October 2006
IMF Country Report No. 06/351

Mexico: Selected Issues

This Selected Issues paper for Mexico was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on August 17, 2006. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of Mexico or the Executive Board of the IMF.

The policy of publication of staff reports and other documents by the IMF allows for the deletion of market-sensitive information.

To assist the IMF in evaluating the publication policy, reader comments are invited and may be sent by e-mail to publicationpolicy@imf.org.

Copies of this report are available to the public from

International Monetary Fund ● Publication Services
700 19th Street, N.W. ● Washington, D.C. 20431
Telephone: (202) 623 7430 ● Telefax: (202) 623 7201
E-mail: publications@imf.org ● Internet: http://www.imf.org

Price: $18.00 a copy

International Monetary Fund
Washington, D.C.

INTERNATIONAL MONETARY FUND

MEXICO

Selected Issues

Prepared by S. Phillips, G. Mehrez, and V. Moissinac (all WHD)

Approved by Western Hemisphere Department

August 17, 2006

Contents Page

I. A Survey of Conditions for Growth in Mexico, in International Perspective........................2
A. Introduction...2
B. Mexico's Growth Performance 3
C. Assessing Conditions for Growth: A Diagnostic Approach 9
D. Concluding Remarks...27

II. Remittances to Mexico: An Overview 31
A. Remittances to Mexico in International Perspective...31
B. Measurement Issues 34
C. Structure and Growth of Recorded Remittances...36
D. Migration as a Source of Rising Remittances...38
E. Effects of Remittances on Poverty and Domestic Demand....................................41
F. Cyclical Aspects of Remittances 43

Boxes
1. Growth Accounting Country Comparisons 6
2. Labor Productivity Growth in Mexico...7

References
I. 29
II. 45

I. A SURVEY OF CONDITIONS FOR GROWTH IN MEXICO, IN INTERNATIONAL PERSPECTIVE[1]

Abstract

Having implemented major reforms over the course of the last 20 years, Mexico now enjoys a degree of economic stability and per capita income that compares favorably with most of Latin America. Since 2003, Mexico's economy has grown by 3–4 percent a year. On the other hand, Mexico's income over a longer period has not been converging with that of other OECD members. And while Mexico's growth record is similar to that of many other countries in the region, it falls short of that in some other emerging market countries, suggesting that there is scope to raise long-run growth to a higher sustainable path. This paper surveys the evidence and arguments about what has prevented higher growth, to form a summary diagnosis of key areas for structural reforms needed to lift growth constraints and raise living standards.

A. Introduction

1. **Having implemented major reforms over the course of the last 20 years, Mexico now enjoys a degree of economic stability and per capita income that compares favorably with much of Latin America.** Yet Mexico's income has not been converging with that of other OECD members, nor has Mexico grown as fast as some other emerging market countries—albeit mainly countries outside Latin America. What has stopped Mexico from achieving faster growth? This paper surveys the evidence and arguments, with a view to forming a summary diagnosis of the constraints on Mexico's growth, and identifying the areas for reforms to accelerate growth and raise living standards.

2. **This paper is a wide-ranging survey of the conditions for, and obstacles to, growth in Mexico.** The purpose is to bring together and evaluate the relevant evidence and arguments on Mexico's growth, rather than break new empirical ground. The focus is mainly on examining current conditions for growth, rather than the historical evolution of Mexican growth. Where data allow, Mexico's current growth conditions are viewed relative to other countries' conditions, drawing extensively on analyses conducted by the OECD and World Bank. As the aim is to see where reforms could help to support higher growth, comparisons

---

[1] Prepared by Vincent Moissinac (vmoissinac@imf.org). The author is indebted to the Mexican authorities at the Bank of Mexico and the Ministry of Finance for their helpful suggestions on an earlier draft of this paper.

are made mostly with the (relatively few) emerging market countries that have performed better than Mexico or with industrialized countries, as in the case of most OECD members.

3. **The discussion of growth conditions is grouped in three thematic dimensions:**

- *Macroeconomic and financial sector stability,* and the basis these provide for productive investment. In these areas, Mexico has come far in removing obstacles to growth, although more time will be needed to develop a financial system that is not only stable but also deep, providing efficient access to credit on a larger scale than in the past.

- *The efficient and dynamic functioning of markets,* including the degree of flexibility in reallocation of resources and the role of competition in spurring efficiency and ongoing productivity gains. In comparison to faster-growing countries, Mexico still has scope for improvement in this area.

- *The business and investment environment*, including the enforcement of laws and contracts, governance, security issues, and the development of human capital. Remaining weaknesses have been identified in this area.

4. **The paper is organized as follows.** Section B frames the issue of Mexico's growth record, mainly in terms of how relatively slow productivity growth has tended to limit increases in living standards, and presents the paper's prior assumptions and approach. Section C presents the main observations and conclusions emerging from the survey of growth conditions in Mexico. Section D concludes.

B. Mexico's Growth Performance

Slow economic convergence

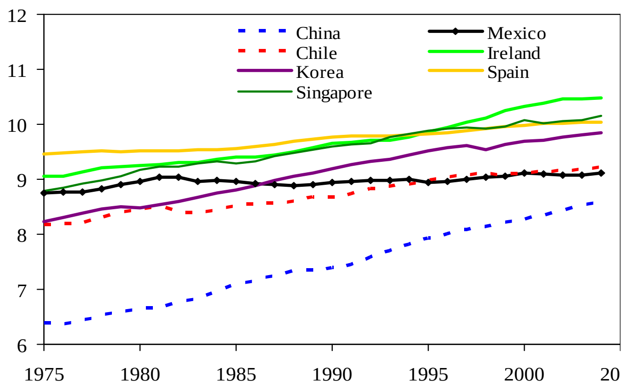
5. **Beginning about 1985, Mexico was one of the first countries in Latin America to implement major market-oriented reforms.** After the macro-financial crisis of the mid-1990s, prudent macro policies and ongoing reforms have now brought Mexico macroeconomic and financial stability and improved transparency and accountability of government. Largely as a result of these efforts, Mexico's economic situation and outlook today compares favorably, not only to the past, but also to most other countries in Latin America.

6. **But, as in much of Latin America, growth is not yet rapid enough for Mexico to converge rapidly toward the income levels of the richer countries, such as its fellow OECD members.** Growth has been about 3 percent annually, or 1½ percent per capita, on average since 1990. Faster growth is possible in today's world: some other emerging market

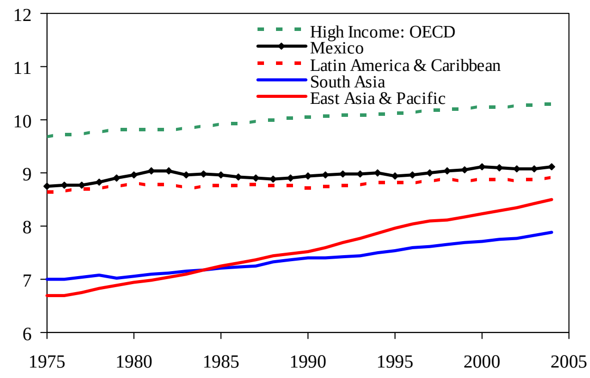
countries have been able to grow more rapidly, on a sustained basis. But almost all those countries are outside Latin America. Indeed, growth in the Latin American region has lagged behind growth of other regions for decades, and in recent years as well—see for example Zettelmeyer (2006).

Per Capita GDP on PPP terms,[2] 1975-2004

Mexico and selected fast-growing countries



Mexico and selected regions



Source: World Development Indicators.

7. **Trade patterns suggest Mexico has not yet fully benefited from one of its key advantages: the combination of proximity to the United States and free trade with this country.** Only a limited share of Mexican firms is exporting to the U.S., with most of these firms located near the northern border. Also, Mexico exports mainly commodity and generally low value-added manufacturing products to the U.S., and few services, although some, such as elderly care, are now beginning. These patterns suggest greater potential for penetrating U.S. markets than has so far occurred.

8. **What is holding Mexico back, preventing a transition to much faster growth?** Comparisons with other countries, notably those that have been more successful in spurring growth than Mexico, provide a guide to make a diagnosis. They allow us to reject right away the thesis that the reforms Mexico has implemented are ineffective when applied in Latin America. Cross-country studies by Loayza and others (2004) indicate that the policies found to be associated with growth around the world are no less effective when they are implemented in Latin America. Moreover, within Latin America, the country that stands out in terms of sustained growth over the last 20 years—Chile—is also the country that was earliest to launch market-oriented reforms, and which in general seems to have taken those

---

[2] Logarithm scale.

reforms farthest. This suggests that Mexico's policy reforms so far have been appropriate and beneficial, but that more time and further reforms may be needed to achieve faster growth.

Low TFP growth

9. **Standard growth accounting exercises suggest that Mexico's growth performance is held back mainly by a relatively low rate of Total Factor Productivity (TFP) growth (Box 1).**[3]

10. **Although growth accounting results for Mexico do not emphasize the investment rate as the main constraint, a cross-country perspective suggests capital formation could make a greater contribution to growth.** Some of the countries that have grown faster than Mexico have had higher investment (and saving) rates. Indeed, for countries in East Asia (with or without China), available growth accounting results reveal the central role played by capital formation, including in providing dense infrastructure coverage. Like low TFP growth, inferior capital formation could help to explain Mexico's lagging labor productivity growth vis-à-vis other countries (Box 2).

11. **The role of labor accumulation raises additional questions—although mainly outside the scope of this paper.** From a purely growth accounting perspective, migration out of Mexico reduces overall GDP growth (migration to the U.S. was as much as 400,000 to 500,000 in 2004 according to some estimates[4], compared to an increase in the economically active population of 650,000 that year, according to official sources, INEGI). However, the impact on per capita income is uncertain. Besides the pull from the wage differential with the U.S., the outflow may point to constraints on the absorptive capacity of Mexico's labor markets. It is possible that migration lowers income growth, by disrupting human capital accumulation and the overall quality of the labor force. In particular, migration may be most likely amongst the most entrepreneurial and risk-taking individuals within a community, who would have the greatest capacity to spur change and innovation. On the other hand, migration has significantly improved family incomes through remittances and it may involve additional positive spillovers—for instance increasing technological transfers from the U.S. or access to resources in the U.S. that may be used for investment in Mexico.

[3] TFP estimates for Mexico, as for many other developing countries, are subject to wide margins of error, reflecting the difficulty in estimating factor accumulation (considering the extent of economic informality and other data limitations) and the sensitivity of the results to the time period arising from the record of large economic and financial shocks.

[4] Based on Jeffrey Passel and Robert Suro (2003). Mexico's National Population Council (CONAPO) has also estimated that annual migration to the U.S. reached 400,000 in 2004.

Box 1. Growth Accounting Country Comparisons

Focusing on the post-crisis period (1996–2003), Faals (2005) estimates contributions to per capita growth from TFP and capital formation of 0.7 percent and 0.4 percent respectively. While subject to large margins of error, growth accounting estimates comparable across countries (Bosworth and Collins (2003) and Loayza and others (2004)) suggest weaker TFP growth in Mexico than in countries that have enjoyed faster growth, including Chile and many countries in Asia. Some of the faster-growing countries also posted faster capital formation than Mexico, namely Chile in the 1990s and East Asia.

Growth Accounting, International Comparisons

(Annual percent change)

				Contribution to output per worker growth		
		Output	Output per worker	Physical capital per worker	Human capital	TFP
Mexico 1/	1965-1979	6.5	2.9	0.8	...	2.1
	1980-2003	2.6	-0.4	0.1	...	-0.5
	1996-2003	3.5	1.1	0.4	...	0.7
Mexico 2/						
	1970s	6.7	4.7	2.7	1.9	0.1
	1980s	1.8	-0.2	0.9	2.3	-3.4
	1990s	3.5	2.0	1.0	1.0	0.1
Argentina						
	1970s	3.0	2.2	1.6	1.0	-0.5
	1980s	-1.5	-2.4	-0.3	1.2	-3.3
	1990s	4.6	3.5	0.0	1.0	2.5
Brazil						
	1970s	8.5	6.5	2.6	0.6	3.3
	1980s	1.6	-0.1	0.6	1.4	-2.2
	1990s	2.7	1.3	0.3	1.2	-0.3
Chile						
	1970s	2.9	1.9	0.4	1.0	0.5
	1980s	3.8	2.8	0.8	0.7	1.3
	1990s	6.6	5.7	2.5	0.8	2.4
Colombia						
	1970s	5.5	3.4	0.9	2.4	0.1
	1980s	3.4	1.6	0.8	1.1	-0.4
	1990s	2.7	1.2	0.8	1.2	-0.9
Industrial countries						
	1970s	3.3	1.7	0.9	0.5	0.3
	1980s	2.9	1.8	0.7	0.2	0.9
	1990s	2.5	1.5	0.8	0.2	0.5
Latin America						
	1970s	6.0	2.7	1.2	0.3	1.1
	1980s	1.1	-1.8	0.0	0.5	-2.3
	1990s	3.3	0.9	0.2	0.3	0.4
China						
	1970s	5.3	2.8	1.6	0.4	0.7
	1980s	9.2	6.8	2.1	0.4	4.2
	1990s	10.1	8.8	3.2	0.3	5.1
East Asia less China						
	1970s	7.6	4.3	2.7	0.6	0.9
	1980s	7.2	4.4	2.4	0.6	1.3
	1990s	5.7	3.4	2.3	0.5	0.5
South Asia						
	1970s	3.0	0.7	0.6	0.3	-0.2
	1980s	5.8	3.7	1.0	0.4	2.2
	1990s	5.3	2.8	1.2	0.4	1.2
Middle East						
	1970s	4.4	1.9	2.1	0.5	-0.6
	1980s	4.0	1.1	0.6	0.5	0.1
	1990s	3.6	0.8	0.3	0.5	0.0

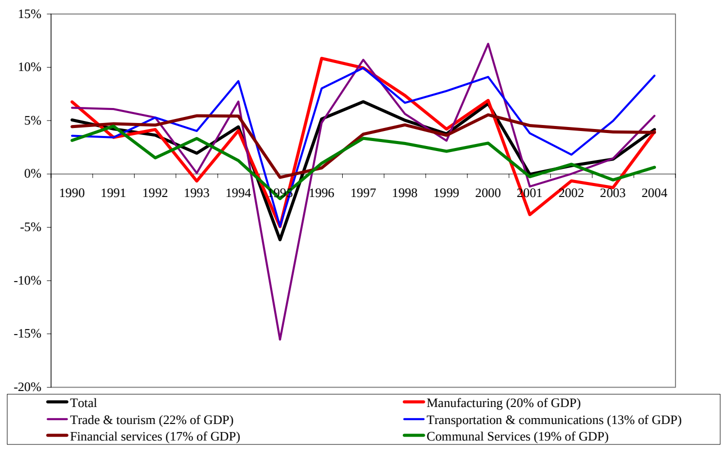
Sources: Bosworth and Collins (2003); Faals (2005); Loayza et al. (2004); and IMF staff calcul
1/ Based on Faals (2005)
2/ Based on Loayza et al. (2004)

Box 2. Labor Productivity Growth in Mexico

According to OECD (2006), Mexico's per capita income gap vis-à-vis the US is due mainly to lower labor productivity—with labor resource utilization lagging but much closer to US levels. Mexico is also compared here to Korea, one of the more rapidly growing emerging economies that is also an OECD member. Mexico's productivity growth has persistently lagged, but recent trends show an improvement in key economic sectors.

