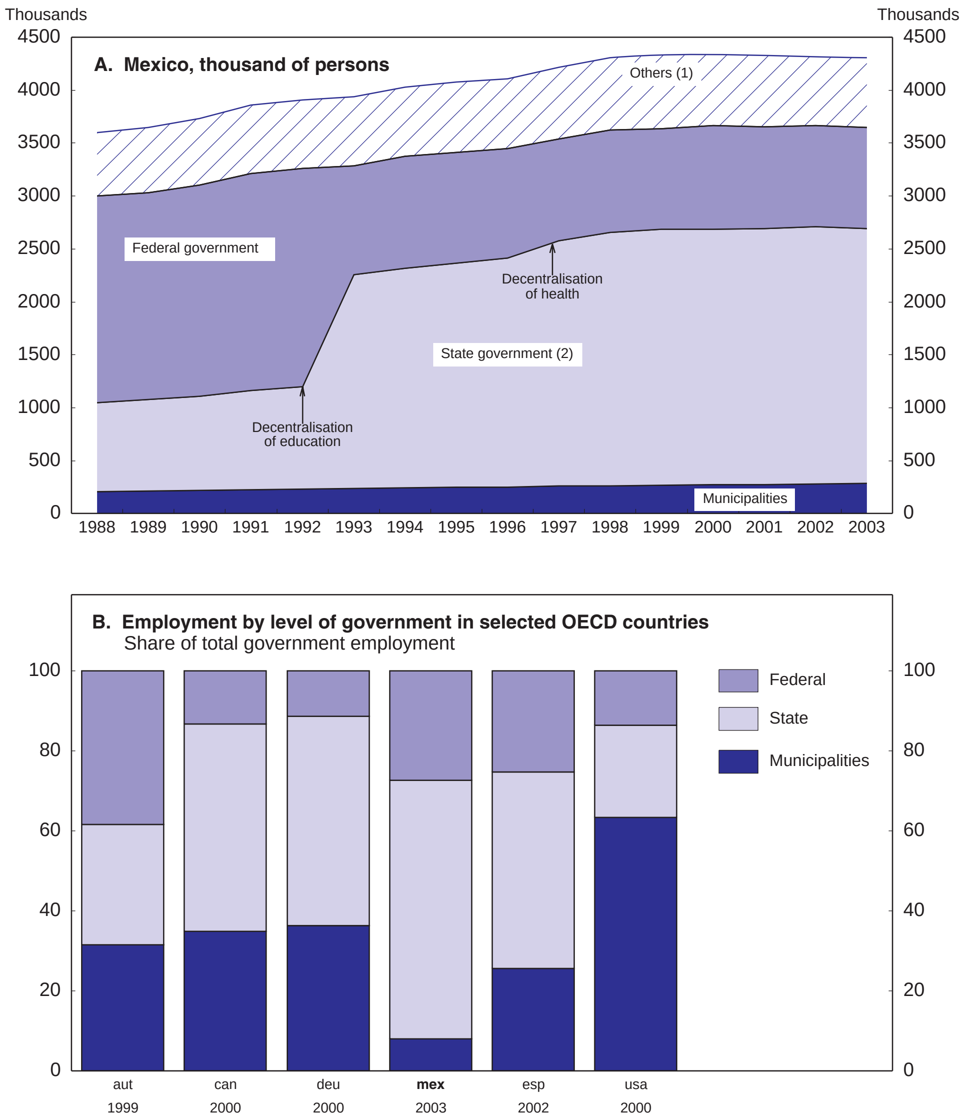
Overly rigid public job status and pay conditions largely set in practice at the federal level limit sub-national governments' autonomy in human resource management and, hence, their ability to improve the cost-effectiveness of public services. Policies regarding human resources in the education and health care sector are in principle in the hands of the states and some states have developed innovative approaches (see above). Their room for manoeuvre in these areas remains, however, limited by a federal labour contract that existed prior to decentralisation and which continues to set working conditions.[9] Even though public employment at the state level now accounts for the lion's share of total public employment (Figure 5.3), annual wage adjustments are dominated by the negotiations carried out between national unions and the federal government and may thus fail to reflect the actual financial situation in some states and differences in living costs across jurisdictions.[10] The life-long job contract also makes it difficult for sub-national governments to sanction poor performers – a serious issue in the education and health care sectors plagued by a high rate of absenteeism. Exacerbating this, functional and geographical mobility of public employees is extremely limited, partly reflecting the lack of integration of pension systems across states and the large role of the trade unions in selecting and placing public employees.[11] This has made it difficult to adjust to changing needs for public services, creating upward pressures on public employment. In practice, states have increasingly relied on temporary workers, in particular in the health care sector, with lower wages and limited social insurance coverage.

The design of earmarked grants perpetuates regional disparities...

Spending responsibilities transferred to sub-national governments have largely been financed through earmarked grants, amounting to 4.5% of GDP in 2003. Allocated on a discretionary basis up to 1998, they are now largely governed by formulae. Such a use of formulae has improved transparency and helped to reduce moral hazard problems but has raised important equity considerations. The existence of regional spillovers in sub-national spending programmes would be a valid argument for relying to some extent on earmarked grants, so as to avoid sub-optimal spending at a local level. In the case of similar spillover effects across states, then states should receive the same level of earmarked grants per head. In Mexico, however, the amount of federal grants earmarked to health care and education received by each state largely reflects the costs the federal government incurred previously in delivering these services (Box 5.2).[12] Thus, inequities in federal spending across states prior to the decentralisation – with richer states often being much better endowed than poorer states – have been largely perpetuated. In fact, the amount received both for health care per non-insured person and for education per pupil varies tremendously across states, with poorer states tending to receive less than richer ones (Figure 5.4).[13] The distribution of the grant earmarked for "strengthening sub-national government finances" (PAFEF) displays a similar, though less pronounced, regressive bias. These inequities in federal grants received by sub-national governments are often reinforced by the revenue-sharing arrangement between the federal government and the states and by the system of sub-national taxes (see below). In contrast, the earmarked grant for social infrastructure (FAIS) displays a clear redistributive pattern.

Recent efforts to redress the regressive bias in earmarked grants are commendable but their cost effectiveness could be improved. The 2003 reform establishing the System for

Figure 5.3. **Public sector employment in perspective**



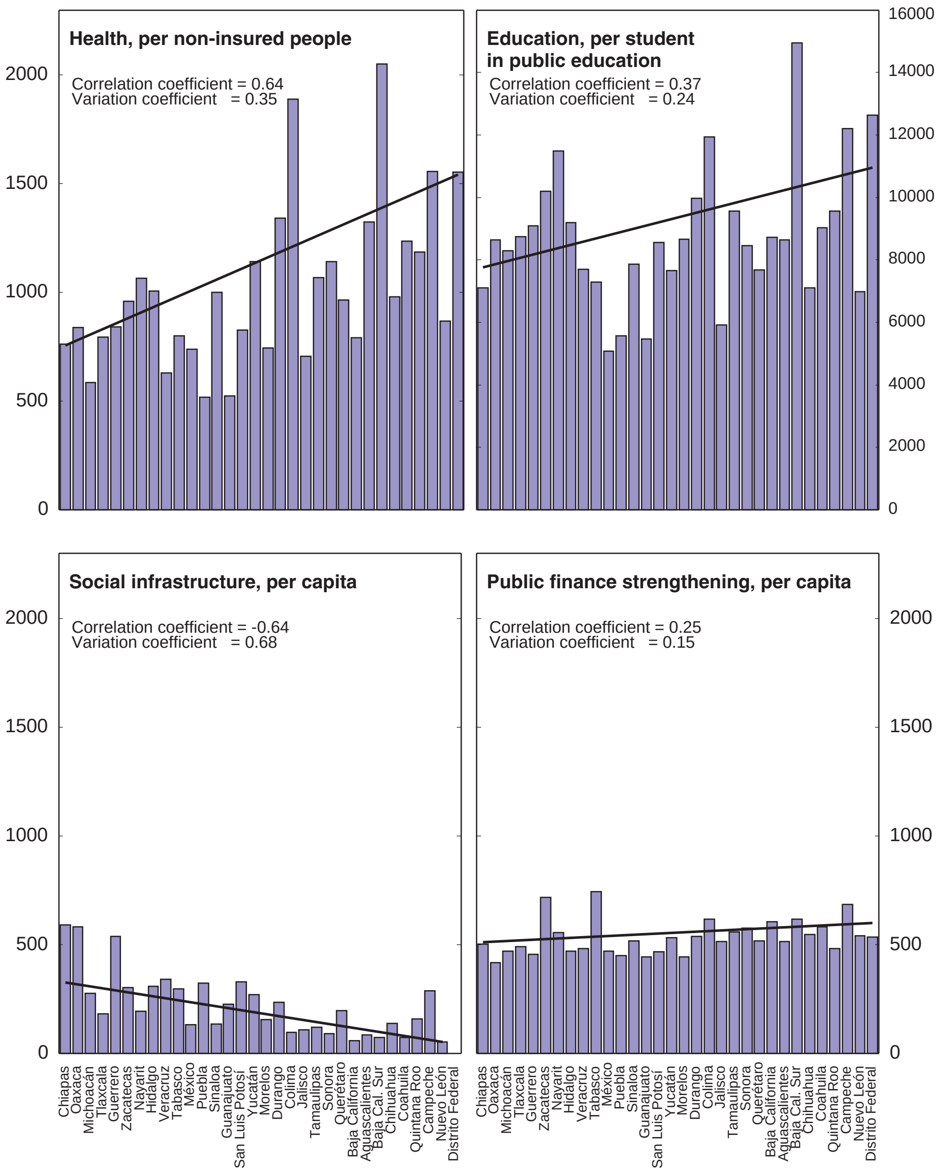
1. Includes social security system and public entities in the central government.
2. Includes the District Federal.

Source: INEGI, *Sistema de Cuentas Nacionales de México*, 1988-2002; OECD, Public Sector Pay and Employment database; Spain, National Institute of Statistics.

Social Protection in Health (SPSS) has set a mechanism that should rectify the interstate inequalities by channelling new resources to poorest states. The federal fiscal costs will, however, be high (around two-thirds of a percentage point of GDP over the period to 2010). To deliver the expected outcomes – improving access to health care for the non-insured – the recent OECD Review on health care in Mexico (OECD, 2005b) identified the need for several reforms. In particular, administrative and management capacity of the states should be improved. States should be able to reform remuneration systems for both health care professionals and institutions so as to provide encouragement for increased and better quality care. In the education sector, adjusting federal grants to improve equity in

Figure 5.4. **Distribution of the main earmarked grants across sub-national governments**

2003, pesos



Note: States are ranked in ascending order of the GDP per capita in 2003. The solid line represents the regression line between the indicated grant and the GDP per capita. For health, Colima and Baja California Sur are excluded from the regression line and for education Baja California Sur is excluded.

