



Donors Committee

For consideration

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To: The Donors Committee
From: The Secretary
Subject: Evaluation of MIF projects: Support of Private Participation in Infrastructure

Inquiries to: Mr. Bernardo Guillamon (extension 1583)

Remarks: This report is an integral part of the work program of the Office of Evaluation and Oversight (OVE) to evaluate Multilateral Investment Fund (MIF) activities, since the beginning of its operations in 1993, following the mandate of its Donors Committee. The work of OVE aims at developing a comprehensive image of the Bank activities in support of the private sector, and particularly of the MIF, as established in the document MIF/GN-78 of February 2002.

The evaluation was initiated in 2002, covering four thematic groups of projects: Alternative Dispute Resolution (GN-78-2), Microfinance (GN-78-3), and Capital Markets & Financial Reform (GN-78-4). During 2003, as established in the program approved by the Donors Committee (GN-78-1), the project groups to be evaluated include the rest of the MIF thematic areas of intervention: (i) Private Provision of Infrastructure Services; (ii) Human Resources Development (including skills standards and labor market reforms); (iii) Business Development Services (including quality standards and promotion of trade and investment); (iv) Venture Capital Development; (v) Environment and Eco-Efficiency; and (vi) Promotion of Competition and Consumer Protection.

The first two group evaluations for 2003 were completed in the first half of the year, while the other four are in process and are expected to be completed during the second half. Once these thematic group evaluations are finished, the results would be consolidated in an overall evaluation report, integrating the results of the evaluation for the 10 years of MIF operations.

References: MIF/GN-78(2/02), MIF/GN-78-1(11/02)



MIF/GN-78-9

***MIF Evaluation – Support of
Private Participation in
Infrastructure***

Office of Evaluation and Oversight, OVE

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ACRONYMS

AMSS:	Alcaldía Municipal de San Salvador
ANCAP:	Administración Nacional de Combustibles, Alcohol y Portland - Uruguay
ATTT:	Autoridad de Transito y Transporte Terrestre de Panamá
BCIE:	Banco Centroamericano de Integración Económica
BOO:	Build Operate and Own
BOT:	Build Operate and Transfer
CAF:	Corporación Andina de Fomento
CEARE:	Centro de Estudios de la Actividad Regulatoria Energética
CFR:	Country Framework Report
IIC:	Inter-American Investment Corporation
CONATO:	Consejo Nacional de Trabajadores Organizados - Panamá
CONATRA:	Confederación Nacional del Transporte - Panamá
DNP:	Departamento Nacional de Planeación - Colombia
ENRESS:	Ente Regulador de Servicios Sanitarios de la Provincia de Santa Fe - Argentina
EPAS:	Ente Provincial de Agua y Saneamiento – Mendoza, Argentina
FONPLATA:	Fondo Financiero para el Desarrollo de la Cuenca del Plata
GDP:	Gross Domestic Product
IDB:	Inter-American Development bank
IDEC:	Instituto de Defesa do Consumidor - Brazil
IIRSA:	Regional Infrastructure Integration in South America
IP:	Implementation Progress
LAC:	Latin American and Caribbean
MIF:	Multilateral Investment Fund
MINTUR:	Ministerio de Turismo - Ecuador
OSM:	Obras Sanitarias de Mendoza - Argentina
OVE:	Office of Evaluation and Oversight - Inter-American Development Bank
PCR:	Project Completion Report
PPIAF:	Public-Private Infrastructure Advisory Facility – www.ppiaf.org
PPMR:	Project Performance Monitoring Report
PPP:	Plan Puebla - Panamá
PRI:	Private Sector Department – Inter-American Development Bank
UREE:	Unidad Reguladora de la Energía Eléctrica - Uruguay
UTE:	Administración Nacional de Usinas y Transmisiones Eléctricas - Uruguay

PROLOGUE

This report of this Group of Projects is an integral part of the work program of the Office of Evaluation and Oversight (OVE) to evaluate Multilateral Investment Fund (MIF) activities, since the beginning of its operations in 1993, following the mandate of its Donors Committee. The work of OVE aims at developing a comprehensive image of the Bank activities in support of the private sector, and particularly of the MIF, as established in the document MIF/GN-78 of February 2002.

In order to proceed with the evaluation, a special methodological framework was developed by OVE to capture the specific characteristics of MIF interventions. Also an initial estimate of its entire project portfolio was done, identifying the main thematic project groups for which common reference points could be established and meaningful lessons could be drawn. The evaluation was initiated in 2002, covering four groups of projects: (i) Financial Reform, (ii) Capital Markets; (iii) Microfinance; and (iv) Alternative Dispute Resolution. These four groups represented 134 from 16 countries with a total approved value US\$159, 75 millions of MIF resources.