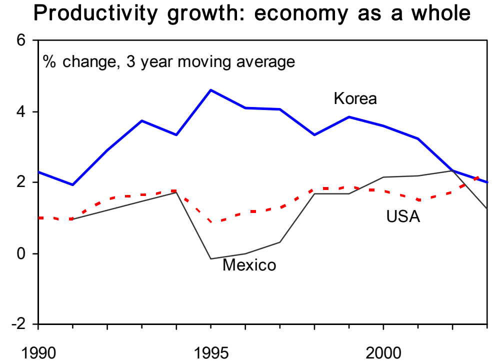
Trends. Based on INEGI data, labor productivity growth picked up in 2004, close to levels seen in the last episode of fast economic expansion, although productivity growth in manufacturing was lower.

Mexico: Labor Productivity Growth in Selected Sectors

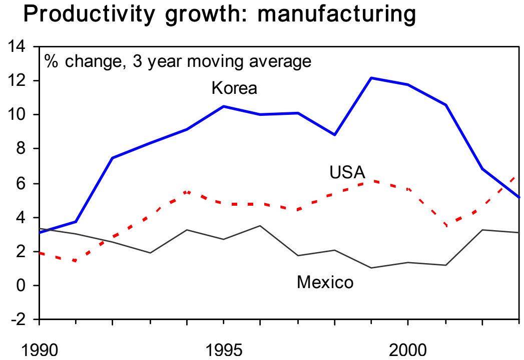


Vis-à-vis other countries. Based on OECD data, labor productivity growth in Mexico stayed in the 0-2 percent range for most of the time since 1990—with a sharp decline in the aftermath of the 1994 crisis. Whereas labor productivity has stayed around 2 percent since 2000 in the service sector, it has edged up slightly in manufacturing. However, Mexico's lag vis-à-vis countries such as South Korea and the US is most visible in manufacturing.

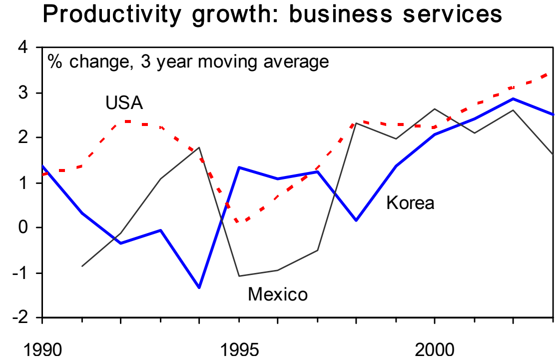
Productivity growth: economy as a whole



Productivity growth: manufacturing



Productivity growth: business services



An informal, qualitative framework for assessing conditions for growth

12. **A large and growing theoretical and empirical literature seeks to explain why countries grow at different rates, at different times.** While that search is continuing, we do at least know what richer countries, and faster-growing countries, tend to "look like": that is, we know the characteristics on which such countries tend to differ from less rich, and slower-growing, countries. Indeed, the empirical literature has found many variables correlated with growth—perhaps too many, as it is possible that some of these correlations may reflect reverse causality and simultaneity bias, or associations with missing variables. On the other hand, standard growth regressions may understate or even fail to detect important relationships, because of measurement problems, or because they impose a too-simple specification, usually ignoring non-linearities and complementarities.

13. **Rather than contributing a new empirical analysis, this paper presumes that the factors usually found to be associated with growth—whether macro policies, trade openness, or measures of institutions, governance or the business environment—do play a causal role in supporting growth.** We also consider that microeconomic flexibility and market competition matter for productivity and growth, and not just for static efficiency and the level of income (Cole and others (2004)).

14. **Mexico's growth conditions are viewed relative to other strongly performing countries' conditions, where data allow, in order to suggest where reforms could best be focused.** Comparisons of interest include those with: (i) conditions in Latin America, including Chile;[5] (ii) other emerging market countries; and (iii) other OECD members (including recent members such as Korea). An advantage of the paper's informal approach is that it allows a closer look at Mexico, and at factors that may be more relevant to Mexico than to most other countries. Such factors, not taken into account in studies using cross-country growth regressions, include the great size and regional diversity of Mexico as well as political changes such as Mexico's recent shift from a non-competitive political system to a competitive, multi-party system with greater transparency and accountability.

[5] Chile and Mexico share many policy similarities and are often named as the top reformers in Latin America. Chile went first in Latin America, starting around 1975; Mexico was second, in 1985, with similar structural reform and stabilization programs. The parallel continued, as both countries later fell into major crises (Chile in 1982, Mexico in 1994), after which each has been able to maintain stability.

C. Assessing Conditions for Growth: A Diagnostic Approach

15. **A survey of the literature shows that Mexico compares favorably with OECD countries as well as emerging market peers on macroeconomic and financial stability but less well in meeting other conditions for growth.** Mexico has successfully reduced inflation and fiscal deficit levels to OECD country levels (or below), and measures well on financial soundness, with financial legislation and regulations now generally meeting best international practices and the balance sheet of Mexico's banking sector among the most robust systems in all emerging markets. But beyond this macro-financial stability, Mexico lags developed and fast-growing emerging economies in some structural aspects, grouped here into two areas: (i) the efficient functioning of markets, and (ii) the quality of the business environment and market infrastructure—both "hard" infrastructure such as roads and ports, and "soft" infrastructure, such as enforcement of property rights, regulatory standards, education. This section presents the evidence on these conditions for growth.

Macro and financial sector stability

16. **The importance for growth of entrenching macro and financial stability can hardly be over-emphasized.** Since 1995, Mexico has turned around macro-policy and financial supervisory frameworks and institutions, with stellar results in terms of low inflation and more resilient public and private balance sheets. While considerable benefits have already been observed in specific economic sectors, the full effects of these achievements on GDP growth likely require more time to materialize. As new growth initiatives are being considered, it will be essential to continue to entrench such stability.

17. **Macroeconomic conditions, and the supporting institutional and policy framework, have improved tremendously over the past decade.** Fiscal deficits are now in the 1½ percent range (or balance on the traditional deficit measure), public debt is on a declining trend, and inflation is near 3 percent—a situation better than in many advanced OECD countries. The free floating exchange rate regime, combined with the anti-inflation credibility gained by the central bank, has enhanced Mexico's resilience to real and financial shocks.

18. **The financial sector has also become robust, posting healthy balance sheets and profits—by comparison to other LAC and EM countries—and generating rapid growth in financial services, albeit from a low base.** Aside from stable macro conditions, the growth of lending and other financial services owes much to comprehensive financial sector reforms, which in particular opened the sector to foreign ownership, tightened risk management practices and capitalization requirements, and created better information systems about borrowers.

19. **Increasingly, we have seen the positive effects of macroeconomic and financial stability for growth, and further positive effects are likely in the pipeline.** The most visible effects: the low level of real interest rates by historical standards; the development of domestic capital markets, with for instance the establishment of a 20-year domestic yield curve with liquid benchmarks; restored credit access for households, with for instance the fast expansion of the mortgage market and, accordingly, the construction sector. Again, as these kinds of effects take time to play out—with the example of Chile in the 1980s—further gains are likely in the future.

20. **Going forward, the task will be to further entrench stability.** The new Budget and Fiscal Responsibility Law is a step in that direction, requiring that future budgets aim at a zero balance (on the traditional fiscal measure). Provided that off-budget flows stay contained, consistent achievement of this target would assure sustainability of the total public debt. However, with the budget relying on oil revenues for about 40 percent of its resources, meeting this target could become difficult in the event of a sharp decline in oil prices or oil production. To reduce the exposure of the public finances to oil uncertainties over time, tax reform, as well as risk-sharing with the private sector in the energy sector, are indicated. In the financial sector, the challenge of entrenching stability could include establishing the full independence of the financial supervisory agencies, as recommended by the recent FSAP.

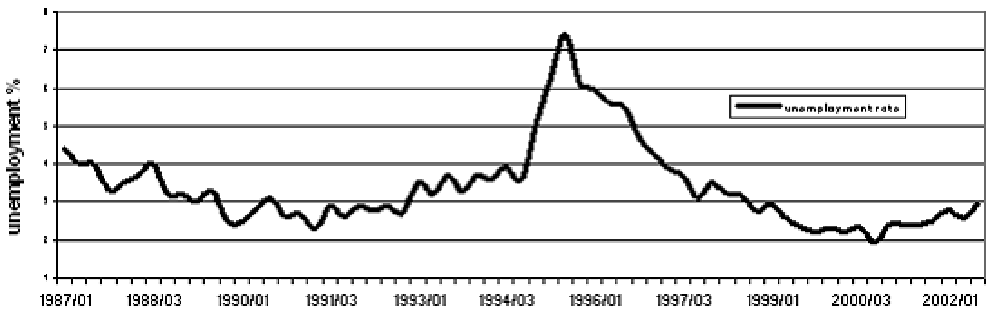
Market functioning: flexibility, competition, and efficiency

21. **For the full benefits of a market-based economy to be realized in terms of raising growth and living standards, markets must function efficiently to allocate resources flexibly to their most productive uses.** In common with many other emerging economies, Mexico still faces obstacles to the flexible and efficient functioning of key markets. Rigid labor market regulations inhibit reallocation of labor and contribute to maintaining a large informal sector that potentially affects labor productivity. Still relatively limited access to financial intermediation for segments of the economy means reliance on nonconventional financing sources, whose supply may be more costly and less certain. Barriers to competition—or possibly inadequate regulation of private oligopolies—in domestic product markets raise the cost of essential production inputs, thereby hampering investment and slowing productivity growth. In some cases, absence of sufficient competitive forces within an industry may limit its productivity growth. Mexico has begun to take important steps in this area, notably with significant reforms to the competition law in 2006. Available cross-country indicators that allow comparisons with other OECD members and some emerging economies point to areas where structural reforms could yield important benefits for growth.

Labor markets[6]

22. **Mexico's labor markets appear to be fairly flexible in terms of wage adjustments**. This has been reflected in low unemployment both by Latin American and developed-country standards. There is evidence that this satisfactory performance is partly due to the nature of collective bargaining in Mexico, which has placed greater emphasis on maintaining employment than increasing wages (Maloney and Pontual (1999)). Another explanation lies in the existence of a dynamic microfirm sector that absorbs a sizeable fraction of the Mexican active population and behaves much like the small-business sector of industrialized countries (World Bank (1999)).

Unemployment Rate—Urban Mexico, 1987–2002



Source: INEGI.

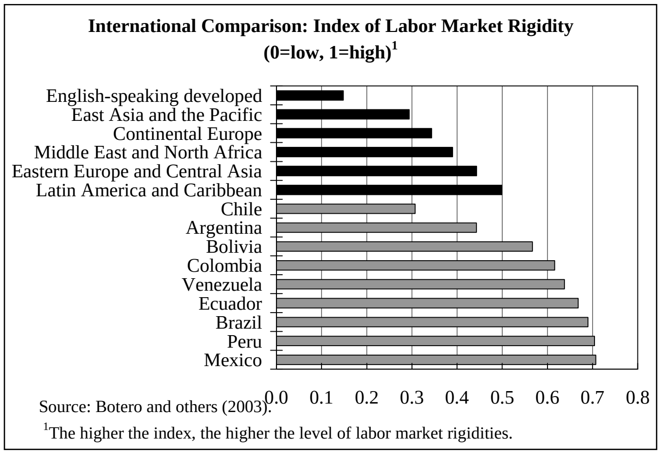
23. **Yet labor regulations in Mexico remain among the most rigid in the OECD and emerging markets.** Restrictive hiring and firing modalities add considerably to the cost of labor. Current regulations generally establish that the working relationship between an employer and an employee is permanent;[7] severance payments are high; and nonwage costs equivalent to an estimated 47.2 percent of payroll put Mexico near the top of the nonwage costs classification for Latin American countries. In addition, procedures to settle disputes are protracted and uncertain, with considerable discretion in the hands of the labor conciliation and arbitration council (JCA). Possible reforms in this area could include mechanisms to encourage mutual agreement among the involved parties, deadlines to reach a final settlement, and transparent procedures to reach final decisions. The JCA's role in

---

[6] This section has benefited from extensive World Bank comments.

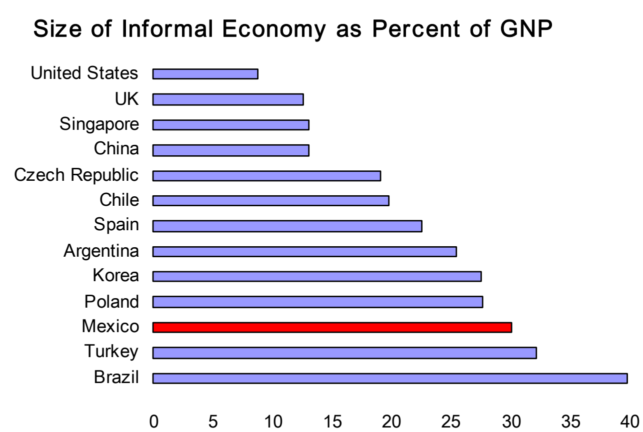
[7] In limited specific situations a working relationship may be considered fixed term, or for a specific assignment (*por obra*).

authorizing enterprises' decisions about downsizing or shutting down may also raise transaction costs in such procedures (De Buen and De Buen (2001)).



24. **In Mexico, as elsewhere, labor market rigidities constrain employment turnover over the business cycle and help split the labor market between a formal and an informal segment; this segmentation hampers the efficient allocation of labor and productivity.** High costs of dismissals cause firms to resist shedding labor in cyclical downturns and to hire fewer workers than would be optimal in the upswing. On the other side, workers might also avoid looking for more productive jobs as this risks losing severance payments. These distortions lead to an inefficient allocation of labor that negatively affects productivity. In addition, they imply lower employment turnover rates, which may reduce workers' incentives to train and acquire new skills. High labor costs and other regulations to provide job security for those employed in the formal sector tend to foster informality. Unionized, formal sector workers are able to command higher wages, with an effect on wage levels in the broader labor market. This in turn tends to reduce formal employment and encourage informality to persist. In addition, firms engaged in activities that naturally have high labor turnover rates may choose to operate informally, or to stay small.