Source: Ministry of Health, Información estratégica de gasto público en salud 1999-2003; Ministry of Education, *Sistema Educativo de los Estados Unidos Mexicanos, principales cifras, ciclo escolar 2003-2004*; Ministry of Economy, Cuenta de la Hacienda Pública Federal 2003; Conapo; Inegi.

per capita transfers across states would be even more costly for the budget – between 0.3% of GDP (if the objective were to bring those less-well-treated states to the current average) and 2.3% of GDP (if the objective were to give to all the best treatment – an approach followed in the health care sector to implement the *Seguro Popular* to ensure that all individuals have access to health care insurance). It also needs to be recognised that the costs of providing education services in some of the poorer states are likely to be much higher than in the richer states because of topographic and socio-economic conditions (including the number of indigenous languages, see Chapter 2).

... and earmarked grants create adverse incentives for a cost-effective delivery of public services

The formulation and implementation of earmarked grants raise several issues:

- Controls on their use exist practically only at the local level. This has helped to keep administrative costs lower than in some other countries,[14] but there is no mechanism to ensure that earmarked grants respond to national priorities – the main justification for using earmarked grants in the first place. In particular, positive incentives or sanctions mechanisms are absent and information not well developed.[15]
- The formulae used for setting the amount of the grants earmarked to education and health care (FAEB and FASSA) and for distributing them across sub national governments are not based on objective criteria, but rather on actual supply and costs. This creates incentives to maintain obsolete infrastructures and keep excess capacity in the health sector. In the education sector, the grant formula creates incentives to increase the number of teachers, at the expense of other education inputs (such as classroom materials or the training of teachers). Furthermore, it discriminates against those states which had developed their own education system before the decentralisation process since associated costs have not been recognised by the federal government.[16] It also largely neglects demographic developments, in particular migration flows across states.
- The criteria used for the Social Infrastructure Fund (FAIS) can trigger strategic games since any improvement in the availability of core public services would result in a cut in the grant for the next period. Partial evidence suggests that municipalities which qualify for the FAIS, because a high proportion of households does not have access to water provision facilities, tend to use the FAIS money for other purposes so as to continue receiving the grant.
- The newly created grant earmarked to strengthen states' financial positions (PAFEF) is not governed by any formula, either in setting its overall amount or in distributing it across states. This could create serious moral hazard problems, with states making no effort to keep their public finances in order so as to receive more generous grants.

Issues in funding arrangements for sub-national governments

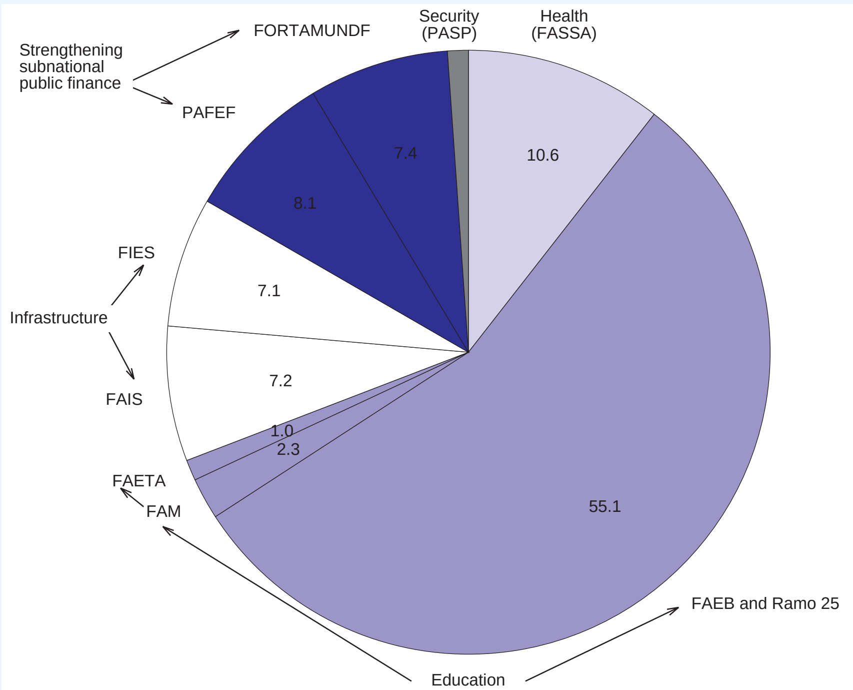
With large spending responsibilities at the sub-national government level, the main challenges on the funding side are: first, to provide sub-national governments with sufficient revenue-raising autonomy to make them accountable to local citizens; and second, to ensure that all have enough financial resources to provide a certain level of core public services. Yet Mexico stands out as having a highly centralised tax system, resulting in a very large fiscal gap at the sub-national level which is filled by intergovernmental transfers. Another specificity is the revenue-sharing system (*participaciones*) whose main purpose is not to redistribute fiscal capacity from rich to poor jurisdictions – it was originally designed to compensate sub-national governments for having relinquished their taxing powers to the federal government in the early 1980s.

Box 5.2. **Main earmarked grants: criteria used to set the amount and to distribute them across sub-national governments**

The current federal earmarked grant system (*aportaciones federales*) was created with the reform of the Law on Fiscal Co-ordination in 1998. Under this law, the distribution of earmarked grants across sub-national governments is largely based on formulae, contrasting with the previous system characterised by a high degree of discretion. In principle, control on the use of these grants is carried out by the federal government and national Congress, whereas for block grants (*participaciones*), the state Congress exercises control. Overall, earmarked grants accounted to half of sub-national governments' financial resources in 2003 (*i.e.* 4.5% of GDP). The main earmarked grants are targeted at basic education, health care, social infrastructure and actions to strengthen states' and municipalities' public accounts (Figure 5.5).[1]

Figure 5.5. **Main earmarked grants to sub-national governments**

As a percentage of total earmarked grants in 2004[1]



1. Provisional data.

Source: INAFED.

Education. The main earmarked grant is the basic education grant (*Fondo de Aportaciones para la Educación Básica, FAEB*). At the time of the decentralisation, the amount received by each state from the FAEB reflected mainly historical costs for the federal government when providing this service. Each year, the FAEB received by individual states is adjusted at the margin to reflect changes in the number of schools and teachers. For basic education, states also receive a federal grant earmarked to education infrastructure and to provide breakfast for those at school (under the *Fondo de Aportaciones Múltiples*, FAM). The overall amount of the FAM is set as 0.814% of the "sharable tax revenues" (the so-called RFP[1]) and its distribution across states is largely based on objective-needs criteria: number of registered pupils, number of school-age pupils not attending schools, increase in school-age

Box 5.2. **Main earmarked grants: criteria used to set the amount and to distribute them across sub-national governments** *(cont.)*

children and the degree of marginality of the jurisdiction. The federal grant earmarked to technological and adult education (*Fondo de Aportaciones para la Educación Tecnológica y de Adultos*, FAETA) is, like the FAEB, largely allocated on the basis of actual spending (mainly existing facilities and human resources employed under such programmes).

Health care. The main earmarked grant for health care is the FASSA (*Fondo de Aportaciones para los Servicios de Salud*). At the time of the decentralisation, the amount received by each state from the FASSA reflected mainly historical costs for the federal government when providing this service. Each year, the FASSA received by individual states is adjusted to reflect installed facilities and the number of health care professionals. A small fraction of the FASSA is further distributed to reflect objective needs (non-insured population). Overall, historical patterns of budget allocations at the time of decentralisation continue to play the dominant role (Moreno Jaimes, 2001).

Infrastructure. There are two main grants earmarked for investment in infrastructure by sub-national governments: the Social Infrastructure Fund (FAIS) and the Trust Fund for Infrastructure in the States (FIES). The FAIS is set at 2.5% of the "sharable tax revenues" (the so-called RFP[2]). The main objective of the FAIS is to improve infrastructure in most marginalised areas. Its distribution across states is based on several extreme poverty indicators measured through the income level and the access to basic public services of the population (such as the share of households without a connection to an electricity and/or water provision system). Each state has to redistribute to municipalities 88% of the federal grant, choosing between two formulae: one replicates the federal government formula; the other gives more weight to population (thus being less favourable to remote rural areas). These funds should be used on specific areas, including: drinking water, sewage, urban public works, electrification of rural areas and basic health and education infrastructure. In contrast with the FAIS, the FIES has no redistributive objective. It is set as a percentage of "excess oil revenues" (*i.e.* any positive deviation from the Budget projections). It is distributed across states in line with the revenue-sharing system, *i.e.* richer states tend to receive more (see below).

"Strengthening sub-national governments' public finance" (PAFEF and FORTAMUN). Initially, the Fund to strengthen states' finance (PAFEF) created by the Congress in 2000 was devoted mainly to education infrastructure in those states where education spending was below national average. In 2001, the use of the PAFEF was extended to any infrastructure and to address problems with their pension system. In 2002, debt relief was recognised as a new spending area. The overall amount of the PAFEF is set each year in the budget process and there is no clear allocation criteria across states. In 2005, there were 8 spending areas: infrastructure, pension systems, financial improvement (*i.e.* any measures to strengthen public finances of states such as debt reduction, contingent liabilities or to face specific spending pressures), land register modernisation, improvement in local tax collection systems, development of mechanisms to improve the tax base, science and technology, and civil protection. The Fund to strengthen municipal finance (FORTAMUN) was introduced in 1998. It is set at 2.56% of the RFP and distributed across municipalities and areas (*demarcaciones*) in the Federal District on a per capita basis. Municipalities can use this money to pay back their debt and to strengthen public security programmes.

1. Earmarked grants are channelled through two main appropriation lines. The so-called Ramo 33 includes the grants earmarked to health, education and social infrastructure. The fund to strengthen states' finance (PAFEF) and the Trust Fund for Infrastructure in the States (FIES) are included in the so-called Ramo 39.
2. Sharable federal revenues (RFP) consist of all federal government taxes and oil-related revenues, except for the additional and extraordinary fees from extraction of petroleum, as well as the federal tax on new motor vehicles and the tax on usage of cars which are directly appropriated by the states, and a percentage of excise taxes on tobacco and alcohol. The RFP amounted to 13% of GDP and 56% of total public sector revenues in 2004.