According to the detailed work program for 2003 included in the Progress Report of 2002 approved by the Donors Committee in (GN-78-1), during 2003 the project groups to be evaluated include the rest of the main MIF thematic areas of intervention: (i) private provision of infrastructure services; (ii) human resources development (including skills standards and labor market reforms); (iii) business development services (including quality standards and promotion of trade and investment); (iv) venture capital development; (v) environment and eco-efficiency; and (vi) promotion of competition and consumer protection. The first two groups have already the evaluation completed in the first half of the year, while the other four groups reports are in process and expecting to have them completed during the second semester of 2003.

At the end of 2003, once all the evaluation work is covered for the main thematic project groups, an overall evaluation report would be produced by OVE, integrating the results of the evaluation done for the 10 years of MIF operation, and addressing also issues relating to institutional processes and mechanisms.

EXECUTIVE SUMMARY

Infrastructure based services have widespread social and economic implications.

Infrastructure based services are central to the activities of all households and businesses and a major factor in economic growth, poverty alleviation and environmental sustainability. Recent studies indicate a strong correlation between infrastructure and the share of population living on less than US\$1 a day, infant mortality and primary school enrollment¹.

Infrastructure has always been a priority for the Bank Group, representing more than one third of total Bank lending since its creation.

Since 1961, the Bank Group provided almost US\$ 40,000 million in funding to the infrastructure sector. Over the last twelve years, the Bank Group approvals amounted US\$18.65 billion. This represented 25% of total approvals but with a declining trend in the last five years, where it represented only 16% on average. The majority of this funding corresponded to Public Sector Loans, which accounted for 86% of the total. Private Sector Loans started more recently, in 1995 and were expected to accompany the rise of private infrastructure operators. However, to date private sector approvals have never exceeded one third of the Bank Group annual approvals for the infrastructure sector.

Despite its being only 0.6% of annual Bank Group approvals for the infrastructure sector, MIF has played a leading role as a source of technical cooperation funding. Since 1994, the MIF has provided funds equivalent to 51% of all the stand-alone technical cooperation resources approved by the Bank Group in the area of infrastructure.

The involvement of the Bank, and the MIF, in the infrastructure sector has shifted emphasis over time, going from a search for “coverage maximization”, followed by a direct effort to “reform state-owned operators”, finally leading to bids for “privatization”

Over the first couple of decades the Bank’s priority was to help countries increase the coverage of basic infrastructure services. Massive loans were divided in phases and channeled through public executing agencies in each one of the countries. Mostly everywhere, this resulted in a steady, albeit slow, increase of coverage.

By the mid-eighties, the marginal returns of these programs were becoming scarcer. Despite growing allowances within the loan programs for “institutional strengthening” of the public executing agencies, their efficacy was declining.

Private sector participation in infrastructure became more politically viable after the experiences of the United Kingdom and Chile. At the same time, mounting fiscal pressures precluded most States from further direct involvement in the financing of infrastructure. In this context, the Bank led the way by redoubling its lending, now directly addressed to reforming state owned utilities.

¹ Danny Leipziger, “Rethinking Privatization: Introductory Remarks”, World Bank Workshop, February 10, 2003.

At the beginning of the nineties, the Bank changed radically its approach to the infrastructure sector by reducing its financing to the public sector and seeking ways to lend directly to the private sector.

By the mid nineties, the terrain seemed appropriate for the private sector to take over many of the services. The Bank Group followed suit by opening up the Private Sector Department, which was supposed to facilitate the financing of the new private operators of the formerly State-owned utilities.

However, the private sector did not show enough appetite for the Bank financing and the overall annual approvals of the Bank Group started declining since 1993, to less than half, as the Bank slowed down its funding to State-owned utilities and was unable to recover it through private sector lending.

In contrast, other multilateral organizations seemed to have maintained a high level of direct lending to the LAC infrastructure sector over the 1990s. For instance, the World Bank Group, an organization whose area of activity extends not only to the LAC region, has maintained twice the level of investment in LAC infrastructure than the IDB Group, that only focuses on LAC. Similarly, the Andean Development Corporation, a subregional organization, has steadily increased its investment in infrastructure from only 5% of IDB group approvals in 1991 to an amount equivalent to 62% of IDB Group approvals for infrastructure in 2000. In 2001 and 2002, the Andean Development Corporation clearly overtook the IDB Group in the infrastructure sector with 113% and 169% of IDB approval amounts respectively. Similarly to the IDB and the World Bank, most of this lending was directed to the public sector.