25. **Pervasive informality tends to reduce labor productivity in the economy.** Different authors (see for instance IMF(2005b)) estimate that around 50 to 60 percent of the working population may be classified as informal, where, in general, informality is defined as without job benefits, such as medical insurance and retirement plans. Informality is associated with low size enterprises and since these tend to have lower productivity they reduce aggregate labor



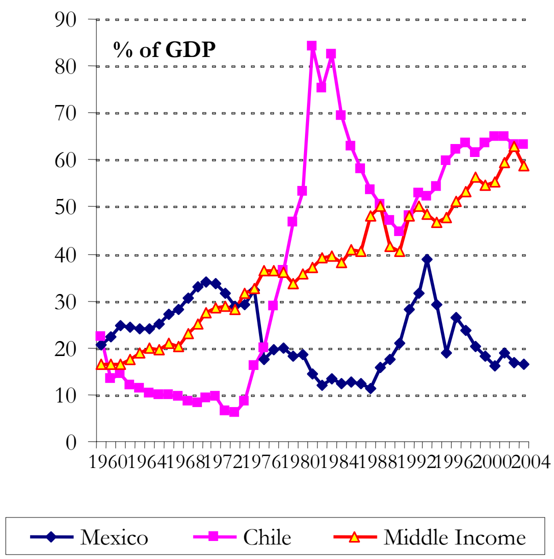
Source: World Bank (2006)

productivity. Informality also impedes the efficient allocation of resources as the underlying capital is generally not registered and thus cannot be used to access credit. Incentives to move into the formal sector are weak. High informality rates combined with poor labor productivity growth likely contributed to the slow growth of labor income during the 1990s.

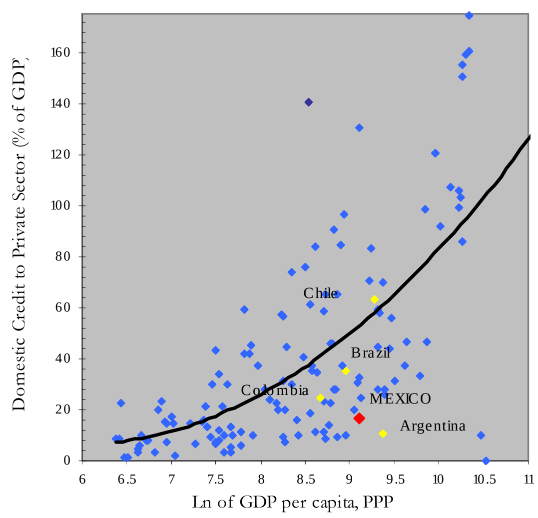
Financial sector access

26. **Ambitious reforms in the financial sector have already yielded important gains; but their full benefit has yet to be felt**. A recent Financial System Assessment Update (or FSSA, see IMF (2006)), found good prospects for further private sector financing growth, while also pointing to a number of remaining obstacles to broader and more efficient financial intermediation.

Evolution of Domestic Credit to the Private Sector (1960–2004)



Cross-Country Comparisons of Domestic Credit to the Private Sector (2004)

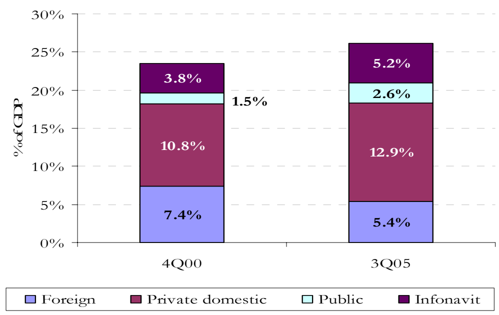


Source: World Development Indicators.

27. **Mexico's strong macroeconomic performance and comprehensive financial sector reforms since the mid-1990s have restored the growth of domestic credit and created positive prospects for continued growth.** The FSAP Update found that financial stability is underpinned by well-capitalized and profitable banks, sizeable institutional investor assets (which are growing at around 1 percent of GDP per annum), and a much improved legal and regulatory framework. This in turn should help financial deepening. Private sector credit growth has accelerated, and financing from private domestic sources has increased by somewhat more than 2 percent of GDP between 2000 and 2005 (see figure).

However, intermediation remains quite low by international standards, and experience in other countries suggests that it may take time until the full effects of financial reform materialize.

Financing to the Private Sector by Source
(in percent of GDP)



Source: BOM and SHCP.

28. **However, the FSAP Update also found that accessibility and affordability of financing have remained limited in some specific market segments**. Access to domestic capital markets has improved mostly for large firms; in spite of various government programs to support micro and SME loans, the share of bank lending to these firms has not increased by much. Low access to the financial sector for SMEs may hurt growth as less efficient intermediation channels—suppliers' credits or other related-party lending—or retained earnings are used. Also, the accessibility of financing varies widely across Mexican states, which can be partly attributed to differences in the business environment and the level of enforcement of creditor rights across states—resulting in an overall weak business environment (see table below). To address these problems, the FSAP Update recommended: (i) promoting information availability on SMEs (namely ensuring that the credit history of all SME loans be captured adequately by the credit bureau as well as simplifying, with caution, regulatory requirements for SME lending), (ii) the further strengthening of public registries of commerce and property and the reduction of their user costs (e.g., notaries), and (iii) the stronger and more consistent enforcement of creditors' rights across jurisdictions.

Selected Cross-Country Doing Business Comparisons (2005)

	Mexico	Chile	Brazil	Region	OECD
Registering Property					
Procedures (number)	5	6	15	6.7	4.7
Time (days)	74	31	47	76.5	32.2
Cost (% of property value)	5.3	1.3	4.0	4.8	4.8
Getting Credit					
Legal Rights Index	2	4	2	3.8	6.3
Credit Information Index	6	6	5	4.5	5.0
Public registry coverage (% adults)	0	45.7	9.6	11.5	7.5
Private bureau coverage (% adults)	49.4	22.1	53.6	31.2	59.0
Protecting Investors					
Disclosure Index	6	8	5	4.1	6.1
Director Liability Index	0	4	7	3.8	5.1
Shareholder Suits Index	5	5	4	5.7	6.6
Investor Protection Index	3.7	5.7	5.3	4.5	5.9
Enforcing Contracts					
Procedures (number)	36	28	24	35.4	19.5
Time (days)	421	305	546	461.3	225.7
Cost (% of debt)	20.0	10.4	15.5	23.3	10.6

Source: World Bank.

Note: The Legal Rights Index ranges from 0-10, with higher scores indicating that those laws are better designed to expand access to credit. The Credit Information Index ranges from 0-6, with higher values indicating that more credit information is available from a public registry or private bureau. The Investor Protection Index is an average of three dimensions: transparency of transactions (Extent of Disclosure Index), liability for self-dealing (Extent of Director Liability Index) and shareholders' ability to sue officers and directors for misconduct (Ease of Shareholder Suits Index); each of these indices varies between 0–10, with higher scores indicating better investor protection.

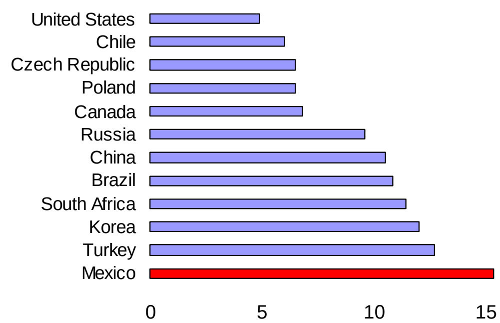
29. **The FSAP also emphasized the need to foster further competition on prices and quality of services among financial intermediaries, for the users of financial services to fully benefit from efficiency gains**. Because concentration may sometimes reduce competition, it is important to enhance efforts to promote competition by: (a) fostering consumer mobility; (b) preventing collusive practices; (c) relaxing entry barriers; and (d) leveling the playing field. In retail payments markets, open access to the interchange and processing infrastructures stimulates competition. However, in more concentrated financial systems such as Mexico's, instead of competing on fees and services, large banks (as owners and main users of the key retail payments networks) have an incentive to limit outsiders' access to electronic fund transfers (EFT), payroll or direct debits to outsiders, through their exclusive network, resulting in potentially higher financial services' costs and fees. Another service with symptoms of weak competition has been consumer and credit card lending, where the persistent divergence in rates for similar credit products across lenders potentially suggests market segmentation and insufficient transparency.

30. **Given these concerns, the FSAP Update welcomed recent measures to improve disclosure of information on availability and costs of credit and retail payment services, and to encourage greater cooperation among intermediaries in the use of financial infrastructure**. These measures should foster greater competition, and as these new disclosure requirements improve the transparency of credit markets and the understanding of competitive forces, critical information can be compiled that, down the road, will allow identification of new policies in the areas of competition and financial access.

Openness and market competition

31. **Mexico is well known for its relatively open foreign trade regime, but room for improvement remains.** The bulk of Mexico's trade in conducted with its fellow NAFTA members, on liberal terms. However, there are some signs that barriers to foreign competition from elsewhere have risen since around 2000, although the change has been moderate. The MFN average tariff has edged up in recent years, potentially hampering Mexico's ability to diversify its export markets. At 15.3 percent (based on 2005 UNCTAD calculations and including customs processing fees of 0.8 percent), the MFN average tariff is higher than in the usual emerging market comparators (China's rate is 10.5 percent and Chile's is 6 percent). The complexity and dispersion of tariffs applied to goods from non-trade agreement countries, and the verification procedures they require, can give rise to high compliance costs and lengthy customs clearance procedures. Important progress was made in 2004 when tariffs on more than 9,000 tariff lines were reduced by between 3 and 10 percentage points—affecting 76 percent of all tariffs. Yet further tariff reduction and simplification should remain priorities for growth and competitiveness.

Average Tariff (unweighted, including customs processing fees)



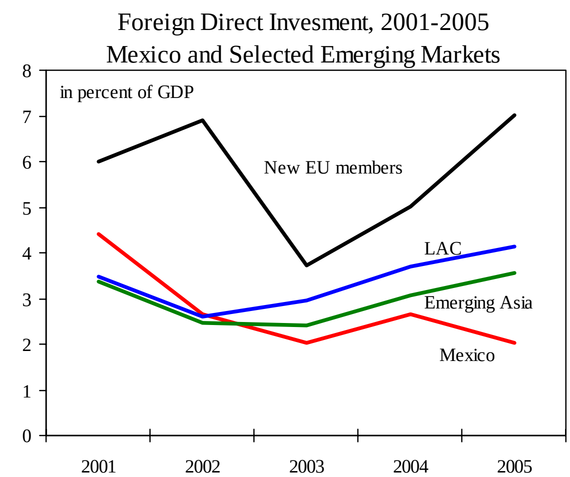
Source: IMF (2006)

32. **The economic costs of Mexico's tariff structure are complex to evaluate.** In 2005, more than 85 percent of Mexico's trade took place under free trade agreements and the average tariff, weighted by trade shares, declined from 4.5 percent in 2002 to 3.5 percent in 2005. Yet, available studies on the impact of trade liberalization indicate significant potential gains if Mexico reduced tariffs (see below).

33. **Some barriers to foreign competition also have been maintained in the form of non tariff barriers and discriminative procedures against foreign firms.** Two such practices are *industrial standards* and *import licensing*. Simple measures of non-tariff barriers suggest a degree of restrictiveness broadly in line with other countries. On the other

hand, OECD research found that, as of 2003, Mexico's procedures in the area of foreign trade and investment discriminated more against foreign firms than all but one country in the OECD. And while the majority of OECD countries had reduced such procedures to a negligible level by 2003, Mexico had yet to do so.

34. **Among OECD countries, Mexico's restrictions on foreign investment remain relatively tight,** with only four of the 30 countries (Poland, Turkey, Italy and Canada) implementing a more restrictive regime**.** This may have contributed to the relatively low level of FDI as a percentage of GDP in Mexico, when compared to emerging Asia, the Latin American region as a whole, and new EU members. Greater foreign investment flows can in turn boost innovation and technological know how, thus raising growth.



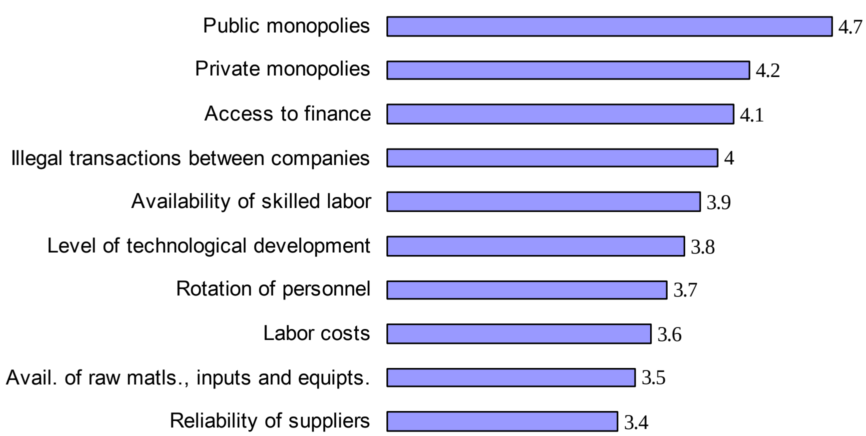
35. **Fostering greater competition in key domestic markets can also spur productivity growth.** Surveys have pointed to "monopolies"—both public and private—as an obstacle to business development in Mexico (see chart). Monopolies, or oligopolies, tend to slow growth by limiting the forces of competition that otherwise would spur productivity growth, or by providing key inputs to other industries either at inefficiently high prices or with low quality.