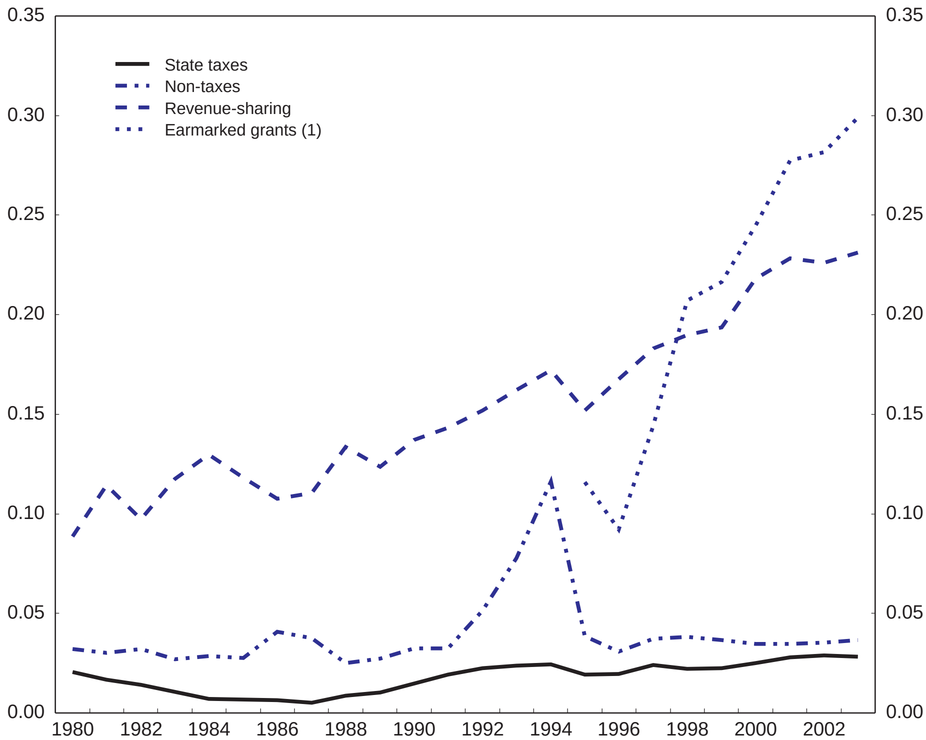
Tax revenues account for a marginal share of sub-national governments' financial resources

Sub-national governments have few taxing powers and hardly use those they have…

Sub-national governments' tax autonomy is extremely limited and recent reforms ceding new taxing powers to the states have met with little success so far. Sub-national governments' own taxes (*i.e.* those over which they have some discretion in setting either the base or the rates) accounted for only 4% of Mexico's total tax revenues (including social security contributions), and less than 5 and 10%, respectively, of the states' and municipalities' financial resources in 2002 (Figure 5.6). A study on sub-national government taxing powers in 1995 revealed that Mexico ranked last out of 20 OECD countries surveyed (Table 5.1). Since then, taxing powers have not changed much while core spending responsibilities have been decentralised, increasing further the mismatch between spending and revenue-raising powers. This low tax autonomy also contrasts with the extensive taxing powers sub-national governments had before the 1980 implementation of the National System of Fiscal Co-ordination (Box 5.3).

Figure 5.6. **Sub-national financial resources**

At 2003 prices, million of pesos



1. Before 1995 data are not available.

Source: CEFP, *Indicadores de Finanzas Públicas por Entidad Federativa*, 1980-2002; INEGI, *Finanzas Públicas Estatales y Municipales de México* 1999-2002.

Table 5.1. **Sub-national government taxing powers in selected OECD countries**[1]

1995

	Sub-national government taxes relative to:		Discretion to set taxes[2]	Summary indicator of taxing powers[3]
	Total taxes	GDP		
Sweden	32.6	15.5	100.0	15.5
Denmark	31.3	15.5	95.1	14.7
Switzerland	35.8	11.9	92.4	11.0
Finland	21.8	9.8	89.0	8.7
Belgium	27.9	12.4	57.9	7.2
Iceland	20.4	6.4	100.0	6.4
Japan	24.2	6.8	90.3	6.1
Spain	13.3	4.4	66.6	2.9
New Zealand	5.3	2.0	98.0	2.0
Germany	29.0	11.1	12.8	1.4
Poland	7.5	3.0	46.0	1.4
United Kingdom	3.9	1.4	100.0	1.4
Netherlands	2.7	1.1	100.0	1.1
Austria	20.9	8.7	9.5	0.8
Portugal	5.6	1.8	31.5	0.6
Czech Republic	12.9	5.2	10.0	0.5
Hungary	2.6	1.1	30.0	0.3
Norway	19.7	7.9	3.3	0.3
Mexico	**3.3**	**0.6**	**11.2**	**0.1**

1. The countries are ranked in descending order according to the value of the summary indicator of taxing powers.
2. The figures show the percentage of their total taxes for which sub-national governments hold discretion over the tax rate, the tax base or both the tax rate and the tax base. A value of 100 designates full discretion.
3. The summary indicator is the product of the ratio of sub-national government taxes to GDP and the degree of discretion to set taxes. Thus, it measures sub-national government taxes with full discretion as a percentage of GDP.

Source: OECD, *Taxing Powers of State and Local government*, 1999; and *Revenue Statistics* 1965-2001, 2002.

… raising sub-national governments' own taxes has met serious constraints

Payroll taxes account for the bulk of the states' own tax revenues, a unique feature among OECD countries (Table 5.2).[17] Their main advantage is low administrative costs. Still, they have serious disadvantages:

- They are collected at the place of employment, as opposed to the place of residence, while core spending of the states benefits households (*e.g.* education and health care). Thus, when commuting between states is frequent, *e.g.* in the Mexico City metropolitan area which spans two states (Estado de México and the Federal District), revenues may flow to the "wrong" state.
- The sharing of tax bases when a company operates in several jurisdictions can create disputes between states or facilitate tax evasion since cross checking of information between states is not well developed. Duplication of procedures resulting from the absence of a common tax base is also wasteful for both taxpayers and administrations.
- The payroll tax adds to the cost of hiring workers in the formal sector.
- A payroll tax may discourage the innovation process by imposing a heavy burden on newly created companies with little or no profits.[18]

States' payroll taxes are deductible from the federal government's corporate tax base. This reduces competition pressures across states and the distortionary effect of any given

Box 5.3. **The sharing of taxing powers and revenues across government levels since the 1980s**

High sub-national government tax autonomy resulting in a distortive tax system until the late 1970s

Until 1980, states had wide taxing powers. This resulted in a very complex tax system (up to 430 different taxes on consumption and productive activities existed), tax cascading, an inefficient allocation of resources and even state tax wars. In addition, the lack of co-operation across government levels made it difficult to administer the tax system.

Tax centralisation in 1980...

The National System of Fiscal Co-ordination (NFSC) was implemented in 1980 with the objective of improving the efficiency of the tax system. The NFSC established two contracts between the states and the federal government. Through the Adhesion Contract, states agreed to restrain their tax autonomy and to receive in return (unconditional) revenue-sharing transfers from the federal government (the so-called participaciones). The NFSC regulates tax responsibilities across government levels, with the objective of preventing double or even triple taxation of a single source of income. In particular, corporate income, excise and the newly created value-added taxes became exclusively federal. The Administrative Co-operation Contract provided guidelines for improving tax collection of federal taxes: states have the rights to enforce and collect some federal taxes and keep most of the extra-revenue from these activities.

... combined with a revenue-sharing arrangement

While centralising a large number of taxes, the NFSC also defined how revenues of the main federal taxes would be shared, both between the federal and sub-national governments and across states:

- Originally set at 18.1%, the states' share in "sharable federal revenues" (the so-called RFP) through the General Participation Fund (participaciones) was increased in 1996 and stood at 20% in 2005. Efforts to improve tax collection have further contributed to the growth in revenue-sharing transfers received by the states – the RFP rose in real terms on average by 3.5% each year over the period 1990-2002.
- The distribution of revenue-sharing transfers across states was originally designed to compensate the states for relinquishing their taxing powers. Thus, richer and oil-producing states have received more than poorer states. The distribution formula was later adjusted to better reflect needs (states' population became an important criteria) and, in 1994, to reward states for improving the collection of some federal taxes. In 2005, 45.17% of the participaciones were distributed across states on an equal per capita basis; 45.17% on the basis of actual efforts to raise revenues from three federal taxes (taxes on specific goods and services IEPS, federal tax on the use of cars Tenencia and federal tax on the acquisition of a new car ISAN) and the remaining 9.66% as the inverse of the previous two criteria. The last component gives a rather favourable treatment to states with few inhabitants.

States are required to allocate at least 20% of the revenue-sharing grants they receive from the federal government to the municipalities, though there is no uniform and clear distribution formula across states. States use one, or a combination of, criteria: 84% of the states use population data; 52% revenues from the property tax; 45% an indicator for actual tax effort; 42%, water rights (Ibarra Salazar and Varella Mollick, 2004).

Table 5.2. **Main own taxes of the states**[1]

	Base	Legal or actual rates	Number of states implementing the tax in 2005	Revenues in 2003 (as a share of states' own tax revenues)
Payroll tax	Labour compensation (in nature and cash)[2]	States have full discretion to set rates. Actual rates varies within a 1 to 2.5% range	30	57.1%
Tax on transfers of immovable properties[3]	Sales price	States have full discretion to set rates	Only the Federal District	6.8%
Tax on transfers of cars and other movable properties	Sales price	States have full discretion to set rates	29	2.9%
Tax on motor vehicles older than 10 years	Vehicles for personal use above 10 years-old	States have full discretion to set rates	15	2.3%
Tax on hotel accommodation	Price of the hotel accommodation	States have full discretion to set rates	30	2.1%
Tax on gambling	Income received by those organising gambling	6%. If states set rate above 6%, the federal government would raise its own rate to 21%	30	1.1%
Tax on public shows	Income received by those organising shows	States have full discretion to set rates	11	0.4%
Surcharge on the federal personal income tax (created by the 2005 budget law)	The base is set by the federal government	Range set by the federal government: 2 to 5%	2	Not applicable

1. This table only includes those taxes for which states have some powers to set either the tax base or rates.
2. Several states apply multiple rates according to the nature of economic activities and/or the number of employees.
3. The tax is imposed at a municipal level in 31 states.

Source: INEGI, *Finanzas públicas estatales y municipales de México*, 2000-2003; SHCP, *Unidad de Coordinación con Entidades Federativas. Diagnóstico Integral de la Situación Actual de las Haciendas Públicas Estatales y Municipales*, 2005.