By the time MIF started operations, it relied on the Bank to source and implement technical assistance projects. The MIF started to work in the infrastructure area by supporting the Bank in its efforts to invigorate private investment - a task that proved to be more complex than initially expected.

The MIF had been endowed with financial resources, but relied on the Bank to execute its operations. At that time, it was in the best interest of both the Bank and the MIF, to have projects approved and funds from the MIF quickly applied to help complement and invigorate Bank-led, private participation efforts in the infrastructure sector.

Although, this gave the MIF a much-needed initial push, it left a deep mark around the notion that infrastructure was an area of the interest of the Bank, and not the MIF. Among other things, this got reflected in the absence of “private participation in infrastructure” as one of the clusters, or areas of interest highlighted by the Working Group on MIF Strategy on July 28, 2000 (MIF/GN-56). Levels of approval in the MIF for this area also were reduced by more than 50% in the last years marking a sort of phasing out of MIF activity in the infrastructure sector.

As the MIF developed its own strategic agenda and beefed-up its organization it sought to imprint its own style in the projects it chose to pursue in the infrastructure sector.

The MIF approved three lines of activity specifically related to infrastructure, but in practice the application of funds was slow, with only a few projects approved, except in the Aviation Safety Line, where the MIF perceived it was playing a principal role. A little less than 20% of the

projects were approved under the provisions of the lines of activity: nine projects under the Airport Security Line of, another four projects under the Line of Activity for Concessions, and three projects under the Line of Activity for Infrastructure.

Apart from the projects approved via the lines of activity, through the end of 2002 the MIF has approved other 70 operations, mostly to accompany Bank activity in the areas of sector reform, regulation and privatization. Overall, the MIF approved 86 projects in 23 countries to support private participation in infrastructure, for a total of US\$ 83.9 million.

The transportation sector accounted for 26 operations and US\$ 20.5 million in MIF funding. The water and sanitation received 21 operations, but also US\$ 20.5 million in MIF funding. The energy sector had 17 operations and US\$ 17.4 million, telecommunications only 5 projects and US\$ 13.9 million, while there were also 17 multisector projects with US\$ 11.6 million in MIF funding

However, the overall approval of MIF projects for the area of infrastructure shows a significant declining trend. Between 1994 and 1999 the average level of MIF approvals to support private participation in infrastructure was US\$10.9 per year. Annual MIF approvals for the sector decreased to about half, after 1999.

While a silent debate over the role of each party was taking place inside the Bank Group, the external needs of infrastructure-based services were growing even larger as the LAC region started to lose competitiveness based on the inadequacy of some of its infrastructure.

It is estimated that needs for new infrastructure and maintenance of the existing infrastructure in the LAC region would require an annual investment of at least 3% of regional GDP². The largest share of these requirements corresponds to the electricity sector, which would need about 42% of the annual investment, followed by roads with 35%, and water & sanitation and telecommunications, each one requiring about 13% of the annual investments.

However, even in 1998, the peak investment year, actual investment in new capacity and maintenance of existing capacity was less than 2% of regional GDP. Current investment levels are less than 25% of the 1998 peak. The endemic shortfall in infrastructure investments had allowed developing regions, such as East Asia to dramatically overtake LAC over the last decade.

The LAC region received the largest share of direct foreign investment in infrastructure during the nineties, but there was a mismatch with the needs of the countries

Investments flows to infrastructure projects with private sector participation grew in the LAC region from US\$14.6 billion in 1990 to a peak of US\$75.6 billion in 1998, to later decline dramatically almost to the levels of the beginning of the decade. Overall, the LAC region managed to capture the largest share of the private funds received by developing countries for infrastructure, with 48% of the total private investment flows. The East Asia and Pacific region,

² Investment needs were estimated roughly, as a first approximation. Standardized unit costs, e.g., cost per km. of paved road, and target penetrations were utilized to estimate the investment requirements.

that came second, only received 28% of the flows.³ However, continuous public sector investment more than made up for the smaller share of private investment.

However the private investment mix differed from the country needs. Telecommunication companies received almost half of the funding (42%), exceeding its 13% share of investment needs. Energy received somewhat less of its requirements (32%), but Water & Sanitation and Roads received much less than needed, with 5% and 20% respectively, versus investment needs of 13% and 35% respectively.