Barriers to Trade and Investment: OECD Indices
(on a 0-6 scale, with 0 least restrictive and 6 most restrictive)

	Ownership barriers		Discriminatory procedures		Regulatory barriers		Tariffs	
	1998	2003	1998	2003	1998	2003	1998	2003
Australia	2.9	2.4	0.0	0.0	0.0	0.0	1.0	1.0
Austria	2.8	1.5	0.5	0.3	0.0	0.0	2.0	1.0
Belgium	1.8	0.3	0.0	0.0	0.7	0.0	2.0	1.0
Canada	2.9	2.9	1.4	0.5	0.0	0.0	1.0	1.0
Czech republic	4.3	2.0	4.0	0.7	3.1	0.0	1.0	1.0
Denmark	1.3	1.2	0.5	0.5	0.0	0.7	2.0	1.0
Finland	1.5	1.5	0.0	0.0	0.7	0.0	2.0	1.0
France	3.4	2.3	0.5	0.5	0.0	0.0	2.0	1.0
Germany	0.3	0.3	0.9	0.7	0.7	0.7	2.0	1.0
Greece	3.2	1.3	2.0	2.0	0.7	0.7	2.0	1.0
Hungary	3.8	1.9	1.2	1.2	0.0	0.0	3.0	3.0
Iceland	2.7	1.1	0.0	0.0	0.7	0.0	0.0	0.0
Ireland	1.3	1.2	0.0	0.0	0.0	0.0	2.0	1.0
Italy	3.1	2.8	0.9	0.7	0.0	0.0	2.0	1.0
Japan	3.0	2.4	1.4	0.3	0.0	0.0	1.0	1.0
Korea	2.5	2.2	0.0	0.0	2.3	0.0	4.0	3.0
Luxembourg	1.4	1.5	1.1	0.3	0.0	0.0	2.0	1.0
Mexico	***2.9***	***2.8***	***1.4***	***1.4***	***0.3***	***0.0***	***4.0***	***6.0***
Netherlands	1.3	1.2	0.5	0.5	0.0	0.0	2.0	1.0
New Zealand	3.0	2.3	2.5	0.0	0.0	0.0	1.0	1.0
Norway	1.9	1.9	0.3	0.3	0.7	0.7	1.0	0.0
Poland	4.5	3.7	4.4	0.3	4.4	1.6	4.0	4.0
Portugal	1.6	1.6	1.2	0.7	0.0	0.0	2.0	1.0
Slovak Republic	-	2.3	-	1.1	-	1.6	-	1.0
Spain	1.8	0.8	0.3	0.3	2.0	0.7	2.0	1.0
Sweden	1.5	1.5	2.7	0.7	0.0	0.0	2.0	1.0
Switzerland	2.0	2.0	1.1	1.1	2.4	0.0	1.0	1.0
Turkey	3.8	3.1	2.9	0.7	0.0	0.0	3.0	3.0
United Kingdom	0.3	0.3	0.3	0.3	0.0	0.0	2.0	1.0
United States	2.9	1.8	0.3	0.0	0.0	0.0	1.0	1.0

Source: OECD (2005a)

Market obstacles to business development

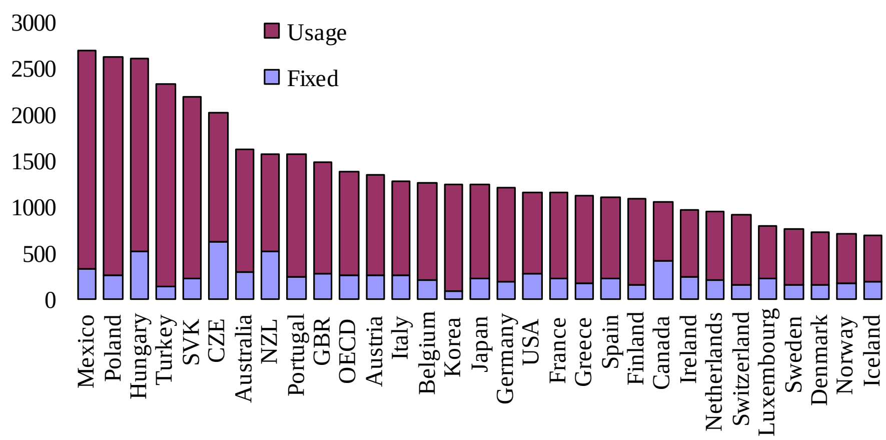


Source: CEESP, Encuesta Sobre Gobernabilidad y Desarrollo Empresarial (2005)

36. **In Mexico, energy reform is a key element of the structural agenda, given the important role of state monopolies,** of which the hydrocarbons (PEMEX) and electricity (CFE and Luz y Fuerza) sectors are prominent examples. An analysis of the efficiency and pricing policies of these state enterprises is beyond the scope of this paper, but it can be noted that the relatively low quality (unreliability) of electricity service could have implications across the Mexican economy (see World Bank (2005)).

37. **More broadly, Mexico's recent reform to the competition law aims at strengthening competition across the private sector.** The 2006 law creates a modern basis for anti-trust regulatory action. Until the reform, the federal anti-trust commission lacked sufficient power to pursue anti-competitive practices. The reform increased standard fines and, eventually, if competition does not improve, it has the authority to divest company assets. Moreover, the commission may issue binding opinions on proposed regulation or decisions of vertical regulators (that deal solely with one sector). This is particularly important against a backdrop where the adequacy of such regulation has been widely questioned, in light of persistently high prices in some key sectors. As documented by OECD (2005c), telecom tariffs for businesses are the highest among its 30 member countries (see figure). The impact of the legislation will of course play out over time. It will be important to have strong political backing of the reform and of the commission's independence to ensure the effectiveness of the reform.

Composite basket of business telephone charges 1/, August 2004
(excluding VAT)

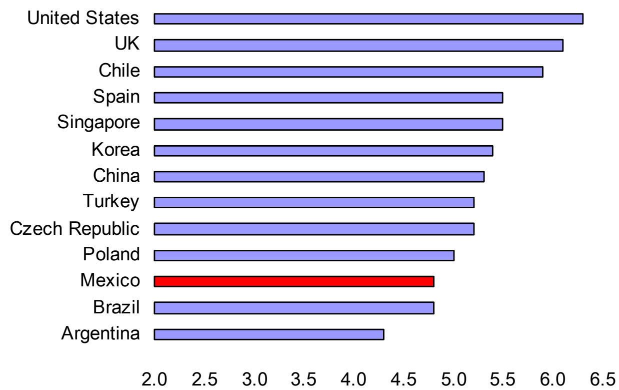


Source: OECD Communications Outlook 2005.

1/ Basket includes international calls and calls to mobile networks.

38. **In the unregulated private sector, Mexico has retained a concentrated market structure in a number of industries that may give rise to weak competition**. Such concentration exists for example in such activities as television broadcasting, tortillas and corn flour, and beer (in each case, the two largest companies appear to represent more than 90 percent of the market) and in construction materials (where the two largest companies are about 75 percent of the cement market). The price of cement is reported to be significantly higher in Mexico than in the U.S.[8]

Intensity of local competition



Source: World Economic Forum (2005)

State intervention

39. **State intervention, including through the regulation of product markets and the activities of state-owned enterprises, can significantly influence market functioning and competition.** Mexico has taken important steps to promote regulatory transparency and reduce direct state interference with business operations. The OECD (2005a) credited Mexico with the best score for regulatory and administrative transparency as of 2003—the same score as Spain, and better than countries known for their generally superior transparency practices such as Canada. Mexico's more favorable ranking resulted mainly from an impressive overhaul of inadequate licensing and permit systems and from reductions in the administrative burden on certain sectors. Regarding the direct forms of government economic interference, the progress recorded by the OECD is principally explained by the abandonment of price and other economic controls.

---

[8] See for instance El Economista, "EU y México firman acuerdo cementero," January 19, 2006.

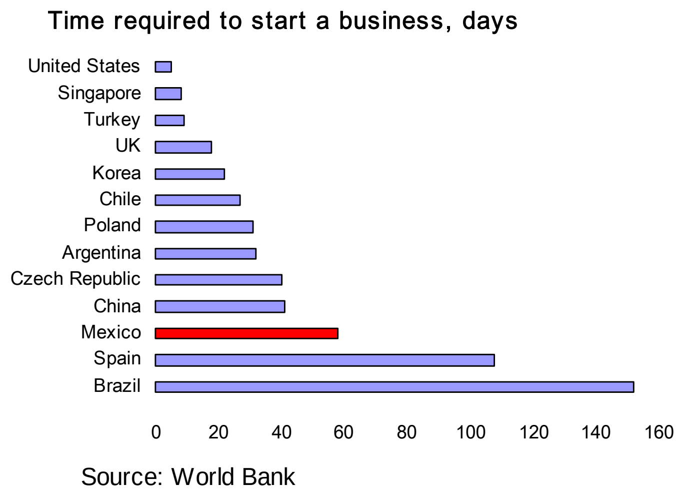
Regulatory Barriers to Product Market Competition, 1998-2003
Mexico, Korea, Czech Republic and Canada
(on a 0-6 scale, with 0 least restrictive and 6 most restrictive)

	Mexico		Korea		Czech Republic		Canada	
	1998	2003	1998	2003	1998	2003	1998	2003
Overall score	**2.4**	**2.2**	**2.5**	**1.5**	**3.0**	**1.7**	**1.4**	**1.2**
State control, of which:	***2.5***	***1.9***	***2.7***	***1.7***	***3.9***	***2.5***	***1.8***	***1.7***
involvement in business operations	2.3	1.4	2.2	1.5	2.9	1.9	1.8	1.5
public ownership	2.5	2.3	3.0	1.8	4.8	3.0	1.8	1.7
Entrepreneurship barriers, of which:	***2.7***	***2.2***	***2.5***	***1.7***	***2.0***	***1.9***	***1.0***	***0.8***
licenses and permits	4.0	0.0	6.0	2.0	4.0	4.0	0.0	0.0
simplification rules and procedures	0.5	0.3	1.5	0.0	1.2	0.5	1.2	1.0
administrative burden for corporations	3.3	3.3	2.7	2.7	3.0	3.0	1.5	0.8
sector specific administrative burden	3.9	3.2	1.6	1.9	1.7	2.2	1.5	0.9
anti-trust exemptions	0.9	3.5	0.7	0.6	0.0	0.0	0.6	0.6
Trade and foreign investment barriers	***2.1***	***2.4***	***2.2***	***1.3***	***3.1***	***0.9***	***1.3***	***1.1***
Memorandum item:								
Regulatory and administrative opacity	***2.4***	***0.4***	***3.8***	***1.2***	***2.7***	***2.3***	***0.6***	***0.5***

Source: OECD (2005a)

40. **However, the OECD's overall scoring of barriers to product market competition, showed that progress in Mexico to 2003 had been hampered by a worse performance in two areas: (i) barriers to foreign trade and investment and (ii) competition regulation.** During 1998 to 2003, while other OECD countries liberalized trade and foreign investment overall, Mexico's performance in this area stagnated. And, on competition regulation, OECD scores indicate a significant absolute deterioration in Mexico, reflecting application of anti-trust exemptions, while all other OECD countries reduced anti-trust exemptions. Mexico's worsening anti-exemption indicator reflected a Supreme Court ruling which limited the power of the federal anti-trust commission to take action against state governments and their enterprises (and accordingly, the industries with greater exemptions in Mexico are state-owned enterprises.) As a result, the overall quality of the regulation of product market competition in Mexico progressed only marginally between 1998 and 2003 compared to its OECD peers such as Korea or the Czech Republic. Looking ahead, Mexico's rankings should improve with firm implementation of the recently-approved competition law, and if the further granting of anti-trust exemptions can be avoided.[9]

[9] The law will have an impact to the extent that it changes current practices. Evidently, it will have little effect in industries where the public sector keeps an important role if state governments and enterprises continue to be exempt.



41. **Finally, some regulatory barriers to market entry remain high by OECD and emerging market standards.** A simple overall indicator of the barriers to market entry is the average time required to start a business as estimated by the World Bank (2006). In Mexico, this is still much longer than in key emerging market competitors in Asia and Eastern Europe.

Gains from liberalization

42. **The potential gains from liberalization are considerable, considering for instance OECD model-based simulations.** Using a variety of modeling strategies, OECD (2005b) found substantial potential gains for exports and per capita growth if Mexico were to reduce regulatory barriers to product market competition to what is considered OECD best practice. In that study, the reduction of barriers to domestic product market competition is found to provide the larger output gains, followed by reductions in trade tariffs.[10]

Developing the Business and Investment Environment

43. **Mexico has tended to rank below its country peers in the quality of the business and investment environment.** Typically, relative weaknesses are found with respect to (i) provision of essential public goods such as the rule of law and (ii) other services, such as infrastructure and education, with wide-ranging externalities for the economy, that are

[10] The study estimates the gains from reductions in trade tariffs, FDI restrictions, and domestic product market restrictions, using in-house econometric panel studies. OECD countries are assumed to adjust these policy variables to best OECD practice levels. Mexican exports would then grow by 40 percent, with more than 25 percentage points attributed to the streamlining of domestic regulations and some 10 percentage points to lower tariffs. Mexico’s GDP per capita would increase by 5 percent, of which 2.8 percent is due to regulatory reforms, 1.5 percent to bilateral tariff reductions, and 0.7 percent is due to FDI restriction reductions.

currently being provided by the state in Mexico. A number of studies point to challenging governance, enforcement, and property rights issues in Mexico.

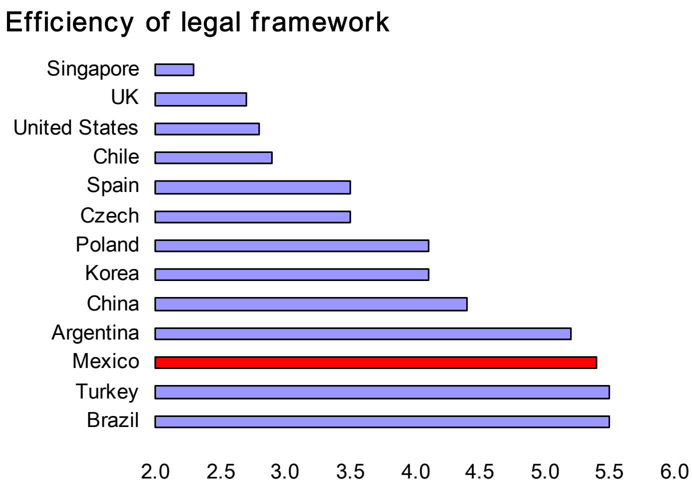
Enforcement

44. **The enforcement of contracts, property rights, and laws, including public security, is generally weak in Mexico; it creates additional costs and risks for firms and reduces investment opportunities.** Contract enforcement in Mexico is slower and more costly than in other high performing emerging markets. For instance, it takes 421 days and costs 20 percent of the contract value to enforce a contract in Mexico whereas only 75 days and 5 percent of the contract value in Korea. In several instances, Mexico has changed its laws to improve contract enforcement, but it may take time and committed strong implementation to change perceptions that in turn may shape business decisions. Such is the case of legal procedures for bank lending: new mechanisms for secured lending, allowing for out-of-court collateral enforcement, have been enacted since 2000 with the goal of strengthening creditors' rights. But implementation reportedly has remained marginal as, in practice, borrowers have been able to undermine the effectiveness of the new mechanisms by going to court or successfully challenging as unconstitutional private enforcement action by creditors to seize their property (see World Bank (2006)). The importance of strengthening public security, in particular in light of violence from those engaged in organized illegal activities, is also highlighted.