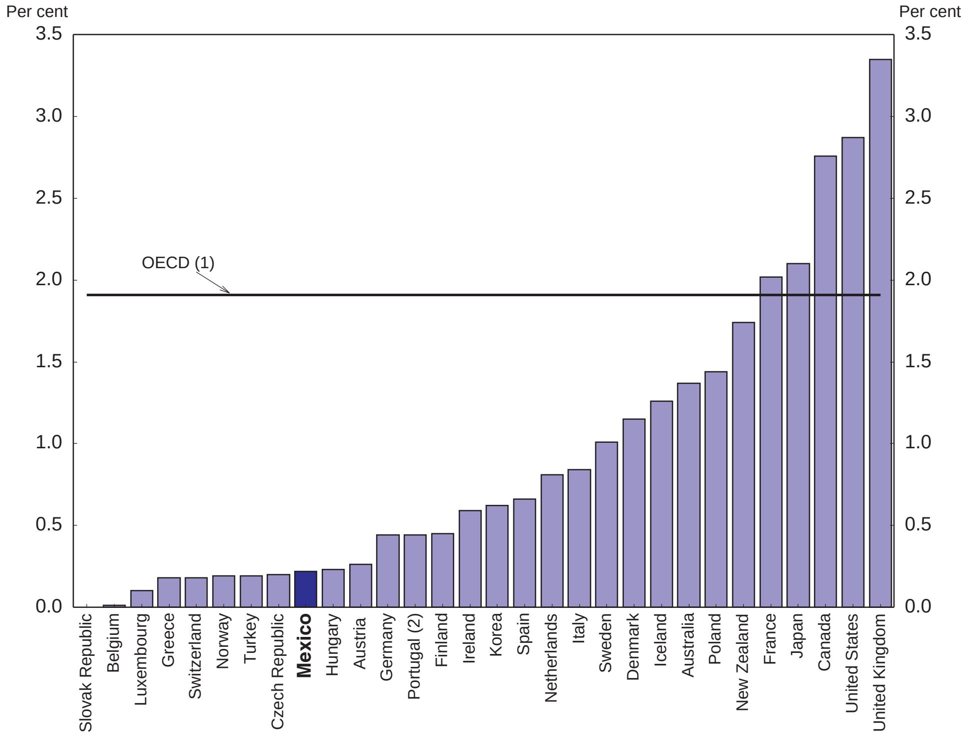
level of payroll tax. On the other hand, deductibility fails to promote accountability at the state level and gives incentives to set payroll taxes too high: an increase in state taxes would ultimately partly be paid for by the federal government.

The real estate tax, which has many attractive features as a sub-national tax, is the main municipal tax. Although it accounted for 60% of municipalities' own tax revenues in 2002, proceeds – at a quarter of a percentage point of GDP – are much lower than in most other OECD countries (Figure 5.7). The real estate tax has been plagued by ill-defined property rights.[19] Transforming the real estate tax into a tax on land users, instead of owners, could ease this. It would, however, raise serious equity concerns since those using lands without well-defined property rights are often relatively poor peasants. The outdated land register (*catastro*) has been another limitation. Contrasting with the practice in several other OECD countries (including Belgium, France, Japan and Spain), the register is managed by local governments and, in a few cases, by the states. Updating it, entails high political costs in the short term, while the benefits are likely to accrue in the longer run and the short mandate for mayors, combined with the no-re-election rule, makes it politically unattractive. In addition, many small municipalities may lack staff with the necessary administrative skills to properly assess and collect the real estate tax. Finally, although the full revenues from the real estate tax have been assigned to municipalities since the 1986 constitutional reform, tax rates still have to be approved by the state's legislature.

Since the mid-1990s, the federal government has relinquished some of its tax bases to the states and allowed them to introduce new taxes (Box 5.4). These initiatives have had

Figure 5.7. **Recurrent taxes on immovable property in OECD countries**

Revenues as a percentage of GDP, 2002



1. Weighted average using 2000 GDP and purchasing power parities.
2. 2001 data.

Source: OECD Revenue Statistics, 1965-2003.

only limited success. None of the states implemented the options offered to them in 2002 of introducing a final sales tax, over and above the federal VAT, although the revenues would have been high. The transfer of tax auditing and collection functions to the states for key federal taxes, coupled with financial incentives (the states keeping most of the revenues from these activities while their individual share in federal revenues – *participaciones* – increases with their actual tax collection efforts), has had more success. In particular, some of the poorer states (including Chiapas, Guerrero and Michoacán) have been successful in their efforts to improve tax collection, thus experiencing an increase in their share of the revenue pool. Others, however, have clearly lagged behind. Estimates from the federal government on the potential marginal revenues from increasing tax audits at the state level suggest that, overall, more could be achieved and that incentives to improve tax collection faced by sub-national governments are still insufficient.[20]

Recent adjustment in the grant system and political factors have jeopardised past initiatives to increase sub-national governments' tax revenues. With the emergence of a multiparty House of Representatives, the Congress has been very active in pushing for increased transfers to sub-national governments, and Federal government grants to sub-national governments have increased steadily since the early 1990s, softening budget constraints. The creation of the grant to strengthen states' public finance (*PAFEF*) by the Congress in 2000 is the most patent example. In this context, sub-national governments

Box 5.4. **Main recent tax reforms to increase states' taxing powers since the mid-1990s**

1996

- States were authorised to levy a tax on hospital services and on ownership or use of old motor vehicles.

1997

- The federal tax rate on gambling was cut from 21 to 15% and states were allowed to impose a 6% rate on the same base.
- Under an administrative co-operation agreement, the states were authorised to administer a number of federal taxes (income tax, assets tax, excise tax for small taxpayers and VAT). This is an incentive for improving their collection capability insofar as they may keep any additional revenues resulting from the tax audits they conduct.
- States were made responsible for collecting the tax on new cars and the one of the use of cars. Proceeds from these taxes are now retained entirely by the states although they have no powers to set either rates or the base.

2002

- States were allowed to levy a 5% surcharge on the income of individuals with entrepreneurial activities under the regime for small taxpayers. This option was not used and was removed by Congress in 2003.
- States were allowed to introduce a new sales tax at a maximum rate of 3% on top of the federal VAT. This option was not used and was removed by Congress in 2003.

2003

- Through administrative co-operation agreements, the federal government transferred to states: *i)* revenue from the federal income tax on individuals with entrepreneurial activities under the regime for small taxpayers (*i.e.* income less than 2 million peso per year); *ii)* the equivalent of 5% of the revenue from the federal income tax on profits of individuals with entrepreneurial activities under the regime for intermediate taxpayers (*i.e.* income less than 4 million peso per year); and, *iii)* the equivalent of 5% of the tax on the capital gains from real estate transactions. Individuals can compensate any of these payments to states against their federal income tax.

2005

- The federal government continued to reduce its top rate from 33% in 2004 to 30% for personal income tax (a further cut to 28% in 2007 has been announced). At the same time, states were allowed to impose a 2 to 5% rate on the same base. By April 2005, two states (Chihuahua and Guanajuato) implemented the option while the Michoacán and Sonora Congresses were considering doing so.

have been reluctant to pay the political cost of raising more taxes on their own citizens. At the municipal level, several empirical works also suggest that the generosity of the grant system, and in particular the introduction of grants earmarked for investment in 1998, has led municipalities to reduce their tax efforts.[21] The lack of human, technical and administrative capacities to implement properly new tax prerogatives could also be a contributing factor.

Revenue-sharing arrangement: a limited equalisation content

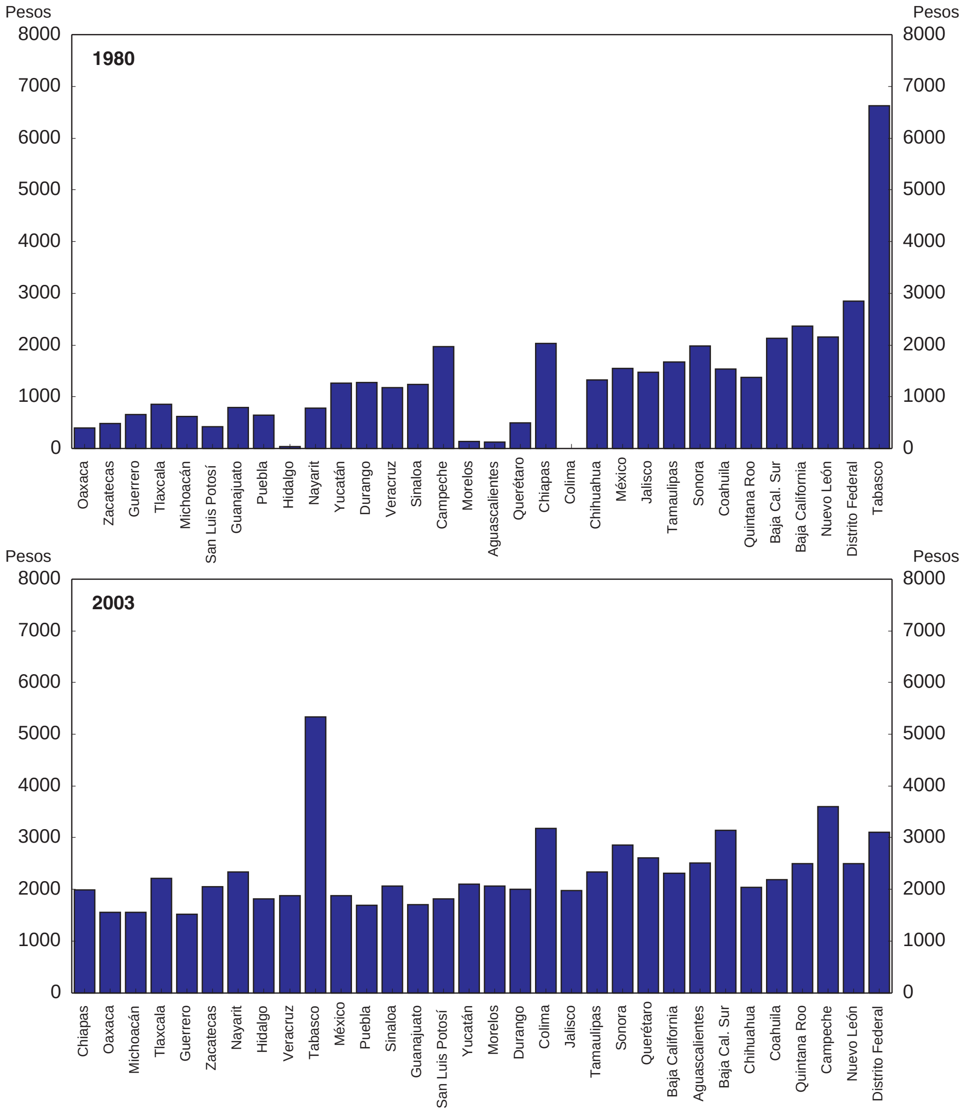
Originally conceived to compensate sub-national governments for relinquishing their taxing powers, the revenue-sharing arrangement does not achieve much equalisation across jurisdictions. The National System of Fiscal Co-ordination (NSFC) stipulated in 1980 that no state should get less revenue under the tax centralisation option than they were collecting before joining the revenue-sharing scheme. Thus, until the early 1990s, richer states received up to 7 times more *participaciones* – the main revenue-sharing arrangement, amounting to 3.4% of GDP in 2003 – than poorer states. This contrasts with the approach followed in many other OECD countries (including Canada, Germany, Japan, the Nordic countries and Spain) where revenue-sharing arrangements, or more generally block grants, are the main tool to achieve some equalisation of fiscal capacities. The redistribution potential of the revenue-sharing arrangement has been improved since the early 1990s, reflecting various adjustments in the formula (see Box 5.3 above). Yet, per capita transfers received by rich and oil-producing states are still much higher than those received by poorer states (Figure 5.8). This allocation across states is further replicated for some of the grants earmarked for infrastructure (*e.g.* the FIES). The prospects for incorporating into the revenue-sharing arrangement greater redistribution towards states with below-average potential tax revenues per capita are, however, limited since the NSFC gives the states the possibility to opt out of the system.