Private investors seem to have favored sectors with the least social impact, in new services and/or where tariff increases could be borne by more affluent sectors. They generally stayed away from sectors in which making the business viable would force them to police millions of non-paying, low-income users.

Nor was private investment enough to make up for the withdrawal of public investment in infrastructure

Privatization attracted much fewer investors than expected. For example, only 10 international investors had any potential interest in water & sanitation projects in the region. The same held true for the energy sector, where 65 operators worldwide had any potential interest, but only a handful were in a position to play any significant role.

Local capital markets did not develop as fast as expected, leaving infrastructure projects with few options apart from self financing or accessing hard currency financing in global capital markets.

As totals were tallied at the end of the decade, much less private investment was received, leaving most of the water & sanitation, most of the roads and a portion of energy and telecommunications companies still under State management. For example, water and sanitation services are still managed by public entities in 34 out of the 41 largest cities in the region⁴.

Although no comprehensive analysis has been performed on the effects of privatization, preliminary results confirm that coverage and quality of services have grown faster in countries where private investment was allowed, but the differential increase between these countries and those in which the “reform model” was applied visibly was modest at best. For example, in the electricity sector, installed capacity between 1990 and 2000 grew at an annual rate of 5.4% in countries where more private sector participation took place, but also grew fast in countries with less privatization such as Costa Rica or Uruguay, where the average annual growth rate for the same period was 4.9%. Likewise, in telecommunications, installed capacity in countries with competition grew at a 16.7% annual rate, while in countries without competition it also grew at a fast rate of 13.2%. It seems countries have made the required investments at about the same pace regardless of whether the source of capital was private or public.

³ The figures of this section have been obtained from the World Bank’s Private Participation in Infrastructure Project Database.

⁴ Vivien Foster. “Ten Years of Water Service Reform in Latin America: Towards an Anglo-French Model,” The World Bank (unpublished).

In general, unit costs to consumers grew much faster in privately operated utilities, than in their publicly owned counterparts. In the telecommunications sector this has been particularly acute with local operators. Privately owned telephone utilities increased unit rates for local calls eight-fold over the period 1990 to 2000, while publicly owned telephone utilities doubled them over the same period. In retail electricity, a less acute, but similar effect is observed with private distributors more than doubling unit prices while public counterparts increased them by roughly 60% from 1990 to 2000. In contrast, competition did manage to exert a downward pressure on wholesale electricity and international calls. However, such benefits accrued primarily to industrial and commercial users, and less to residential users.

Price increases were however accompanied by an improvement in the quality of services and a large improvement in productivity per worker at the utility companies. For example, privately managed telecommunications companies in the LAC region increased their productivity per worker almost 250% over the past decade. On the other hand, public operators productivity, increased less, but also at a very healthy pace of 150% over the past decade. This may have been a reflection of pressures to “streamline or privatize”, the beneficial effects of technology, or a combination of both.

Apparently, fiscal revenues improved greatly, as private operators shared a portion of its earnings with the host States and public budgets ceased to finance direct investments in infrastructure. Nevertheless, contingent liabilities for the States, resulting from potential renegotiations with private operators are yet to be discovered.

However, important issues related to employment, poverty and the environment remain unresolved and public sentiment has started mounting against privatization.

In spite of some positive impact on coverage, quality and fiscal balance, there is all across Latin America an increasing public disapproval of the privatization process, which in 2001 averaged 64% for the region and reached as high as 78% in Argentina and Colombia⁵. While the increase in the quality and quantity of services is to a great extent acknowledged by the public, the complaints focus mainly on the increases in tariffs and the affordability by lower-income users, the dismissal of utility workers, the perception of excessive profits of private utilities, and corruption.

The MIF has been addressing these new challenges, showing a remarkable responsiveness to market needs, despite its lack of explicit intent towards the infrastructure sector.

Innovative MIF projects in countries of all sizes are leading the way for new opportunities for the IDB Group as a whole. For instance, MIF has made inroads into areas such as: (i) Strengthening of regulation at the local level and/or of small local operators; (ii) Application of concession tools to other areas of infrastructure, such as health care, etc; (iii) Promotion of alternative means of private sector participation, such as management contracts or local level concessions; (iv) Coordination of regulatory activities among countries involved in integration schemes; or (v) some novel thematic areas like Consumer protection, Training of regulators, Urban Transport, Solid Waste Management, among others.

⁵ The source of these data is Latinbarometro.

There is a clear predominance of C and D countries among beneficiaries of this group. Almost three quarters of the projects, 61 out of a total of 86 projects, benefited C and D countries, where the role of the MIF has been much more visible.