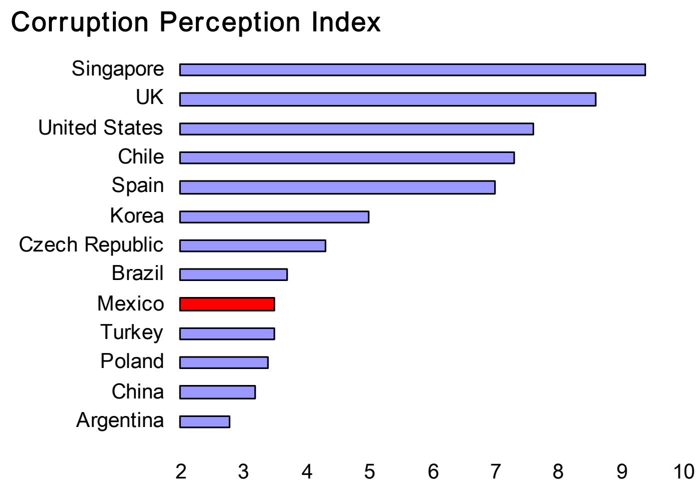
45. **A factor behind poor enforcement is the gaps in public administration reform—especially at the state government level.** Although laws have been modernized, efforts to adapt the justice system and property registration systems have been uneven across states. While requirements and procedures for contract enforcement and property registration are decided at the federal level and hence are uniform, there is a wide dispersion in the expediency and cost of these procedures between states. Differences relate to the use of intermediaries—which in some states can be many or simply have not been trained or lack specialization—and difficulty in accessing competent courts or the property cadastre to a varying degree. These problems overall appear greater in Mexico than in other emerging market countries based on recent World Economic Forum surveys on the efficiency of the legal framework (see figure).

46. **Governance problems in the public and private spheres have also been a cause for the weak enforcement of procedures and laws.** In the public sphere, limited accountability of state and municipal governments, notwithstanding fiscal decentralization, may have contributed to poor quality of public services in many states, with poor public infrastructure for administering property and resolving business disputes. The intensity of these problems varies considerably among regions—especially with respect to the reliability

of the judicial system. But overall, public governance remains poor, as proxied by corruption perception measures compiled by Transparency International (see figure).



Source: World Economic Forum (2005)



Source: Transparency International (2005)

47. **In the private sphere, a new stock market law enacted in 2006 is expected to improve corporate governance practices which, until recently were quite poor,** as indicated by Mexico's rankings in investor protection in the World Bank's Doing Business database (Mexico ranked 125th of 155 countries). Previously, shareholders had no effective recourse against managing boards of publicly-listed companies, and disclosure requirements for when managing boards engaged in related party transactions were especially weak. The new stock market law is expected to align some key corporate governance requirements with U.S. practices. As a result of this and other improvements, Mexico's World Bank ranking in investors' protection is expected to jump to between 40th and 50th place.

Infrastructure

48. **Transportation, utilities, and communication infrastructures are also key for a strong business environment, conducive to investment and growth.** Weak infrastructure, especially transportation and port facilities, segments markets and thus limits competition, while also raising production costs, and so reducing Mexican firms' competitiveness and the profitability of investment. East Asian countries with faster growth rates than Mexico typically display broader infrastructure coverage than Mexico. However, the quality of public investment in infrastructure matters as well as its quantity, and the World Bank has identified quality as a key issue in Mexico.

49. **In particular, the need for more efficient infrastructure is well documented for electricity, water supply, and roads.** Inefficiencies in public electricity providers show

themselves in more frequent service interruptions, larger losses, and higher operating costs than private providers elsewhere in Latin America. Operating efficiency levels in water and sanitation are also well below OECD averages and the better performing utilities in developing countries. Roads are a major challenge. Considering 20 indicators of road quality, the World Bank (2005) finds that 61 percent of the highway system can be considered modern, with 39 percent requiring improvements. Only one- fourth of roads are in good condition, well below the 60 percent average in other OECD countries. Roads in the worst conditions are state and municipally controlled roads.

Comparative Survey on the Quality of Infrastructure, 2005

Country	Overall Infrastructure Quality 1/	Port Infrastructure Quality	Railroad Infrastructure Quality	Air Transport Infrastructure Quality	Electricity Supply Quality
Brazil	2.8	2.7	1.8	4.5	4.7
China	3.2	3.6	3.6	4.0	3.7
Poland	3.2	3.6	3.7	4.0	4.9
Turkey	3.5	3.1	2.1	4.8	4.2
Mexico	**3.5**	**3.3**	**2.2**	**4.9**	**3.8**
Argentina	3.6	3.6	2.7	4.3	4.3
Chile	4.9	4.9	2.7	5.7	5.5
Czech Republic	4.9	3.5	5.3	5.2	6.3
Spain	5.2	4.7	4.4	5.6	5.5
Korea	5.2	5.3	5.4	5.5	5.9
UK	5.3	5.3	4.3	6.2	6.5
Singapore	6.7	6.8	5.8	6.9	6.5
Sample Average	**3.9**	**3.8**	**3.0**	**4.5**	**4.6**

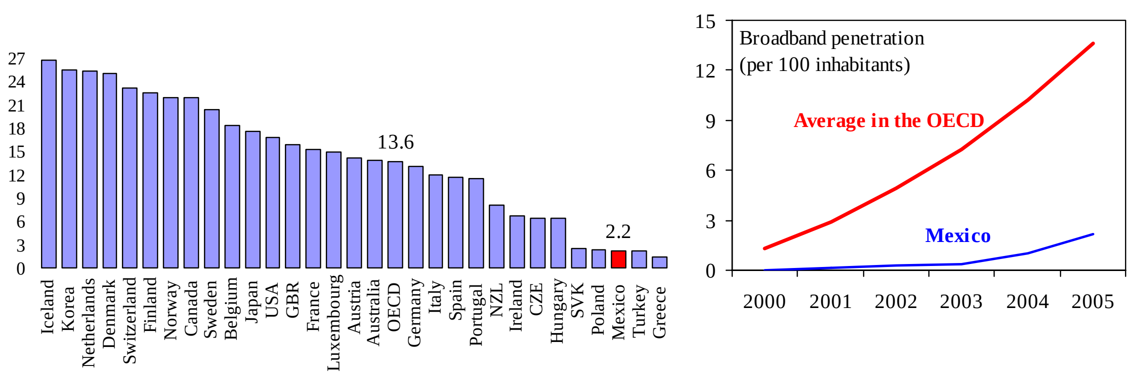
1/ "Overall Infrastructure" includes quality indicators from other sectors not shown above (that is information and communication technologies).
Note: Survey-based subjective evaluation on a scale from - "underdeveloped and inefficient" to 7 - "as developed as the world's best." The higher the score, the better the quality.
Source: WEF (2005).

50. **According to the World Bank (2005), considerable efficiency gains could be reaped from better infrastructure policies, even if current levels of public investment were not raised.** The public sector could use its resources more effectively. Regressive tariff subsidies, especially for electricity use, could be replaced by income-tested safety nets. The resources saved could then be redirected to regular maintenance. Beyond this, budget planning for infrastructure requires a longer time horizon and greater institutional coordination than is currently the case. Public resources could also be more focused on areas where private participation is not forthcoming, and modalities of Private Participation to

Infrastructure (PPI) could be improved. So far, PPI in Mexico has taken forms that generally contribute the least to efficiency gains—with a majority being "greenfield projects."[11] New financial arrangements, which transfer more risk and give greater efficiency incentives, would help foster greater infrastructure efficiency.

51. **Regarding communication infrastructure, Mexico also lags in areas such as broadband penetration, a key element in the information society for households and companies.**

Broadband penetration per 100 inhabitants

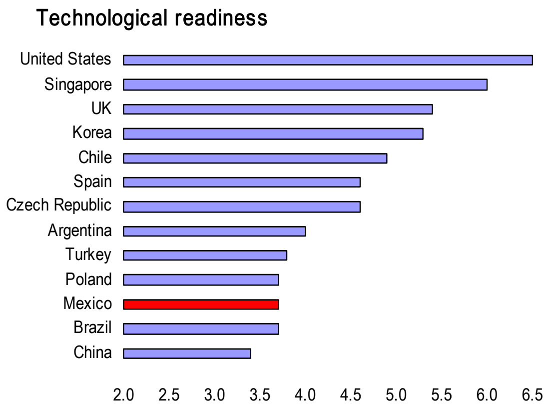


Source: OECD Broadband Statistics, December 2005.

Human capital

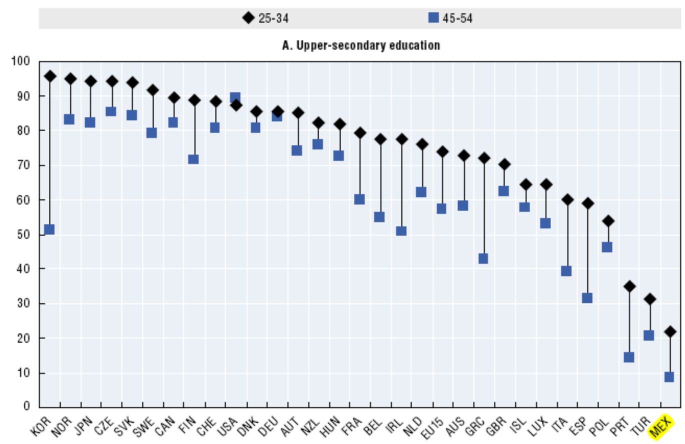
52. **A factor commonly found to be a determinant of TFP growth is a country's average education level.** Education outcomes—whether measured as schooling attainment or by OECD proficiency tests in sciences and verbal skills—in Mexico are below those in other OECD countries, and the population coverage remains low. In recent years, considerable progress has been made in facilitating human capital formation through the establishment of incentives-based safety nets—the Oportunidades programs. But these programs will have to be complemented by long-term education reforms, as well as programs aiming to expand innovation in Mexican economy.

[11] *Greenfield Projects:* A private entity or a public-private joint venture builds a new facility and then operates it for the period specified in the project contract. The facility may return to the public sector at the end of the concession period.



Source: World Economic Forum (2005)

Educational attainment
(percentage of population aged 25-34 and 45-54)



Source: OECD

53. **In a recent study (Poverty Reduction and Growth: Virtuous and Vicious Circles), the World Bank found inequality and the associated poverty to hamper growth in Mexico.** According to the World Bank, Mexico may be among the countries where regional disparities may be leading to a “two-speed” economy, where certain regions are becoming more integrated with external markets, modernized and dynamic, while others seem stuck in a low growth equilibrium. The potential role of poverty traps and regional disparities would need to be considered in identifying an overall growth strategy for Mexico.

D. Concluding Remarks

54. **Over the years, Mexico has implemented significant reforms to create better conditions for economic growth.** Still, relative to the rapid growth rates achieved by some other emerging market and developing countries, Mexico’s growth performance has been disappointing. Weak productivity growth appears as the most visible reason, although investment in Mexico also has been less than in fast-growing Asia and Chile.

55. **It is evident that Mexico needs to proceed further with its reforms.** While Mexico can be considered one of the reform leaders of Latin America, it still shares many points of weakness that are common to Latin America as a whole. Looking more broadly, Mexico lags other emerging market and OECD countries in many structural areas, and these lags affect economic growth through resource misallocation, missed investment opportunities, and slower productivity gains.

56. **Compared to many countries, Mexico's relative strength is in having established an environment of macroeconomic and financial stability. But in two broad areas Mexico still has much room to improve.** First, *limits on the forces of competition* mean that key markets fail to function dynamically, with greater barriers to access and entry, malfunctioning or less efficient labor and goods markets than found in other countries. Second, *shortcomings in the provision of a strong business environment by the state* may discourage investment and growth. Relative to some other countries, Mexico faces challenges in both these dimensions, and it is possible that the two classes of problems may interact and reinforce each other. One significant manifestation emphasized here is the pervasiveness of *informality* in Mexico, which goes beyond labor market issues, and is likely to both a cause and consequence of other problems that may slow growth (IMF 2005b). Such interactions can also work in a favorable direction. The positive implication of these interrelationships is that moving ahead with complementary reforms has the potential to generate beneficial spillovers and further accelerate Mexico's growth.

57. **As a wider understanding of the obstacles to growth in Mexico emerges, this may support political consensus to advance with needed structural reforms.** As in other countries, reforms can be difficult to implement, as long as their potential benefit to the broader public interest is not well understood, while the costs of reform for those in affected sectors—whether business owners or workers or both—are clear. The greater transparency and openness that Mexico now enjoys will increase the chances that coalitions can be formed in favor of reforms. Mexico can also now count on recent institutional and governance reforms, such as the new competition law and securities market law, to open the way to a more dynamic functioning of markets, particularly if their implementation is well-supported by the judicial system. Recent and ongoing reforms in the financial sector—to promote its development and the forces of competition—will also play a positive role.

REFERENCES

Bosworth and Collins (2003) "The Empirics of Growth: An Update," Brookings Papers on Economic Activity No 2.

Botero, Juan, and others (2003). "The Regulation of Labor," NBER Working Paper No. 9756.

De Buen Lozano, Nestor and Carlos E. De Buen Unna (2001). "Estudio Del Mercado De Trabajo De Mexico: El Marco Normativo e Institucional. Propuestas Para Incrementar La Flexibilidad Laboral." Informe Para El Banco Mundial.

Cole, Harold L., Lee E. Ohanian, Alvaro Riascos, and James A. Schmitz Jr. (2004). "Latin America in the Rearview mirror," Journal of Monetary Economics, No. 52.

Faals, Ebrima (2005). "GDP Growth, Potential Output, and Output Gaps in Mexico," IMF Working Paper WP/05/93.

Fraga, Arminio (2004). "Latin America Since the 1990s: Rising from the Sickbed?" *Journal of Economic Perspectives*, Vol. 16, No. 2.

Dornbusch, Rudiger, Alejandro Werner, Guillermo Calvo, and Stanley Fisher (1994). "Mexico: Stabilization, Reform, and No Growth," *Brookings Papers on Economic Activity*, Vol. 1994, No.1.

IMF (2005a). "Stabilization and Reform in Latin America: A Macroeconomic Perspective on the Experience Since the Early 1990s," Occasional Paper 238.

IMF (2005b). "Mexico: Selected Issues," IMF Country Report No. 05/428

IMF (2006). "Mexico: Financial System Stability Assessment Update." Forthcoming country report.

Loayza, Fajnzylber, and Calderon (2004). "Economic Growth in Latin America and The Caribbean: Stylized Facts, Explanations, and Forecasts," Working Paper No. 265, Central Bank of Chile.

Maloney, William F. and Pontual Ribeiro, Eduardo (1999), "Efficiency wage and union effects in labor demand and wage structure in Mexico - An application of quantile analysis."

Mehrez, Gil (2005). Mexico: Selected Issues Papers (Chapter 1), (IMF Country Report No. 05/428).

OECD (2006), Going for Growth: Economic Policy Reforms, OECD publishing.

OECD (2005a). "Product market regulation in OECD countries: 1998 to 2003." Economics Department Working Paper No. 419.

OECD (2005b). "The Benefits of Liberalizing Product Markets and Reducing Barriers to International Trade and Investment in the OECD." Economics Department Working Paper No. 463.

OECD (2005c). "OECD Communications Outlook 2005."

Passel, Jeffrey and Suro, Robert (2004). "Rise, Peak, and Decline: Trends in U.S. Immigration 1992–2004." http://pewhispanic.org/files/reports/53.pdf

Sahay, Ratna and Goyal, Rishi (2006). "Volatility and Growth in Latin America: An Episodic Approach," mimeo.