Options for changing the revenue mix of the states

Reducing states' dependence on federal government transfers and increasing their revenue-raising powers would likely enhance accountability and harden the budget constraint. States should be attributed at least one main tax, possibly substituting for the existing payroll tax which has raised various concerns. However, there are few taxing powers which can be exercised at the sub-national level without raising equity and/or efficiency concerns (Joumard and Kongsrud, 2003). Regarding efficiency, devolving taxing powers to sub-national governments risks entailing higher collection and compliance costs and creating distortions in inter-jurisdiction trade and/or the capital and labour markets. The choice of the tax base is of importance in minimising the efficiency costs of tax decentralisation. As regards equity, the distribution of tax bases across states is very uneven in Mexico but, again, some are likely to be more evenly distributed than others (in several countries per capita revenues from consumption taxes tend to be more evenly distributed than those from income taxes for instance).

Two main revenue-neutral options have been considered by national authorities so far in Mexico: giving states the opportunity to introduce a sales tax, over and above the federal VAT, or a surcharge on the federal income tax on individuals (*impuesto cedular*). In both cases states would be given the power to set rates within a range set by the federal government. For 2005, the federal government proposed both options but Congress approved only the personal income tax surcharge. This option has the merit of not significantly raising compliance and collection costs, since the administration remains concentrated at the federal level and bases are identical – taxpayers will only have to fill one tax form. It also has the advantage of being levied on the basis of citizens' residence (as opposed to the payroll tax which is levied in the state of employment and to the sales tax which would be affected by cross-border shopping). However, the share of the economically active population currently paying the personal income tax is low, partly reflecting the skewed income distribution (see Chapter 1), combined with a high income

Figure 5.8. **Per capita transfers received by states through the revenue-sharing scheme**[1]



Note: States are ranked in ascending order of the GDP per capita in 1980 and 2003.

1. The main transfers under the revenue-sharing schemes shown here include: the so-called General Participation Fund, the Contingency Reserve, the Municipal Development Fund, revenues from the special tax on products and services (*IEPS*), revenues from the taxes on new and old cars (*ISAN* and *Tenencia*).

Source: Data for revenue sharing are from CEFP/024/2003, *Indicadores de Finanzas Públicas por Entitad Federativa 1980-2002*; 2003 data from SHCP. Population 1980, 2000 Inegi, México en el siglo XX; 2003 data from Conapo; GDP per states from Inegi, BIE.

threshold and tax reliefs, as well as a large informal sector.[22] Thus, relying on a tax paid by a small share of local citizens may not serve much to promote states' accountability, unless reforms are implemented to increase the number of individuals paying income tax by broadening the base (*e.g.* through the removal of various special treatments).

International experience with sales taxes at the sub-national level is rather mixed. In the United States, sales taxes are the single most important form of own-revenue for states

Box 5.5. **Experience with decentralised VAT in Canada and within the EU area**

Sub-national taxes on consumption have been applied in a number of countries. In implementing sub-national VATs, however, some trade-offs between efficiency concerns and revenue-raising autonomy at the sub-national level have emerged. Key risks associated with sub-national VAT involve distortions in inter-jurisdiction trade, as well as higher tax evasion and tax compliance and collection costs. The Canadian and EU experience sheds light on how these issues have been dealt with, or remain unresolved.

Canada provides many useful insights for the design of decentralised consumption taxes since various models have been implemented. The dual provincial/federal VAT implemented in Quebec likely provides the best balance between the objective of raising sub-national government taxing powers, and thus accountability, and minimising inefficiencies associated with sub-national consumption taxes (see Bird and Gendron, 2001).*

A dual VAT system in Quebec. The province of Québec applies a VAT (somewhat confusingly called Quebec Sales Tax) on top of the federal government VAT (GST). The QST is administered by the provincial government which also administers the federal GST, thus avoiding duplication in compliance and collection costs. Taxes on inter-provincial sales from one business to another are essentially handled using a deferred-payment system similar to that now applied in the EU, except that the overriding federal GST acts as an enforcement mechanism. Exports from Quebec, whether to another province or country, are zero-rated for QST purposes. Since exports to another province are subject to the federal GST, incentives to comply with the VAT system remain strong. The normal process of federal GST audit in effect further serves as a cross-check to ensure that the QST has not been evaded. In addition, since the QST is applied to a GST-inclusive base, Quebec has a direct incentive to monitor the GST as well as the QST.

The HST system in Newfoundland, Nova Scotia and New Brunswick. In 1997, an agreement between the federal government and three Eastern provinces led to the introduction of a joint VAT (the HST), with one harmonised base and a combined federal-provincial rate of 15% in the three participating provinces. The HST replaced the federal value added tax (GST) in these provinces and the provinces' sales taxes. The HST is administered by the federal government. Revenues are shared on the basis of province-specific consumption patterns. Still the HST agreements limits provincial and federal government autonomy since the rate of the HST cannot be changed without a unanimous agreement.

The "transitional" VAT system within the European Union. The European Union has kept a dual system since 1993: the destination principle applies for the business sector, but the origin principle is implemented for most cross-border purchases by individuals (the main exceptions being purchases of new vehicles and mail order transactions). Such a dual system attempts to fulfil the requirements of an internal market without frontiers whilst allowing room for manoeuvre at the national level as regards the choice of VAT rates and the collection and auditing of the tax. The transitional regime replaced custom controls by the obligation, for all EU firms involved in distance selling to individuals (B2C) in another EU country, to register and account for VAT in that country on all those sales, once having passed a threshold of sales. Intra-EU business-to-business sales also have to be declared. Still, complexities of VAT procedures, combined with the lack of uniformity in the implementation of EC Directives on VAT across EU countries, have acted as a major disincentive to cross border trade and given rise to tax fraud (Joumard, 2001).

* In addition, five provinces apply retail sales taxes (Ontario, Manitoba, Saskatchewan, British Columbia and Prince Edward Island), over and above the federal VAT. They administer their sales taxes independently from the federal GST, which does not apply to the same base.

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and are also of some importance for local governments; but the base has narrowed substantially, reflecting a shift in consumption patterns from goods towards services, many of which are exempt from the sales tax because services are predominantly sold to businesses. Avoiding cascading taxation of business purchases by exempting sales to producers should be an objective but it may result in high administrative costs and/or spur tax evasion.[23] Revenue losses associated with cross-border trade and the development of e-commerce are also serious issues.

Using a consumption base for sub-national taxes still presents some advantages compared to a personal income tax surcharge. Revenues from consumption taxes tend to be less volatile over time – an important criterion for judging whether a tax base is appropriate for sub-national use. They may also be more evenly distributed across regions than income taxes. If the national authorities were to give significant weight to these two factors, a superior option to sales taxes would likely be to implement a dual VAT system.[24] Experiences in Canada and within the European Union provide useful insights (Box 5.5). Among the large variety of models, the approach implemented in Quebec presents clear advantages for Mexico. The combination of a federal VAT (GST) with the provincial one in Quebec (QST) embodies a self-enforcement mechanism, provides sub-national governments with some autonomy to set rates, and avoids creating too large distortions in inter-jurisdiction trade.

Whether or not the reform should be revenue-neutral at the national level is also an important issue. If the increase in states' revenue-raising powers results from a transfer of a tax base from the federal to the state governments, as in 2005, some downward adjustment in federal transfers (through the revenue-sharing arrangement) would seem warranted. This would also increase the incentives for states to exercise their new taxing powers. At this juncture, the very low redistributive potential of the revenue-sharing arrangement in Mexico mitigates the equity concern associated with a shift in financing sources from federal transfers to own taxes. But an active Congress would certainly resist any reduction in federal transfers to states and municipalities. On the other hand, given the need to enhance permanent revenues in Mexico to finance core spending programmes such as basic education, health and poverty alleviation (see Chapter 4), states' taxing powers could be implemented without cutting commensurately the federal government tax revenues.[25] Under this scenario, national tax revenues would increase and states should take clear responsibilities for the much needed additional public spending.

Securing fiscal discipline in a decentralised setting

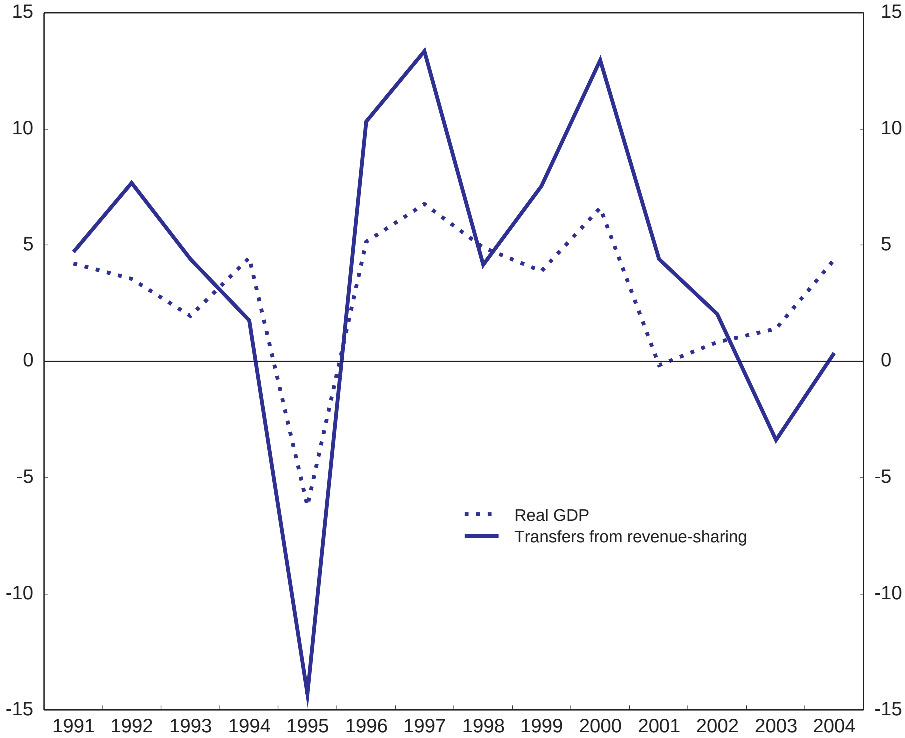
Ensuring the sustainability of public finances while maintaining a stabilisation role for fiscal policy is an important challenge in the decentralised setting in Mexico.

The volatility of sub-national government revenues distorts their spending behaviour

Sub-national government revenues are highly volatile, creating a risk of a sub-optimal allocation of resources. Several federal grants are set as a fixed percentage of a basket of federal taxes and oil-related revenues.[26] These grants accounted for 3.1% of GDP in 2004, but have fluctuated significantly over time (Figure 5.9). In addition, actual federal grants have differed in several instances from those projected in the federal government budget (*e.g.* to reflect higher or lower federal revenue, on account of oil price changes), which are used as a baseline by sub-national governments to drawing their own budgets. Although

Figure 5.9. **Volatility in federal transfers received by sub-national governments**[1]

Annual growth rate, 1993 prices



1. The main transfers shown here include resources from: the so-called General Participation Fund, the Contingency Reserve, the Municipal Development Fund, the special tax on products and services (*IEPS*), and the taxes on new and old cars (*ISAN* and *Tenencia*).