Despite the enormous difficulties, progress in private participation in infrastructure services has been significant over the decade. In some way or form, the MIF has ended up supporting the infrastructure reform process in almost all countries.

MIF has developed infrastructure related projects in 100% of the LAC member countries and managed to execute projects in 92% of the countries. In spite of different degrees of success, MIF presence was so prevailing that most of the regulatory systems in the LAC countries had received some form of assistance from the MIF. For example, MIF has supported water sector reform in 65% of the countries. One of the MIF sponsored projects led to the creation of a regional association of water regulators whose members are or have been supported by MIF projects. A similar situation presents itself in the energy sector and to a lesser degree in the roads and telecommunications sectors, where international associations of regulators already existed.

So far it has proven unrealistic to achieve a fully private provision of infrastructure services. Despite a widespread perception to the contrary, still public providers provide the majority of services in many key sectors such as water and sanitation⁶. In fact more than 90% of the multilateral financing for infrastructure still goes to the governments of the region.

This issue is central to the conception of interventions. In the past, the “means”, namely, private sector participation, were prioritized over the “ends”, namely improved quantity and quality of services. There is a continuous of options and tools that can be used to involve private sector in the construction and delivery of infrastructure related services. For example, MIF projects in the water and sanitation sector have encountered and started to address numberless issues related to the role of the public sector and are striving to find alternative forms of private sector involvement.

Despite reforms everywhere, the difficult issues, such as “tariff adjustment mechanisms” or “affordability for lower-income segments” were often tabled for a latter date.

The MIF has pioneered some “rule based” approaches to tackle these difficult, unresolved issues. However, those approaches require an organized program behind, consistent benchmarking information and an even greater leverage of technology and synergies. Such information would be critical to promoting transparency, improving efficiency among providers and the empowering of regulators, consumer organizations and the policy makers.

The creation of adequate regulatory institutions is a lengthy process that requires a long-term commitment by the countries and the IDB Group as a whole.

⁶ Public participation is also highly prevalent in other sectors. For example, fixed line telecommunications are still 100% publicly owned in Uruguay, Surinam, Paraguay, Honduras, Haiti, Ecuador, Costa Rica, Colombia and Bahamas. By the same token, electricity distribution is 100% public or almost 100% public in Mexico, Uruguay, Paraguay, Nicaragua and Costa Rica; and as high as 60% public in Colombia and 40% public in Brazil.

It is a process of institution building that requires a clear definition of final objectives, a good identification of weaknesses and deficiencies and well defined action plans. The results so far showed success in obtaining an appropriate regulatory framework in operation in only 20% of the projects devoted to regulation, showing the tremendous challenge ahead.

MIF assistance to specific privatization and concession processes has been very helpful, but was more geared to the financing of consulting services and less to insuring the transparency and adequacy of the transactions. Half of the projects financed by the MIF the transaction was completed successfully.

Some successful regional projects have given the MIF the advantage of a global perspective not tied around the regional departments of the Bank. Harmonization to support the convergence of regulatory aspects is starting to show promising benefits, particularly for smaller countries involved in integration processes.

The evaluation revealed that the goals and objectives of most projects were not precisely defined. In many cases there is only a definition of outputs while in others the objectives are too broad and general. Hardly any project included a consistent reference to basic indicators of quality, coverage, capacity and prices in the sectors addressed by the projects.

The average project was planned for 28 months of execution, but took more than 65 months from approval to final disbursement. The policy of MIF to avoid the financing of second stages of a project has led to the design of more complex projects that are difficult to manage effectively. MIF should recognize that the process of building adequate regulatory framework and institutions is a long-term process that is better supported by a gradual approach that may require a sustained level of assistance, from the MIF or other interested parties.

The most effective MIF projects in the area of infrastructure tended to be preceded by a thorough identification of risks, which are fully understood and accepted by the MIF Donors Committee. Moreover, highly effective projects were usually built around risk mitigation activities, therefore all their actions were directed towards mitigating resistance to reform from the main stakeholders.

The quality of executing teams is a determining factor. In projects with lean, highly qualified and dedicated executing teams it is not uncommon for team members to take on many of the tasks initially planned for consultants. Secondly, highly efficient projects count on team members to seek standardization of activities in order to reduce costs and increase the quality of results.

In general there was little technical follow-up of the implementation of this group of projects, since specialists in the Field Office dealt primarily with administrative and procedural issues. Significant delays were common, without triggering any sort of mandatory evaluation to be conducted by an independent party with the ability to redefine the project objectives.