Zettelmeyer, Jeronimo (2006). "Growth and Reforms in Latin America: A Survey of Facts and Arguments," mimeo.

World Bank (1999). "Mexican Labor Markets: New Views on Integration and Flexibility." Volume 2: technical papers. Poverty Reduction and Economic Management Unit. Mexico Department.

World Bank (2005). "Mexico—Infrastructure Public Expenditure Review (IPER)."

World Bank (2006). Doing Business in Mexico http://www.doingbusiness.org/Main/Mexico.aspx

II. Remittances to Mexico: An Overview[12]

Abstract

- *This chapter presents an overview of remittances in Mexico, motivated by their recent increase and its possible macroeconomic implications.*
- *In absolute terms, remittances to Mexico appear to be among the world's largest; however, in relation to GDP, remittances are far less than in some other countries, including in Latin America. Still, at about 3 percent of GDP—and growing—remittances to Mexico are large enough to be of macroeconomic significance.*
- *However, macroeconomic effects of rising remittances to Mexico—such as the impact on domestic demand and the real exchange rate—are difficult to distinguish because the rapid growth of recorded remittances reflects, in some part, an improvement in data recording.*
- *Still, some observations can be made. First, remittances inflows vary considerably across regions. Remittances are higher in states with large migration to the U.S. Second, it appears that remittances, overall, contribute to reducing poverty—although the impact may be smaller if one considers the opportunity cost of emigrating. Third, studies investigating the use of remittances in various countries find that remittances are mainly spent on private consumption. Finally, there is some evidence that remittances to Mexico have fluctuated in line with U.S. economic activity, at least during the downturn-and-recovery cycle in the first half of this decade.*

A. Remittances to Mexico in International Perspective

58. **Recorded remittances to Mexico have grown rapidly in the last decade and are now about 3 percent of GDP—a magnitude similar to that of Mexico's net exports of hydrocarbons.** Such a level, particularly in light of the rapid increase in remittances—and its possible continuation in the future—is of potentially significant importance to the balance of payments, private consumption, and investment as well as economic fluctuations and poverty.

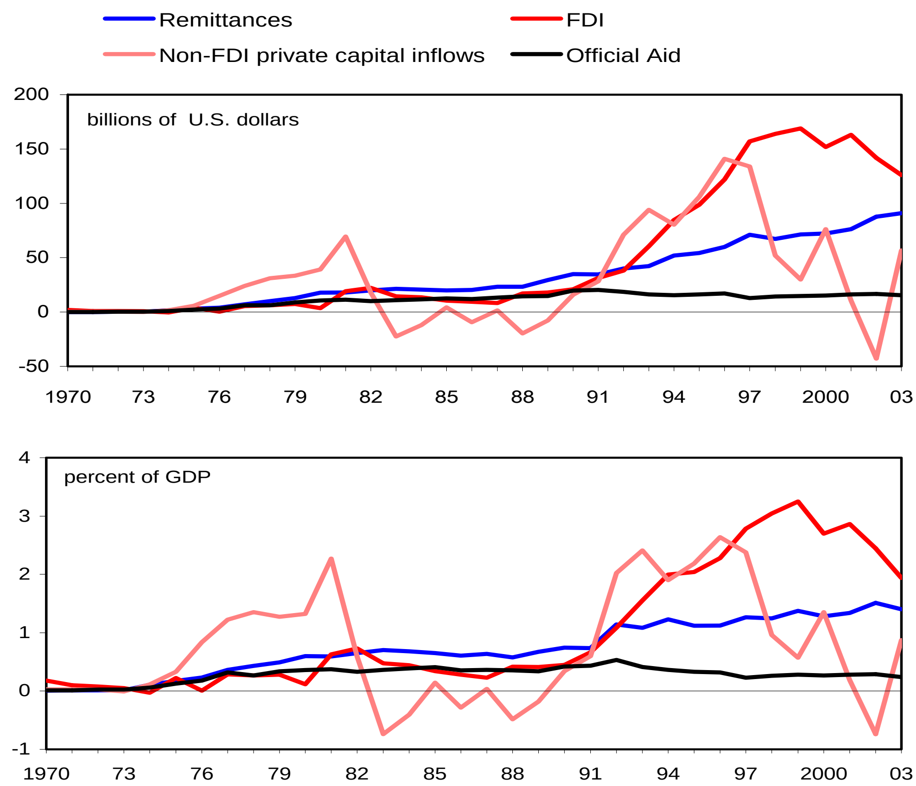
59. **Rising remittances are not unique to Mexico—across the world, remittances have been growing robustly over the past three decades (WEO 2005). Remittances—defined as goods and financial instruments transferred by migrants who reside and**

---

[12] Prepared by Gil Mehrez (gmehrez@imf.org). The author is indebted to the Mexican authorities at the Bank of Mexico and the Ministry of Finance for their helpful suggestions on an earlier draft of this paper.

work abroad in a given country to their country of origin—grew from a global US$15 billion in 1980 to US$80 billion in 2005 (see figure). Worldwide, remittances are much larger than official aid and non-FDI capital flows, and are almost as large as FDI. Furthermore, remittances have been remarkably resilient in the face of economic downturns and crises and in several cases (e.g., the Asian crisis) they appear to have played a smoothing role.

Worker's Remittances and Other Foreign Exchange Inflows to Developing Countries, 1970-2003

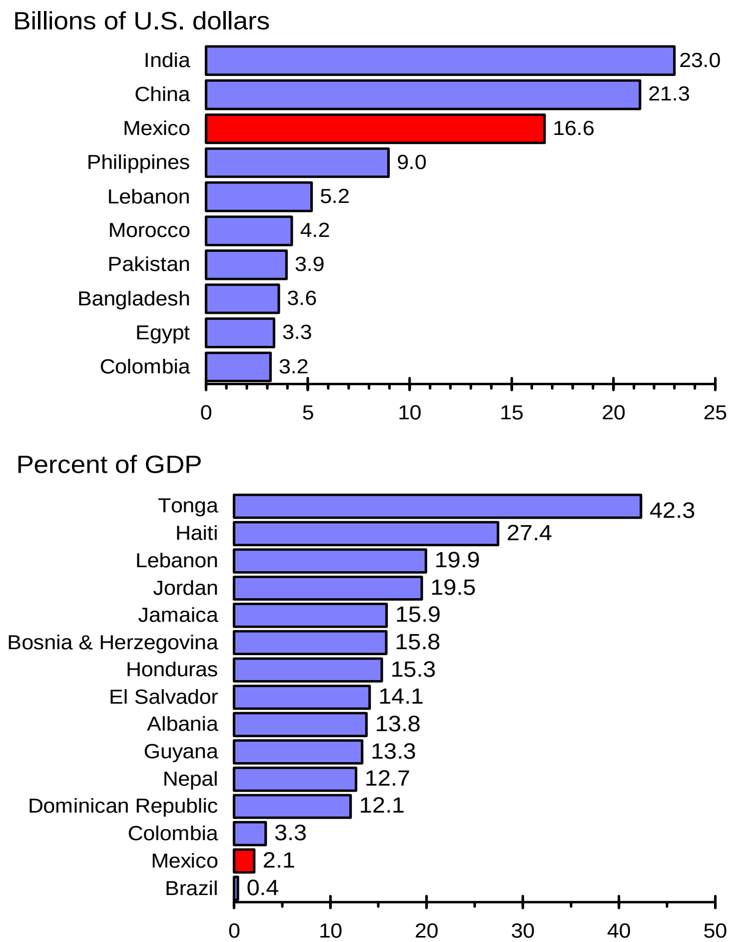


Source: World Economic Outlook, 2005

60. **Mexico ranks along with India and the Philippines in terms of the U.S. dollar value of flows of remittances—but considered in relation to economic size, remittances are much more important elsewhere.** As a share of GDP, remittances to Mexico amounted to 2.1 percent in 2003, whereas in at least 10 smaller economies they amounted to well over 10 percent of GDP (chart).

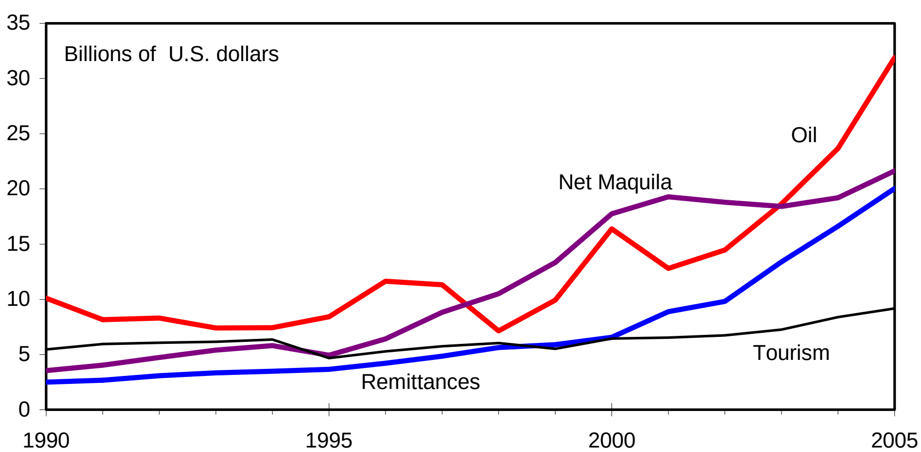
61. **Nevertheless, remittances in Mexico are a significant source of foreign exchange inflows.** Remittances in 2005, at about US$20 billion, were as large as the net exports of the maquila sector, about three times tourism receipts, and two-thirds of petroleum exports. If not for the steep rise in the price of oil after 2002, remittances would now exceed oil exports (even at today's energy prices, remittances do exceed Mexico's *net* exports of hydrocarbons).

Remittance Inflows in Selected Developing Countries, 2004



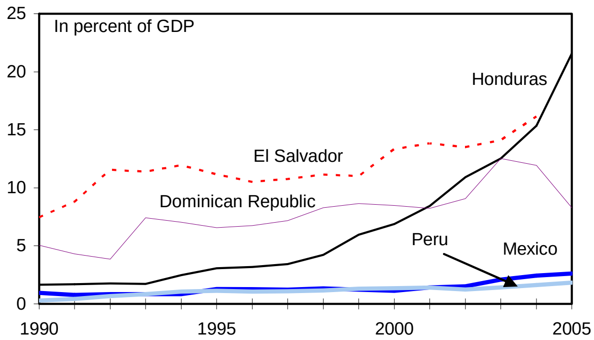
Sources: World Bank; and IMF *Balance of Payments Statistical Yearbook* .

Family's Remittances and Export Revenues, 1990-2005



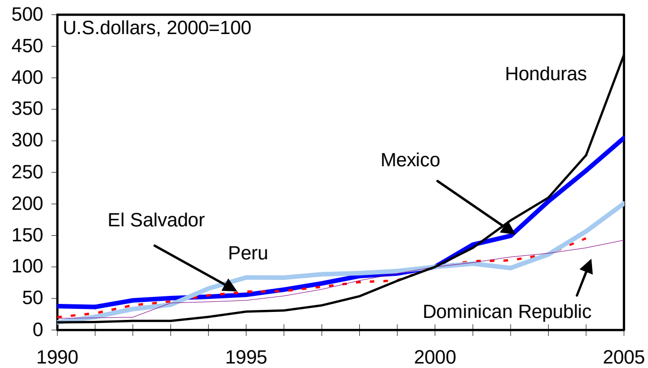
62. **Furthermore, remittances in Mexico have surged in the last five years, tripling from about US$6 billion to US$20 billion.** Compared with other countries in Latin America, only Honduras has experienced such a large percentage increase. Note though that remittances as a share of GDP have grown faster in other Latin America countries. For example, in Honduras remittances as a share of GDP surged from about 3 percent in 1995 to almost 16 percent by 2005. Remittances in the Dominican Republic and El Salvador grew by about 4 percentage points between 1995 and 2005 (to about 12 and 16 percent of GDP respectively).

Remittances as Percent of GDP in Latin America, 1990-2005



Source: IFS

Remittances in Latin America, 1990-2005



Source: IFS

B. Measurement Issues

63. **Measurement of remittances can be problematic, and in most countries is likely to be subject to a net downward bias, for two reasons.** First, a considerable share of actual remittances may not be transferred through formal channels. Second, remittances in–kind, (e.g., goods sent to households in the home country, or payments made on behalf of relatives back home, such as insurance premiums, tuitions, and so on) usually are not counted. Importantly, it is very likely that this downward bias has declined over time with the development of capital market in countries such as Mexico, which has contributed to a surge in the usage of formal channels of transfer and hence to an increase in recorded remittances. Of course, it is also possible that some inflows to a country are reported erroneously as remittances.[13] In the case of Mexico, however, a number of characteristics and patterns of the remittances data are consistent with their capturing actual remittances flows (including their regional pattern and seasonal variation, as discussed below).

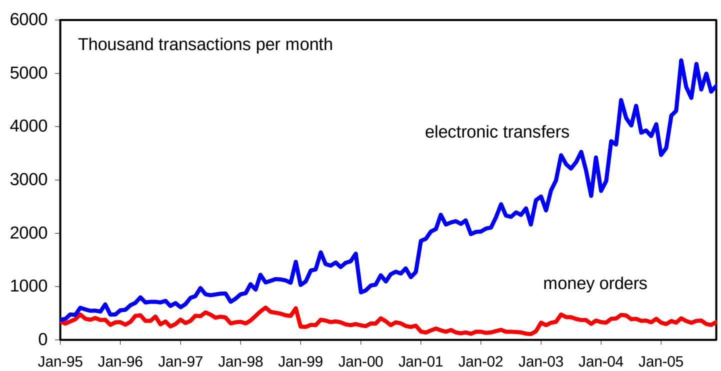
[13] As an example, if a small Mexican exporter sends goods (such as handicrafts) to a Mexican living in the U.S., it is possible that payment for this would be sent to Mexico in a manner that would be picked up and recorded as a transfer, not as a payment for exports.

64. **With regard to Mexico, the Bank of Mexico (BoM) has made significant efforts to increase the statistical coverage of household remittances.** On October 29, 2002 the BoM issued a set of rules aimed at strengthening the statistics on workers' remittances. This was based on the bank's legal capacity to regulate fund transfer services carried out by credit institutions and any other agent professionally involved in such activity (Article 31 of the Bank of Mexico's Law). Thus, all firms dedicated to fund transfer services were instructed to register at the Bank of Mexico and to provide monthly information on the amounts of workers´ remittances channeled into Mexico, classified by recipient state.