Source: Ministry of Finance.

some *ad hoc* smoothing has recently been allowed, this volatility makes budget planning at the sub-national government level difficult.[27] Problems are particularly acute for grants earmarked for infrastructure development.[28] Despite some flexibility in the timing of use for the PAFEF for 2004 and 2005 fiscal years, most other earmarked grants have to be spent within the fiscal term, impeding states from carrying over unused appropriations. This creates incentives for end-year spending sprees and likely results in poor cost-effectiveness of public investment programmes.

The volatility of sub-national governments' resources may also result in a ratchet effect in spending. By nature, sub-national government current spending is largely unresponsive to the economic cycle, is difficult to cut, and even adjusts upwards during a downturn (*e.g.* with fewer people employed in the formal economy during a downturn, the number of uninsured persons and thus states' health spending will increase). In this context, easy-to-cut components (such as investment) suffer the most in a downturn while they may have a high social rate of return.[29] On the other hand, public employment or wages may rise in an upturn and, because of the rigidities in public employment contracts, are difficult to prune thereafter. A ratchet effect on public spending may thus develop – requiring the federal government to adjust transfers to sub-national governments upward in difficult times, an adjustment which tends to become permanent. The introduction of the PAFEF in 2000 and the current proposal to institutionalise it provides a clear case.

Fiscal sustainability is not ensured in the longer term

States' debt has trended up again since 2000…

Although it increased in real terms in the early 2000s, states' debt is still low as a share of GDP (1.8% in 2004) and by international standards.[30] Gauging financial sustainability at the state level would, however, require comparing their liabilities with the financial resources over which they have a direct leverage, *i.e.* their own revenues. At close to 200% in 2003, the debt-to-own revenues ratio for the states is very high, and significantly above the 1994 pre-crisis level (Figure 5.10).[31] In addition, implicit liabilities stemming from pension systems for public employees are high in most states. They amounted to about 25% of GDP in 1998, according to the first *Convención Nacional Hacendaria*, despite recent reforms in some states (including Aguascalientes, Coahuila and Guanajuato) to put their pension systems on a sounder footing.[32] Contingent debt associated with local public enterprises and sub-national governments' debt towards public utilities may also be sizeable,[33] although the federal government recently repaid part of sub-national governments' debt towards water and electricity companies.

… and mechanisms to contain it have not been implemented in all the states

The generalised bail-out of the states by the federal government in the mid-1990s may well have undermined longer-term sustainability by creating a moral hazard problem. In the aftermath of the peso crisis, states' debt jumped from 1.3% of GDP in 1993 to 2.2% in 1995, reflecting the surge in interest rates. Since states were not able to service their debt, the federal government provided extraordinary cash transfers to the states of about ½ per cent of GDP between 1995 and 1998 (IMF, 2004b). Such an intervention was reflected *ceteris paribus* in a reduction in states' debt but has also increased their capacity to borrow thereafter.[34] In return for the debt takeover, states were required to commit to an adjustment programme with the Ministry of Finance, *i.e.* to balance their budget, to present their financial statements in a uniform way and to publish or update a debt law to regulate the dynamics of their own debt and that of the municipalities under their jurisdiction. By the end of 1995, all states had signed letters of intent with the federal government. However, no mechanism was in place to enforce these commitments. By 2002, only nine states had introduced some limits on debt (often in the form of a ratio of debt to own revenues and revenue-sharing transfers or spending).[35]

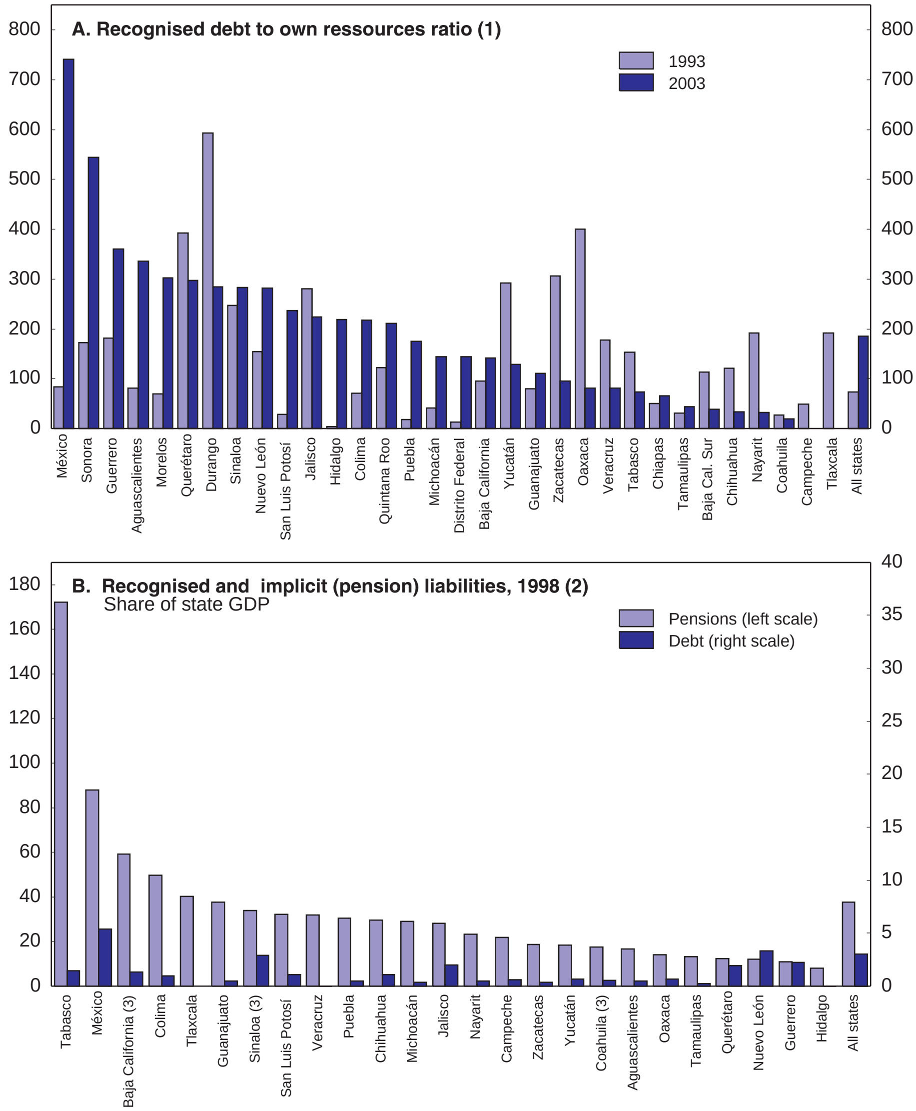
Instruments to secure fiscal discipline are weak

Fiscal rules imposed on sub-national governments are lenient

Fiscal rules imposed on Mexican sub-national governments are rather loose compared with those in place in the majority of OECD countries. The federal Constitution states that sub-national governments can borrow only in peso, from domestic creditors, and for productive investment, but investment is not well-defined. New loans have to be approved by states' congresses. There is, however, no debt or deficit ceiling imposed by the federal government, either defined annually or over the medium-term.[36] Such loose restrictions, combined with a heavy reliance on federal grants at the sub-national level, contrasts with the experience in many other OECD countries. In these, central governments that allow relatively unfettered access to credit markets are those that make sub-national

Figure 5.10. **States' liabilities**

Per cent



1. Own resources are the sum of states' own taxes and non-tax revenues.
2. Pension liabilities have been estimated as the sum of actuarial deficits of states' pension system for their own employees, taking a 3.5% actualisation rate.
3. Teachers and administrative services only.

Source: SHCP, *Diagnóstico Integral de la Situación Actual de las Haciendas Públicas Estatales y Municipales* (2005); INEGI, *Finanzas Públicas Estatales y Municipales*, 1999-2003; CEFP, *Grado de Endeudamiento de las Entitades Federativas, al cierre de 2003*.

governments fund a relatively large portion of their spending through own revenues (Rodden, 2004). Mexico also stands out as an exception in the OECD by combining loose constraints on sub-national borrowing with a scheme whereby federal transfers can be used as guarantee for sub-national governments' borrowing (Table 5.3).

Table 5.3. **Strategies for ensuring fiscal discipline: fiscal rules and guarantees in selected countries**

Limits on borrowing	Central government's guarantees for sub national governments' borrowing		
	No guarantee	Case by case guarantee	Implicit guarantee
Sub-national governments are not allowed to borrow	Chile		
Each loan must be approved on a case-by-case basis	Israel, Korea	Turkey	Japan
The central government imposes maximum levels of borrowing	Denmark, Slovak Republic, Slovenia		
Central and sub-national governments hold formal consultations on the level of borrowing but these are not binding	Australia, Morocco, South Africa	Colombia	Indonesia
Sub-national governments have fixed limits in their constitution or statute	Austria, Germany, United States		
No limits on borrowing	Canada, Czech Republic, Finland, France, Iceland, New Zealand, Norway, Sweden	Greece	**Mexico,**[1] Netherlands[2]

1. Sub-national governments can only borrow for investment and from Mexican investors (although investment is not well defined). Federal transfers can be used as guarantee for sub-national governments' borrowing.
2. In the Netherlands the central government monitors closely municipalities' borrowing through a variety of instruments although there is no formal limit on borrowing.

Source: OECD/World Bank Budget Practices and Procedures database.

Recent reforms to strengthen the disciplining role of market mechanisms...

Among the possible strategies to address the risks of a loose fiscal policy in a decentralised setting, priority in Mexico has recently been given to a market-oriented approach. The institutional setting governing sub-national government access to financial markets has been reformed since the late 1990s so as to promote the disciplining role of market mechanisms. This has entailed:

- *Better information on sub-national governments' financial positions.* To obtain access to credit markets, sub-national governments have now to be rated by two agencies. In this context, states and municipalities are required to provide public finance data for the last ten and five years, respectively. By 2004, the 32 Mexican states and 75 municipalities were rated by at least one agency.
- *Upgraded banking regulations so as to force lenders to account better for the risks associated with loans to sub national governments.* First, banking regulation for single customer exposure limits has been extended to sub national governments, reducing the attractiveness to creditors of sub national governments lending. Second, banks' provision requirements have been made dependent on sub national governments' credit ratings, with risk weights ranging from 20 to 150%.
- *Removal of the requirement to get federal government's approval for any new loan.* Since 1997, sub national governments are no longer required to get an approval for any new borrowing operation from the Ministry of Finance.[37] They no longer need to register the debt with the Ministry of Finance (although unregistered loans would be automatically risk weighted at 150% for lenders). As a counterpart, in case of arrears or a threat of default from one state, the federal government is no longer required to act as a lender of last resort (nor it is prevented from intervening) – banks could not ask the Ministry of

Finance to discount the corresponding debt-service amount from a defaulting state's federal transfer (IMF, 2004).