The complementarity with other actions of the IDB Group could have been a strong factor for success, but did not take place at its full potential.

The Private Sector Department and Inter-American Investment Corporation are areas of the Bank Group that share with the MIF a direct interest in fostering private investment in infrastructure. However, during the evaluation no MIF project in infrastructure was identified as initiated by these areas of the IDB Group, leaving great room for more effective coordination. Additionally, although many MIF projects in different countries are fairly similar in their objectives and activities, we have found very little cross communication among projects and almost no sharing of experiences. In some sectors, such as electricity, telecommunications or water, regional organizations of regulators have started to organize, thus opening an opportunity for MIF to enter into partnerships with them to promote regional synergies.

More than 50% of MIF funding in the infrastructure area was utilized to pay for consulting services. However, the available information is not conducive to an overall evaluation of the quality of the consulting services received by the different executing agencies, nor it avoids duplication on expenditures on the same types of service, often provided by the same consultants in different countries.

The MIF needs to reinvigorate its monitoring and evaluation functions. This should start with project goals clearly explicit, in a way that could subject them to objective measurement. The MIF should ensure that every project budget is provided with funding for monitoring and evaluation and every project should be evaluated. Impact evaluations have been virtually absent despite its potential to gauge MIF interventions as a laboratory for subsequent, larger scale efforts, and also considering the wider impact of infrastructure services.

Except for the Aviation Safety Line of Activity, all other lines of activities have experienced a low utilization due to a higher than expected requirements for project approval.

According to this evaluation, this seems to reflect, not a lack of interest or relevance of the lines themselves, but internal operational difficulties in getting projects approved. Potential users of line of activity projects report that even though there are fewer steps involved in the approval process, the amount of back up work required to get a project approved under a line of activity is similar to that of a regular project, discouraging its utilization. Nevertheless, line of activity projects, when approved, had usually good at capping the amount of resources invested by the MIF to achieve a certain goal. In addition, line of activity projects tended to be narrower and better defined, including in aspects related to the indicators used to measure its performance.

In summary, MIF interventions to promote Private Sector in Infrastructure have been highly relevant, particularly for smaller countries, but showed a mixed performance in terms of effectiveness and efficiency spreading thin in a great variety of sectors and functions. The best results were found when MIF projects were conceived in high complementarity and coordination with the Bank.

This occurred frequently in specialized areas that were left out by mainstream operations that offer opportunities for innovation, such as training of regulators, consumer protection, and harmonization of regional regulations. More targeted and well defined interventions, with a streamlined approval process and strong technical follow-up in areas that showed promising results and great demand could be important to maintain an effective role for the MIF in this important area for private sector development.

I. PRIVATE SECTOR PARTICIPATION IN INFRASTRUCTURE IN THE LAC REGION

- 1.1 **Until the end of 2002 the Multilateral Investment Fund (MIF) has actively supported the infrastructure reform efforts by means of 86 operations endowed with \$83.9 million in MIF funding.** This Chapter provides an overview of the evolution of private sector participation in infrastructure in the Latin American and Caribbean (LAC) region in the 1990's to understand the context of these MIF interventions. During this period most countries initiated a radical sector reform process, that was characterized by an opening up of the infrastructure sector to private sector participation and by attempts to establish a clear institutional separation between the functions of policy maker, regulator and service provider.
- 1.2 **Infrastructure based services are central to the activities of all households and businesses and a major factor in economic growth, poverty alleviation and environmental sustainability⁷.** Energy, transport, telecommunications and water are used in the production processes of nearly every economic sector. Removal of infrastructure bottlenecks and infrastructure productivity improvements has a high multiplier impact on economic growth. Adequate quantity and quality of infrastructure are key determinants of the ability of countries to trade and compete in international markets and therefore should be a priority for all countries in the LAC region. Also infrastructure provision is also a key poverty reduction tool. Access to minimal infrastructure services is one of the essential criteria for defining social welfare and the access and affordability of basic infrastructure services is a major issue for the population living below the poverty line. Access to clean water and sanitation are crucial in reducing mortality and morbidity. Access to transport, roads and energy contribute to higher and more stable incomes for the poor, especially in rural areas. Recent studies indicate a strong correlation between infrastructure and the share of population living on less than US\$1 a day, infant mortality and primary school enrollment. The relationship between each infrastructure sector and the environment is complex, but the provision of services – either by the public or the private sector - can and should be made consistent with the concern for preservation of natural resources and with environmental sustainability.