65. **It is important to note that remittances data in Mexico comes directly from accounting records, providing the figures with solid support.** This is in contrast to many other countries where formal remittances of small amounts are not reported to the central bank on a compulsory basis and hence the data is based on estimations rather than on direct accounting.[14]

66. **In addition, the cost of sending remittances has declined significantly during the last few years, increasing the share of electronic transfers.** For example, on average, the cost of transferring US$300 from the U.S. to Mexico fell from about US$30 in 1999 to about US$10 in 2005 (PROFECO, Procuraduría Federal del Consumidor). Not surprisingly, the number of remittances that are sent formally electronically has jumped, from about 500 thousand a month to 4.5 million, between 1995 to 2005, with an especially steep rise in 2003–05. In contrast, the number of remittances sent by money orders has been stagnant.

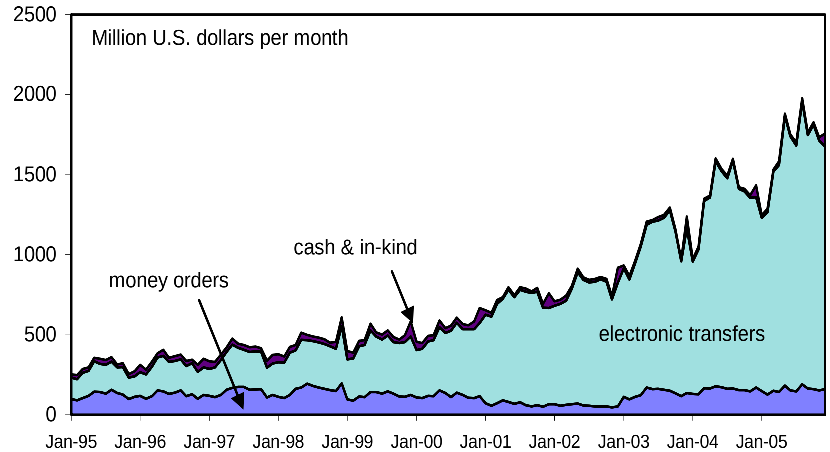
Monthly Number of Remittance Transactions



Source: Bank of Mexico

[14] In recent years, the official Mexican data on remittances inflows has shown a broad correspondence in size with U.S. data on remittances outflows to Mexico, after adjusting for one methodological difference: the U.S.-side data count as remittances only funds sent by persons who have been living in the U.S. for more than one year.

Family Remittances by Type of Transmission



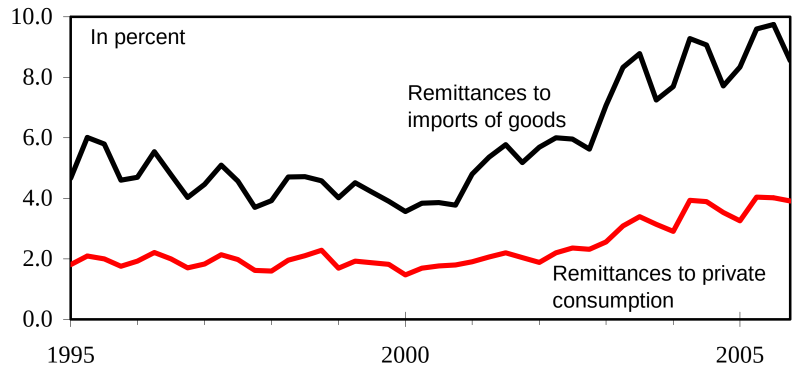
Source: Bank of Mexico

67. **Part of the increase in formal channels can be attributed to the introduction, earlier in this decade, of the consular registration card (matrícula consular) now provided to Mexican nationals by consulates in the United States, without regard to immigration status.** It appears that this has greatly contributed to the increased use of formal channels to send remittances. According to the World Bank, the document is widely accepted as identification for opening a bank account. Also, the World Bank notes that the consular registration card is a valid ID document in 32 states across the United States, in 409 cities, in 280 banking institutions.

C. Structure and Growth of Recorded Remittances

68. **Putting aside the question of measurement, recorded annual remittances to Mexico have surged during this decade, growing from US$6.5 billion to US$20 billion between 2000 and 2005.** In comparison, FDI grew from US$17.8 billion to US$18.8 billion during the same period, while oil exports grew from US$16.1 to US$31.9 billion (the increase in *net* hydrocarbon exports was smaller that this, as fuel imports grew rapidly). Furthermore, remittances as a share of private consumption grew from less than 2 percent in 1995 to almost 4 percent in 2005. As a share of imports of goods, remittances have doubled from 1995, reaching almost 10 percent in 2005.

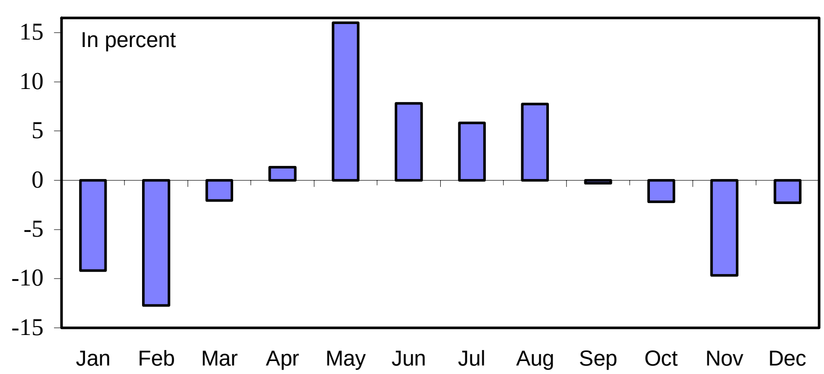
Ration of Remittances to Private Consumption and Imports



69. **Interestingly, Bank of Mexico data indicate that the average size of an individual transfer has remained about constant since 2000.** The average electronic transfer was about $325 in 2005. A recent survey by the Bank of Mexico found that 80 percent of those interviewed send money on a regular basis (on average, senders remit money about thirteen times a year). The average remittance amount is directly related to the sender's income in the U.S.

70. **Seasonally, remittances are larger in May–August.** Remittances are then about 20 percent higher than during the seasonally lowest period, November-February. This pattern can be explained partly by Mother's Day in May and by payments for the new school year. Possibly, seasonal patterns of work in the U.S. economy may also play a role.

Seasonal Factors of Remittances



Source: Author's calculations using X12 seasonal adjustment.

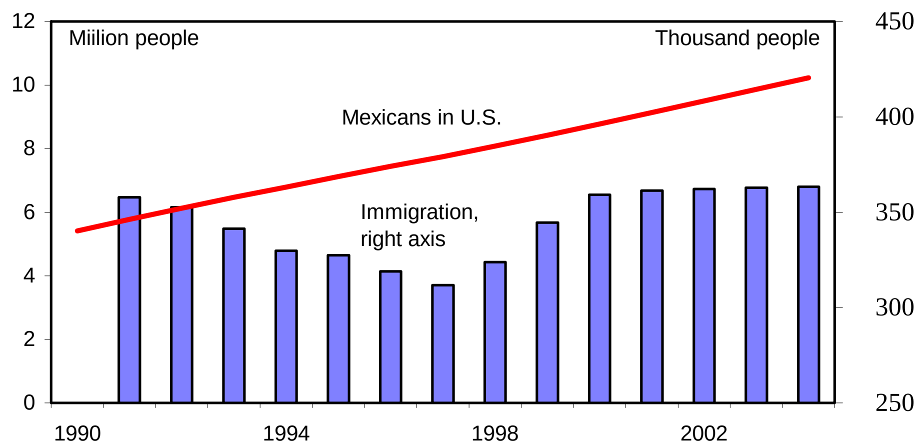
D. Migration as a Source of Rising Remittances

71. **The significant size of remittances raises several questions regarding their determinants, their impact on poverty, investment and growth, and on business cycle fluctuations, as well as the balance of payments and the real exchange rate.** Regarding their determinants, an important element is, of course, immigration.

72. **According to Mexico's National Population Council (CONAPO), 10.2 million people born in Mexico are now living in the United States.** According to CONAPO, annual *net* emigration from Mexico has been growing steadily since 1997 and is estimated to have reached almost 400,000 persons in 2004. For comparison, the population of Mexico is about 105 million[15] and is growing annually by about 1.5 million. Given this trend, it is not surprising that the share of the Mexican-born population residing in the United States out of the total population in Mexico increased between 1970 and 2005 from just 1.7 percent to almost 10 percent.

73. **Although the growth rate of the number of Mexicans living in the U.S. has been on average about 4.5 percent annually, remittances have grown much faster, by almost 15.5 percent annually.** This differential growth highlights the probable role of better recording of remittances, although it could also reflect underlying changes in the relations between the emigrants and their families in Mexico.

People born in Mexico living in United States



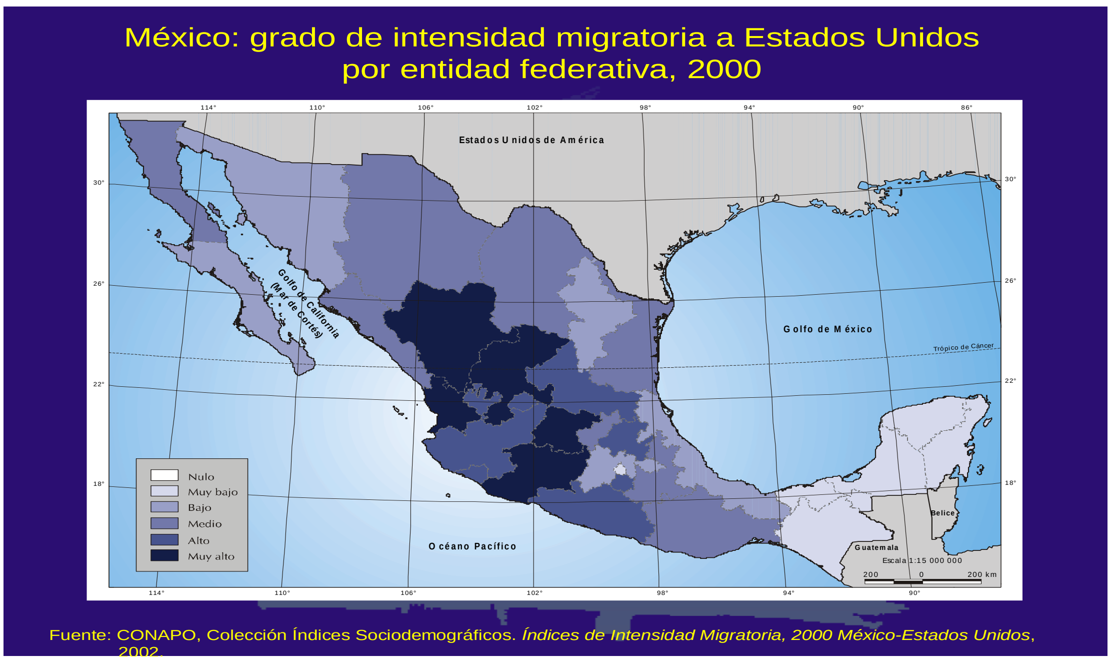
Source: CONAPO

---

[15] This figure is also from CONAPO. The 2005 figure from INEGI, the national statistical institute, is about 103 million.

74. **Migration from Mexico to the U.S., for historical reasons, has been predominantly from central and western Mexico.** Recruitment of labor in Mexico during the early 1900s followed the main railroad line into Mexico, which ran southwest from Texas into the relatively populous states in west central Mexico. From the 1920s to the 1960s, the nine west-central states accounted for about 50 percent of Mexican migration to the United States, but only for 30 percent of the population (Durand, Massey and Zenteno, 2001). Emigration thereafter followed this established network: indeed, the correlation between states' emigration rates in 1995–2000 and in 1955–59 (1924) period is 0.73 (0.48). Interestingly, although emigration rates do tend to be higher than average in states closer to the U.S, border, the "network effect" seems stronger, as states next to the borders are not those with the highest emigration rates

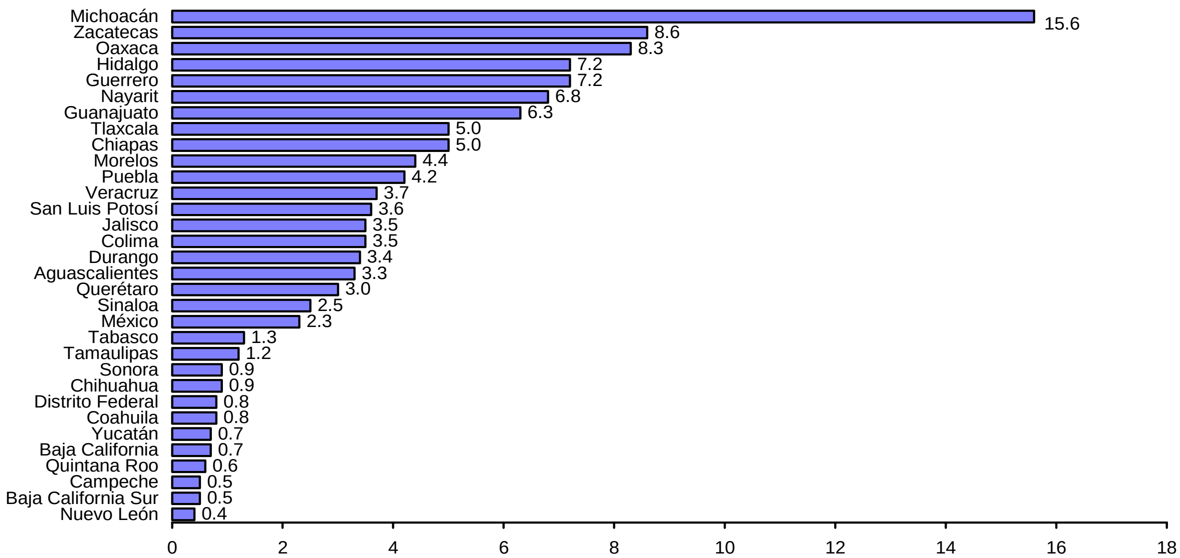
Mexico: State-level Rates of Migration to U.S., 2000



75. **As might be expected, recorded remittances inflows generally are higher in the states with higher emigration rates.** On average, according to CONAPO, 5.7 percent of total households in Mexico receive remittances. However, the distribution is not uniform across states, nor across rural and urban areas. Just four of Mexico's states (Michoacan, Durango, Guanajuato and Zacatecas) receive more than a third of total remittances. Note that the poorest states receive only small amount of remittances. While only about 3 percent of urban households receive remittances, more than 10 percent of rural households do.