… may not guarantee fiscal discipline

The still poor quality of public finance data and the implicit federal government guarantee on sub-national government borrowing weaken the disciplining role of market mechanisms. Although the availability of information has improved since the late 1990s, partly as a result of the rating requirement above described, the lack of a well-established accounting framework on sub-national governments' existing liabilities and repayment capacity makes it difficult to assess and compare sub-national governments' financial positions. In particular, federal and state accounting records are still inconsistent, while the structure and information content of sub-national public accounts are heterogeneous.[38] In addition, lenders can no longer ask the federal government to act as a trustee in servicing state debt, the recently created master trust fund arrangements (*Fideicomiso maestro*) to facilitate sub-national government access to the credit market have introduced a new scheme enabling federal transfers to be used as collateral for sub-national governments' borrowing (Box 5.6). These arrangements act to reduce incentives for lenders to discriminate against poor performing states. In practice, the rating assigned to these bond issues tends to be equivalent to those assigned to federal government issues in the domestic market (Fitch, 2004a). The competitive environment may further induce credit rating agencies to be overly positive when assessing sub-national government financial positions in order to keep clients. On the borrowing side, sub-national governments may expect that in case of serious financial difficulties impeding them to deliver core public services – some of which (*e.g.* health and education) are considered as a fundamental right for all citizens – the federal government would intervene.[39] The special status of the Federal District, which continues to benefit from an explicit guarantee of the federal government, may reinforce these bail-out expectations.

Box 5.6. **Master trust arrangements to facilitate sub-national government access to financial markets**

In April 2000, a new scheme was implemented to facilitate sub-national governments' access to financial markets: the master trust fund (*fideicomiso maestro*). It allows issuers to pre-allocate future resource flows to a fund managed by a third party (the master trust fund), set up by sub-national governments and a bank (or a group of banks). The resources earmarked to these master trust funds consist in most cases of federal transfers (*participaciones*), and in some cases of payroll tax flows. These revenues are used to underwrite bond issues and/or bank loans. The fund redistributes federal transfers to sub-national governments after servicing the debt.

In 2004, about 30% of the sub-national debt was backed by such master trust arrangements, with maturities between 5 to 15 years and grace periods of up to 6 years.

An agenda for further reform

Getting the most out of the decentralisation process would require improving the accountability of sub-national governments – by reaching a better balance between major responsibilities on the spending and borrowing side and rather limited revenue-raising powers – and better addressing disparities in regional development levels. Recommendations for moving in these directions are discussed below. Box 5.7 at the end of this chapter provides a synopsis of these recommendations.

Accompany greater sub-national government autonomy on the spending side by more accountability

Several initiatives are required to spur sub-national governments' incentives to deliver high quality public services in a cost-effective way. A first priority should be to clarify the assignment, and reduce the overlapping, of spending responsibilities across levels of government. In some areas, sub-national government spending autonomy could be increased (*e.g.* in setting public employee job status and wage adjustments or in designing a larger share of the curriculum in the education sector). Responsibility for new infrastructure and for its maintenance should be kept at the same government level. Enhanced autonomy should be accompanied by reforms to strengthen pressures from citizens for more cost-effective services. Developing a coherent set of information allowing citizens to better understand how sub-national governments spend their resources and to gauge the outcomes of these programmes would contribute to this objective. The agreements reached at the *Convención Nacional Hacendaria* in 2004 – whereby sub-national governments committed themselves to provide information on their financial position in official documents and on their web pages – should be implemented swiftly. Better and comparable information would also facilitate the identification of best practices in designing and managing public spending programmes. In addition, auditing mechanism and co-ordination at the federal and sub-national government levels should be improved, in particular for earmarked grants. Abolishing the no re-election rule or, at a minimum, lengthening the duration of local mandates would also help to promote the accountability of local government representatives while better checks and balances should be implemented to reduce the scope for corrupt practices.

Reform the financing principles of sub-national governments

The financing principles of sub-national governments should be reformed so as to promote sub-national governments' accountability and to better address disparities in regional development levels. Increasing local government revenue-raising powers could help secure fiscal discipline by making the costs of local public services more visible for local taxpayers. Still, forcing sub-national governments to pay the political costs of their spending decisions by exercising their taxing powers would require ending the practice of raising federal transfers frequently and, often, on an *ad hoc* basis. The choice of a "best sub-national tax" and its implementation still remains a delicate issue. At the municipal level, reliance on the property tax could be increased by reducing existing institutional barriers to its wider use. Upgrading the land register should be a priority and technical help from the federal government would be welcome for some municipalities. Transferring the responsibility of setting rates from the state legislatures to municipal governments is also desirable. At the state level, the current high reliance on payroll taxes is not a panacea and it does not serve much to improve accountability, since states' payroll taxes are deductible

Box 5.7. **Recommendations for improving fiscal relations across levels of government**

Accompany enhanced autonomy by more accountability

- Clarify the assignment of spending responsibilities across levels of governments and reduce overlaps.
- Improve information on how sub-national governments spend their resources and on the outcomes of their policies. Further develop exchange of experience carried out at a sub-national government level.
- Reconsider the no re-election rule or, at a minimum, lengthen the duration of the municipal mandate.

Reform the financing principles of sub-national governments

- Improve the incentives and framework conditions for the effective use of existing taxing powers of sub-national governments before transferring new ones. In particular, *ad hoc* increase in federal transfers should be avoided.
- Give more taxing powers to sub-national governments to promote their accountability, while taking into consideration existing disparities in revenue-raising capacity and technical resources across jurisdictions. At the municipal level, upgrading the land register is a necessary condition to raise more tax revenues in a fair way and this may require technical assistance from higher government levels. States should be attributed at least one main tax, possibly substituting for the existing payroll tax. There are two main options: allowing for a further reliance on a surcharge on the federal personal income tax or implementing a dual VAT system. If states' payroll taxes are maintained, they should no longer be deductible from the federal corporate income tax base.
- Adjust the formulae for allocating earmarked grants across sub-national governments (in particular for basic education), taking better into account objective criteria instead of historical costs (*e.g.* number of teachers and schools) in distributing money across states. Redress the existing perverse incentives in the use of some earmarked grants (FAIS for social infrastructure, FAEB for education) by improving transparency on the use and outcomes of these grants, and by introducing more flexibility in the timing of the use of investment grants.
- Allocation criteria for the earmarked grant for the strengthening of states' financial position (PAFEF) should be clarified and money used strictly to foster the reform of state employees pension schemes.
- Consider transforming some earmarked grants into a new system of grants which would be general-purpose and equalising grants when spillover effects of public spending programmes cannot be clearly identified or sub-national government use of the grant cannot be monitored.

Promote fiscal stability and sustainability

- Reduce the volatility of federal government transfers by smoothing the impact of cyclical developments and/or oil prices.
- Limit the use of federal government transfer as a guarantee for sub-national government borrowing and promote the implementation of prudent fiscal rules at the sub-national level.
- Promote the publication of harmonised information on sub-national government financial positions, including implicit and contingent liabilities.

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from federal taxes. Giving states a share of the federal personal income tax base has some merits – not least because it is visible and because additional collection and compliance costs can be contained. This option may, however, reinforce disparities in financial resources across states since personal income tax bases are highly concentrated geographically. A sub-national consumption tax would be preferable in this regard, although it may increase compliance and collection costs. To mitigate this, a dual VAT approach is preferable to the option which was proposed by the government – a state final consumption tax combined with a federal VAT.

Earmarked grants, whose amounts reflect historical costs, actual endowments and/or cyclical conditions, should be reformed. For the allocation of the basic education grant (FAEB), which is the main earmarked grant received by the states, moving from a formula driven by supply factors (number of schools and teachers) to one based on objective needs (number of school-age children) would be most welcome. It should be recognised, however, that such a shift cannot be implemented rapidly in the context of existing rigidities in public employees' job contracts. Consideration should be given to include the quality of education services in the formula. Allocation criteria for the grant to strengthen states' financial positions (PAFEF) should be clarified and designed so as to avoid moral hazard problems. Furthermore, it should be allocated, if at all, only for promoting states' efforts in reforming their public pension system toward a funded system, by covering part of the transitional adjustment costs – a similar reform is under discussion at the federal level for the ISSSTE system (see Chapter 4). In any case, a consistent strategy for reforming federal and sub-national pension systems should be developed. Otherwise, the PAFEF should be abolished. Merging some of the existing earmarked grants and implementing carry-over provisions to avoid end-year spending sprees could also help to improve their cost-effectiveness, in particular for those grants earmarked to infrastructure programmes.

Funding principles for sub-national government should also be reformed to address interregional disparities more effectively, in particular since a greater reliance on sub-national taxes could reinforce existing inequities in access to core public services. The shift in earmarked grant formula from supply- to demand-driven factors above recommended would already serve this purpose. Yet, the use of earmarked grants should be restricted to internalising clear spillover effects, and not to redistributing more to poorer jurisdictions. Embodying more fiscal equalisation into the existing revenue-sharing arrangement is difficult since states have an opt-out clause. Still, new block transfers to most deprived areas could be envisaged, financed by a combination of some cutbacks on earmarked grants and higher federal government revenues. The main grant earmarked to social infrastructure (FAIS), targeted to poor states and municipalities, should be reformed along these considerations and its effectiveness judged by reductions in the level of poverty. For public services with clear spillover effects (*e.g.* water provision and wastewater treatment facilities), an earmarked grant could continue to be used but the formula needs to be changed, so that a sub-national government using the federal money in an effective manner (such as improving access to water) does not face a cut in grant in the following period. Introducing a reward factor in the formula (for those improving basic services) is part of the solution. For other public services, a move from earmarked to block/equalising grant would be warranted.

Maintain a stabilisation role for fiscal policy and promote fiscal sustainability

The volatility of the financial resources made available to sub-national governments should be reduced so as to avoid ratchet effects in good times and higher federal transfers in difficult times. To this end, the formula used to derive the overall amount of revenue-sharing transfers and some of the earmarked grants should be modified in order to limit the impact of cyclical and oil price developments. This would avoid temporary increases in federal transfers being translated into permanent sub-national spending. Still, some of the recent increase in oil revenues has a persistent nature (although not necessarily permanent) and could be used to finance badly needed infrastructure, but not recurrent spending, at the sub-national government levels (*e.g.* in the water and transport sectors). In this context, federal grants earmarked to infrastructure could be set as a share of these persistent extra-revenues (see Chapter 4). This would avoid the stop-go approach to investment which has resulted in a poor cost-effectiveness of some public infrastructure programmes.