A. Infrastructure Endowments of the LAC Region

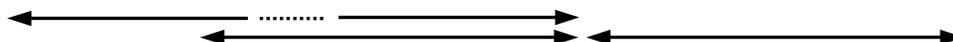
- 1.3 **There is a tremendous infrastructure gap between the region and high-income countries.** The average high-income country in the world has more than three times investment per capita in telecommunications and power and almost ten times more investment in roads, even when compared with the most affluent countries in the LAC region. In contrast, LAC average infrastructure stocks per capita in the telecommunications and power sectors are near the comparable world averages for both low and upper middle-income countries. In terms of paved roads the region is substantially below average world levels for countries in the same income group. In

⁷ See for example an extensive study done for India and extended recently to China by Peter Hazell of IFPRI, as indicated in “Linkages between government spending, growth, and poverty” (1999), where it is found the largest marginal returns to agricultural productivity growth and poverty reduction from additional government expenditures on rural infrastructure (i.e. roads and electricity).

water and sanitation, lower middle-income countries are below average, while even upper middle-income countries fall behind in terms of sanitation.

Table 1.1: Average Infrastructure Stock per Capita⁸ LAC and the World

COUNTRIES	World High Income	World Upper-Middle Income	LAC Upper-Middle Income	World Lower-Middle Income	LAC Lower-Middle Income
Telecom	496.00	124.00	136.04	81.00	80.20
Power	2.12	0.62	0.56	0.37	0.38
Roads	9.74	2.32	1.12	1.08	0.70
Water	96.60	79.90	78.50	70.00	62.09
Sanitation	98.60	78.90	72.75	69.98	69.85



Source: Marianne Fay, “Financing the Future: Infrastructure Needs in Latin America 2000 – 2005”, *The World Bank, Policy Research Working Paper #2545, February 2001.*

- 1.4 **According to some estimates, new infrastructure investments needed in the LAC region as a whole could amount to US\$57.5 billion per year, equivalent to somewhat more than 3% of regional GDP.** The largest share of these requirements is represented by the electricity sector, which would need about US\$22.0 billion per year, followed by roads, which would require US\$17.8 billion per year, water and sanitation with US\$6.6 billion per year and telecommunications with US\$6.1 billion per year. Maintenance investment requirements for the region are estimated as an additional US\$ 35 billion per year, or at least another 2% of regional GDP. Others estimates produce similar results, placing overall investments needs between US\$ 50 and 70 billion per year.
- 1.5 **Private investments flows into the infrastructure sector, excluding divestiture payments, reached a peak of US\$35 billion in 1998, but were heavily concentrated in telecommunications, which by itself represented 42% of the total.** Even if private investment were maintained at its peak 1998 level, it would only cover 38% of the minimum requirements of the region for new and maintenance investment.
- 1.6 **Although there is a great deal of variation across individual countries, the infrastructure sector in LAC has fallen behind the successful East Asian developing economies⁹.** In 1980, East Asia power generating capacity per worker was only 70% of Latin America’s, in 1990 both regions were almost equal, but in 1997 East Asia had risen to 165 percent of Latin America’s levels. Likewise, in 1980 LAC trailed East Asia by a relatively small margin in main telephone lines per worker, but in 1997 the gap had expanded considerably and East Asia had twice as many phone lines per worker as Latin America. In the length of paved roads per worker, LAC almost doubled East Asia in 1980, but by 1985 both regions had reached parity.
- 1.7 **There are great variations in infrastructure endowments across individual countries of the LAC region.** In terms of power generating capacity per worker, Paraguay,