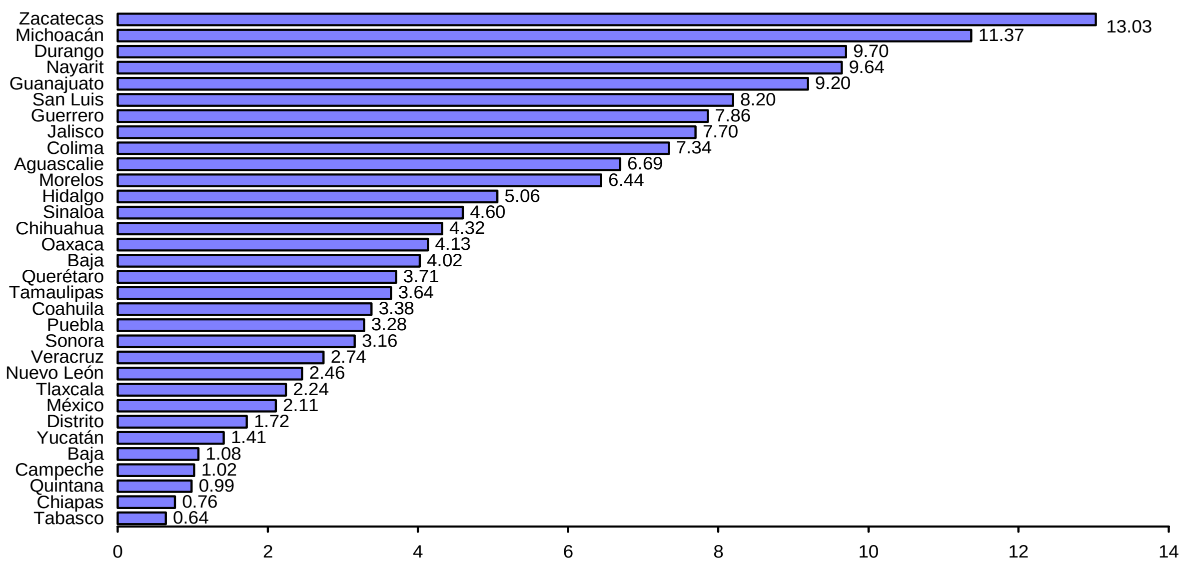
Remittances as Percent of GDP, 2005

Pecent of GDP



Households Receiving Remittances, 2000

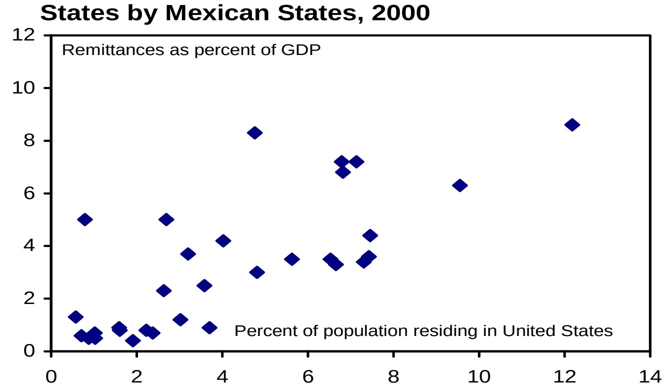
Pecent of households



Source: CONAPO

Furthermore, it is not surprising, given the positive correlation between emigration and remittances, that there is a negative correlation between states' rate of population growth and the amount of remittances they receive.

Remittances and Population Residing in United States by Mexican States, 2000



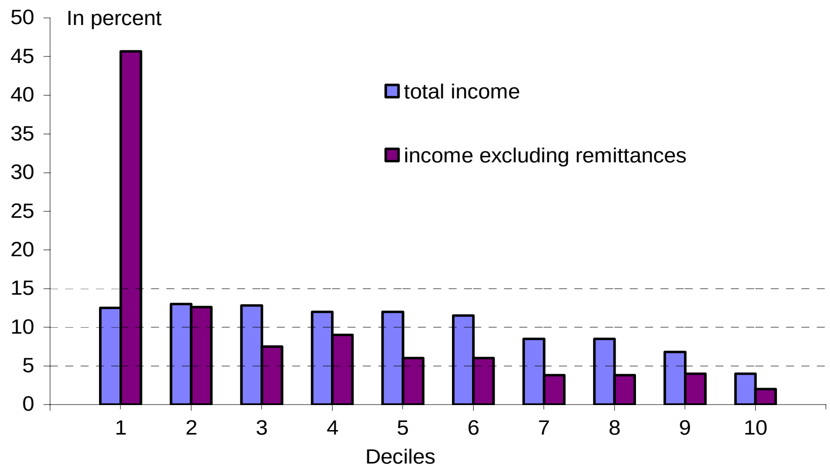
E. Effects of Remittances on Poverty and Domestic Demand

76. **Remittances, overall, contribute to reducing poverty—although the impact may be smaller if one considers the opportunity cost of emigrating. Recipients of remittances are mostly households with low income, when one excludes remittances from total income.** Excluding income from remittances, more than 45 percent of all the households receiving remittances would be in the lowest decile of the income distribution. However, when including remittances in income, only about 10 percent of the families that receive remittances still belong to the lowest decile, suggesting that remittances can have a significant impact on the recipients' income and can at least reduce the degree of poverty.

77. **However, this does not imply that without emigration and remittances households' total income would fall one-for-one, since part of the income-generating capacity of the families has moved abroad, substituting their foregone domestic income with income from remittances.** In other words, if a household member had stayed in Mexico, while the family would not receive any remittances, the person's income from working in Mexico would contribute to the household income. Indeed, Chiquiiar and Hanson (2005) find that Mexican immigrants to the United States are more educated than non-immigrants and that if they were to be paid (according to the current skills) wages in Mexico they would be centered in the middle of Mexico's wage distribution. One possible interpretation is that, because migrants may not be drawn from the poorest households, the "net" impact on poverty of remittances (and associated migration) may be considerably less than gross inflows of remittances would suggest. (Note that a complete analysis would take

into account also the general equilibrium effects of the decision to migrate, including for the supply of labor in Mexico and the wages of those who do not migrate.)

Percentage of Households Receiving Remittances by Deciles



Source: "Remittances and Poverty in Mexico: A Propensity Score Matching Approach," by Gerardo Esquivel and Alejandra Huerta-Pineda, Colegio de México, Working Paper, 2005.

78. **Nevertheless, studies that incorporate the opportunity costs of emigration do indicate that remittances reduce poverty.** Esquivel and Huerta-Pineda (2005), using a score matching approach to investigate remittances and poverty in Mexico, find that receiving remittances reduces the household's probability of being in poverty by about 12 percent. Likewise, Lopez-Cordova (2004) finds that remittances reduce poverty: using a cross-section of Mexican municipalities, Lopez-Cordova finds that higher remittances are associated with better schooling and health indictors, and with reductions in poverty.[16] Of course, distinguishing individual impacts on poverty of specific factors, such as remittances inflows and the government anti-poverty programs, is a difficult task.

79. **Most studies investigating the use of remittances in various countries find that remittances are mainly spent on private consumption, although a part is used for investment, particularly in microenterprises.** Using a survey approach in which recipients were asked what goods and services they spent their remittances on, studies in various countries have concluded that the majority of remittances were used for consumption (see Chami, Fullenkamp and Jahjah, 2003). However, a survey approach ignores the fact that income is fungible; that is, the remittances may be used for consumption allowing other

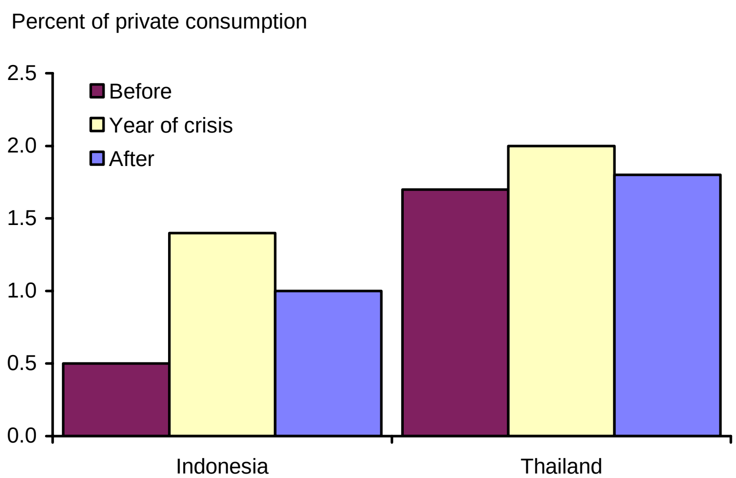
[16] Looking beyond Mexico, a standard cross-country growth regression framework (World Economic Outlook (2005), Adams (2003) suggests a negative link between remittances and poverty.

sources of income to be used for investment. Still, Adams (2005) finds using data from Guatemala that remittances are used mainly for consumption even when controlling for the household income. On the other hand, Woodruff and Zenteno (2004) estimate that remittances are responsible for one-fifth of the capital invested in microenterprises in urban Mexico.

F. Cyclical Aspects of Remittances

80. **Remittances are usually seen as a factor reducing fluctuations in output.** This, for example, has been the case, particularly during the Asian crisis (see chart below), when remittances rose in both dollar terms and in relation to private consumption. However, remittances do respond to economic conditions. For example, they rose steadily in the Philippines during the early 1990s with the improvement in the investment climate, but then declined and became more volatile following the financial crisis in the late 1990s. Likewise, remittances to Turkey fell as the economy slipped into crisis in 1999 and 2000 (Ratha, 2003). In both cases, however, the volatility of remittances was smaller than that of capital flows.

Remittances During Crises

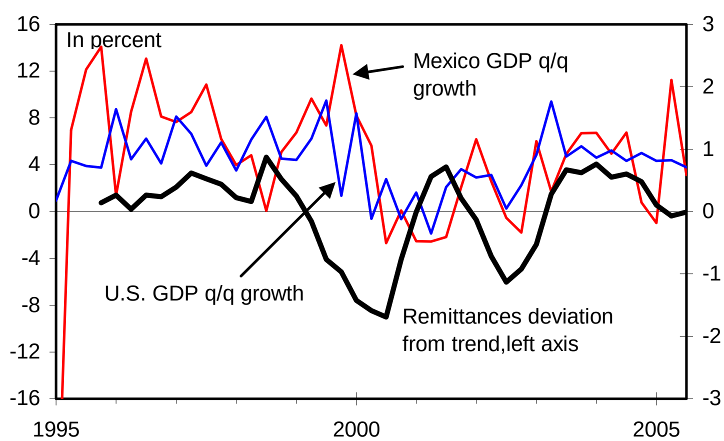


Source: Finance and Development

81. **With regard to Mexico, one would expect that the amount of remittances would depend on the economic cycle in Mexico and in the United States with opposite signs.** That is, bad times in Mexico might trigger an extra effort to send remittances back home, while bad times in the U.S. might lessen migrants' ability or willingness to send money home. However, because the business cycle in Mexico is positively—and increasingly strongly—correlated with the cycle in the United States, it is hard to isolate such separate effects. A further difficulty in analyzing the possible cyclical properties of remittances is the lack of a long enough consistently measured time series. As discussed earlier, there is reason

to believe that the share of actual remittances picked up in the available data has been changing.

82. **A preliminary effort to investigate this question yields some evidence that remittances overall depended positively on the business cycle in the United States—at least during the downturn-and-recovery cycle in the first half of this decade.** The following figure presents the moving average of the deviation of remittances from its trend level, estimated by HP filter with quarterly data from 1995–2005, together with GDP growth rates in Mexico and in the U.S. The figure suggests that remittances were below their trend level between 2000–2003 (although not in 2001), a period of slowdown in economic activity in the U.S. Of course, because economic activity was lower in Mexico during the same period, it is not possible to see here any separate impact of a slowdown in Mexico on the amount of remittances. The pattern with respect to the U.S. business cycle is consistent with findings from other countries. For example, remittances from Saudi Arabia rose during the oil boom years of 1970s and early 1980s, but declined in the mid-1980s as prices of the country's oil exports fell. Likewise, overall remittances from the U.S. surged in the second half of the 1990s, in tandem with the economic growth (Ratha 2003). However, further research would be needed, using micro (household-level) data to shed more light on the impact of the economic conditions in the U.S. and Mexico on remittances, as well as on the impact of remittances on investment and economic growth.



REFERENCES

Adams, Jr., Richard H., and John Page. 2003. *International Migration, Remittances and Poverty in Developing Countries.* World Bank Policy Research Working Paper 3179. December. http://wdsbeta.worldbank.org/external/default/WDSContentServer/IW3P/IB/2004/01/21/000160016_20040121175547/Rendered/PDF/wps3179.pdf.

Adams, Jr., Richard H. 2005. *Remittances, Household Expenditure and Investment in Guatemala.* World Bank Policy Research Working Paper 3532. March.

Chami R., Fullenkamp C. and Jahjah S. 2003. *Are Immigrant Remittances Flows a Source of Capital for Development?* International Monetary Fund Working Paper 03/189. Washington DC.

Chiquiar, Daniel and Hanson Gordon H. 2005. *International Migration, Self-Selection, and the Distribution of Wages: Evidence from Mexico and the United States.* The journal of Political Economy. April.

Esquivel, Gerardo and Huerta-Pineda Alejandra. 2005. *Remittances and Poverty in Mexico: A Propensity Score Matching Approach.* Working Paper

International Migration, Remittances, and the Brain Drain. 2006. The World Bank. Ozden and Schiff, Editors.

International Monetary Fund. Various years. *Balance of Payments Statistics*. Washington, D.C.: International Monetary Fund.

International Monetary Fund. 2005. *World Economic Outlook*. Washington, D.C.: International Monetary Fund.

International Monetary Fund. 2005. *World Economic Outlook*. Washington, D.C.

Lopez-Cordova, Ernesto. 2004.*Globalization, Migration and Development. The Role of Mexican Migrant Remittances.* Mimeo, IADB.

Organization for Economic Co-operation and Development. 2005. Migration, Remittances and Development.

Orozco, Manuel. 2003. *Worker Remittances: An International Comparison.* Working paper commissioned by the Multilateral Investment Fund of the Inter-American Development Bank. Washington, D.C.: Inter- American Development Bank. February. http://www.iadb.org/exr/prensa/images/RemittancesInternational.pdf.

Ratha, Dilip. 2003. *Workers' Remittances: An Important and Stable Source of External Development Finance*. Chapter 7 in World Bank, Global Development Finance 2003, pp. 157-175. http://siteresources.worldbank.org/INTRGDF/Resources/GDF2003-Chapter7.pdf.

Ratha, Dilip. 2005. *Sending Money Home: Trends in Migrant Remittances.* Finance and Development, December, Volume 42, Number 4.

Taylor Edward J., and Jorge Mora. 2006. *Does Migration Reshape Expenditures in Rural Households? Evidence from Mexico.* World Bank Policy Research Working Paper 3842. February.

World Bank. 2006. *Global Economic Prospects: Economic Implications of Remittances and Migration.*

Tutino, Antonella. 2006. Understanding Remittances: A Macroeconomic Perspective. Unpublished manuscript. International Monetary Fund.

Woodruff, Christopher, and Rene Zenteno. 2004. *Remittances and Microenterprises in Mexico*. Unpublished manuscript. Center for U.S.-Mexican Studies, University of California, San Diego.