Market mechanisms and fiscal rules should be given a greater role in enhancing fiscal discipline. The use of federal government transfers as a guarantee for sub-national government borrowing needs to be restricted because of moral hazard problems. This could be achieved by setting a limit on the share of federal transfers which can be used to underwrite sub-national government borrowing and/or by making such an implicit guarantee conditional on sub-national governments implementing a prudent fiscal rule (such as a budget balance requirement or a limit on the debt service and/or total debt ratio). For fiscal rules and market mechanisms to play an effective role, information on sub-national governments' financial positions should be improved. This would require the federal government, in co-operation with sub-national governments, to pursue its efforts to define a consistent and harmonised accounting framework, which would include information on implicit and contingent liabilities. The federal government may also need to provide technical assistance to help ensure its swift and effective implementation.

Notes

1. The Mexican bicameral Congress is made of the Senate – each state is equally represented by three senators, in addition to 32 proportional seats divided in 5 circumscriptions – and the Chamber of Deputies.
2. The concentration of oil activity has an important influence on GDP per capita. As an example, Campeche has one of the highest GDP per capita but without oil revenues would have one of the lowest.
3. Evidence on the differentiated impact of the opening up to international trade and capital flows across the Mexican states is provided by many authors, including Rodríguez and Sánchez-Reaza (2002), Chiquiar Cikurel (2002) and Mendoza Cota and Martínez (2001).
4. In 2002, spending on health and education accounted for 21 and 37%, respectively, of general government final consumption.
5. Regulations on school buildings' architectural design provide an example of the rigidities impeding sub-national governments from taking account of the local environmental characteristics before the decentralisation process. Up to 1996, a federal committee (CAPFCE) centralised almost all the responsibilities in the construction, equipment, rehabilitation and maintenance of school infrastructure. CAPFCE's buildings were the same throughout the country, colour included (Alvarez, 2002).
6. For instance, obtaining a car registration plaque now takes about 5 minutes in Chiapas while in some states citizens can wait several months.

7. In the health care sector, the National Health Council (*Consejo Nacional de Salud*) established in 1995 brings together health authorities from the federal and state governments four times a year in order to ensure co-ordination in the National Health System. It proposes concerted actions, has standardised evaluation procedures and developed technical co-operation between states. In the education sector, the federal government organises meetings with states' education ministries to share information on successful experiments.
8. In the United States, a similar experimentation process was carried out for the programme Temporary Assistance for Needy families (forthcoming OECD *Economic Survey of the United States*). See also Oates (1999) for a discussion on the potential for experimentation and innovation associated with decentralisation.
9. At the time of decentralisation, former federal employees had more favourable wage conditions than state employees with similar positions in both the education and health care sector. This has created pressures for an upward adjustment in state employee wages, putting some states under serious financial strain. On the other hand, state pension systems are often more generous than the pension system for federal government's employees, at least for teachers, auguring future tensions on the states' public finance.
10. For teachers, state sections of the trade union negotiate a second package of wage increases and benefits with each state after national negotiations. *Cf.* Chapter 2.
11. In the health care sector, Paqueo and González (2003) noted that the formal rules and norms for health care professionals accompanying the decentralisation reform were established by the federal government and the central health labour union (without any input from the states). One of these agreements gives the labour union the right to nominate replacements and has led to the practice of nepotism. The labour union effectively decides on 50% of staff replacements. In the education sector, the trade union also has an important role in the selection and placement of teachers.
12. A similar approach was adopted in Spain for the health care sector (OECD, 2005c) although in that country, the inverse correlation between income level of the regions and the existing facilities installed was much less pronounced than in the case of Mexico.
13. In the health care sector, inequities in the distribution of grants across states are exacerbated by the fact that richest states tend to have the highest levels of coverage by the social security system which benefits from a much higher implicit subsidy than the State Health Services per served person.
14. In Austria for instance, administrative costs associated with earmarked grants were found to be substantial, arising from application procedures involving potential beneficiaries, establishing evidence that funds were used as approved, and related activities. Such costs are particularly high for small municipalities where they were estimated to reach between 10 and 20% of the grant (OECD, 2005d). Managing earmarked grants has generated high administrative costs in a number of other OECD countries, including Germany, Switzerland and the United Kingdom.
15. As an illustration, Moreno Jaimes (2001) notes that although the National Health Council is responsible for assessing state health policies and outcomes, there is no clear sanction/incentive mechanisms should a state deviate from standards set by the federal government.
16. In Estado de México, Nuevo León and Baja California, about half of the students were registered in schools managed by the states before the decentralisation took place (Merino, 2001).
17. Only four OECD countries have a payroll tax at the sub-national level (Australia, Austria, Canada and Mexico). Only in Australia does the payroll tax account for a significant share of the states' tax revenues but, at 28% in 2002, it remains much less important than in Mexico. In a number of other OECD countries (including France, Germany, Hungary, Italy, Japan and Spain), sub-national governments rely on business taxes based on the value of the company's inputs, value added or assets (or a combination of these). Such taxes have, however, raised a number of concerns and some have been reduced recently (OECD, 2005e).
18. The incidence of payroll taxes may be partly shifted onto wages and/or prices, thus mitigating the third and fourth disadvantages of payroll taxes identified here. However, the large informal economy in Mexico likely limits the scope for tax-shifting.
19. A considerable space of land is currently without well-defined land titles. In 2003, 63% of the farm land corresponded to *ejido*. An *ejido* is a community based on land tenure that originated from the breakdown of large holdings of land at the end of the revolutionary period. Although modifications to the Constitution were carried out in 1992 to allow converting *ejidos* into private property, there exists a complicated legal process that has to be fulfilled by petitioners and the transition to private property has been much slower than anticipated. A programme to improve the land register with the latest geographical tools was introduced recently.

20. From 2005, the federal government can take back the tax auditing responsibility from the states in the case of evidence of loose auditing at the state level.

21. See Sour (2004) and Moreno (2003). The earmarked grants introduced in 1998 are the Fund to support municipal social infrastructure (FAISM) and the Fund for strengthening municipalities and the federal district (FAFM).

22. Progressivity in the federal personal income tax is rather low at the upper end of the income scale. Top statutory marginal rates have been reduced gradually, to 32% in 2005, and are not high by OECD standards. Various rebates (*e.g.* exemptions for fringe benefits as well as the deductibility for medical expenses and contributions to private retirement schemes, see Chapter 4) further contribute to mitigate the actual progressivity at the upper end of the income scale. In this context, giving states the right to introduce a surcharge on the federal personal income tax is unlikely to create intense competition across states to attract the affluent.

23. Dividing sales between taxed and exempt at time of purchase – the retail sales tax approach – is more difficult than paying tax on all purchases and collecting taxes on all sales. See Díaz-Cayeros and McLure (2000) for a good discussion on the problems raised with the combination of a federal VAT and a state sales tax.

24. Before moving to a dual VAT system, a reform to broaden the VAT base and improve tax collection would be most welcome. These efforts would also redress the VAT regressive bias, since the massive exemptions and zero-rating in the VAT system subsidise top income deciles more (OECD, 1999).

25. Simulations by Webb and Gonzalez (2004) indicate that allowing states to introduce a 2% sales tax accompanied by a commensurate reduction in the federal VAT rate will only be attractive to most of the states if the federal government absorbs at least part of the costs (*i.e.* by cutting revenue-sharing transfers to the states by less than justified by the reduced VAT rate). If the federal government absorbed half of the cost, it would need to compensate only the Chiapas and Tabasco individually to have all states gain.

26. Federal transfers set as a share of tax and oil-related revenues include the so-called *participaciones* and several earmarked grants: the fund for municipal development (FFM), the Fund to strengthen municipal finance (FORTAMUN), the Fund to strengthen states' finance (PAFEF) and the Social Infrastructure Fund (FAIS). In addition, the Fund for infrastructure in the states (FIES) is set as a share of the oil windfall revenues (see Chapter 4). In 2004, the share was set at 50% and the FIES amounted to peso 23.3 billion. Issues arising from the assignment of oil revenues to sub-national governments are discussed in Ahmad and Mottu (2003) and in Brosio (2003).

27. In 2002, states faced lower-than-anticipated revenues following the 2001 recession. Given that states had committed some of their expected revenues to projects or items that could not easily be reversed during the final quarter of the year, the federal government decided to bring forward future income from the revenue-sharing arrangement for 2003. Therefore, states were able to solve their liquidity problems and fulfilled their obligations in 2002. In principle, they would have had to face lower (but anticipated) income from the revenue sharing scheme in 2003. In practice, higher oil prices implied higher federal revenue to be shared.

28. In 2004, states used only 63% of the federal government grants earmarked for investment through the FIES. In six of them (Campeche, Coahuila, Nayarit, Querétaro, Jalisco and Tabasco), this percentage only reached one third or less (La Crónica, 30 December 2004).

29. Partial indication suggests that at the state level, the share of current spending in total spending increased from 80 to 88% between 1994 and 2001 (Secretaría de Hacienda y Crédito Público, 2003).

30. In Austria, Belgium, Canada and Spain, the debt-to-GDP ratio of the intermediate government tier stood at 3, 6, 46 and 7%, respectively, in 2003.

31. Reflecting a more limited access to borrowing, municipalities' financial position has likely remained under better control. According to Fitch (2002a), the overwhelming majority of municipalities in Mexico tend to have considerably lower debt levels relative to the states. On the other hand, Díaz Cayeros and Martínez-Uriate (1997) suggested that although there are few highly indebted municipalities in number, they concentrate a very important share of the population.

32. Existing pension systems also limit geographical and functional mobility of employees since pension rights are not portable when employees move from on state to another, even in a similar position, or take a private sector position.

33. IMF (2004).

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34. It also raised equity issues since the size of per capita extraordinary transfers varied substantially across states, with richer states receiving overall more than poorer ones since they were more heavily indebted (Hernández Trillo *et al.*, 2002).

35. The nine states with a formal limit on indebtedness are Campeche, Chiapas, Guanajuato, Hidalgo, Jalisco, Nayarit, San Luis Potosí, Tlaxcala, Zacatecas. See Secretaría de Hacienda y Crédito Público (2003) and Aregional.com (2002) for a description on fiscal rules in force in Mexican states. Besides quantitative limits, some state legislations include conditions on the maturity of the debt (*e.g.* Veracruz).

36. One complication in Mexico to design fiscal rules is the high sensitivity of public finance to oil price developments. The Chilean structural budget rule could, however, be a useful reference. Its main objective is to smooth public spending in a context of both cyclical fluctuations and copper price shocks so as to achieve more stable conditions for the implementation of long-term social and investment programmes (OECD, 2003b). Introducing a structural budget rule at the sub-national level may not be warranted and would, in any case, raise difficult issues. Still, the basic principles of this approach could be implemented to adjust over time federal transfers to sub-national governments.

37. According to Aregional.com (2002), this approval system allowed some discretionary decisions by the federal government.

38. For more information on this topic see the OECD Database on Budget Practices and Procedures, Aregional.com (2002) and the World Bank (2003).

39. The Mexican Constitution states that every citizen has the right to health care and education.

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