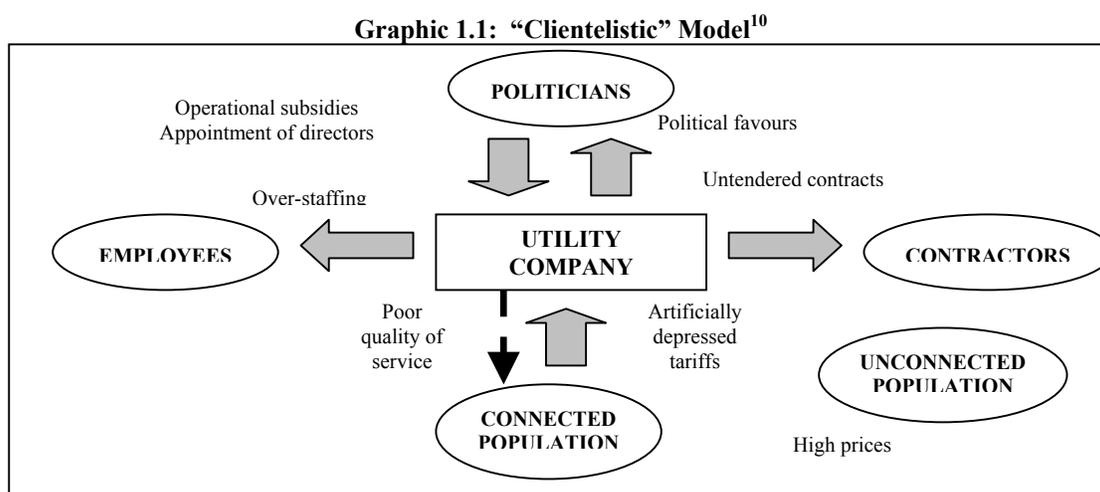
⁸ Units are telephone mainlines per 1000 person, kW of generating capacity per person, kilometers per person for paved roads and percentage of population with access to both safe water and sanitation.

⁹ The countries included in this group are Hong Kong, Indonesia, Korea, Malaysia, Singapore, Taiwan and Thailand. The data is from Cesar Calderon, William Easterly and Luis Servén, “Latin America’s Infrastructure in the Era of Macroeconomic Crisis,” *The World Bank*, to be published.

Venezuela, Uruguay and Argentina have higher levels than the East Asia median, while Mexico and Chile are close to the East Asia median. Power losses are below 10% in Paraguay, Costa Rica and Chile, but above 20% in Venezuela, Panama, Colombia, Ecuador, Honduras, Nicaragua and the Dominican Republic. In telephone lines per worker, Uruguay, Argentina, Chile and Costa Rica are close to the East Asian level. In most LAC countries, the total paved road length per worker is superior to that of East Asia, but only Uruguay, Jamaica, Barbados and the Bahamas come close to these countries in terms of percentage of paved roads in the total network.

B. The Process of Infrastructure Reform

1.8 **Until the beginning of the 90s, electricity, water, sanitation, roads and telecommunications in LAC were almost everywhere provided by monopolistic public enterprises, which suffered from numerous problems that interfered in their efficient and effective operation.** In those cases managers were often appointed on the basis of political connections, rather than technical capabilities and employment was artificially increased to accommodate party affiliates. Tariffs were kept low, with low degree of billing collections, to please the public, while most public utilities received operational subsidies. Investment decisions not always were made on the basis of sound technical and economic analysis and the services provided by the public monopoly steadily deteriorated over time. This has often been called the “clientelistic model” as illustrated below.

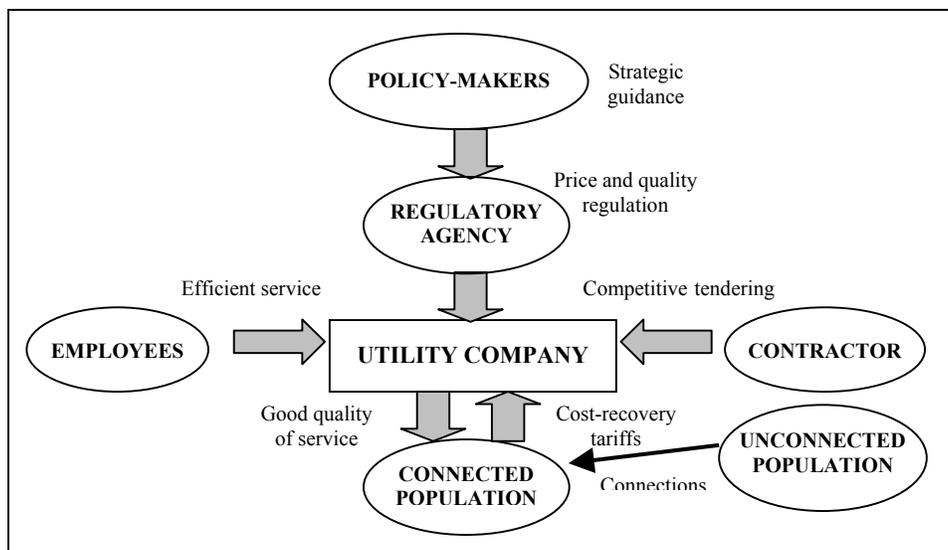


1.9 **During the 1990s, Economic stabilization programs under the guidelines of the denominated “Washington Consensus”, motivated a growing awareness in all countries about the need to control public spending and eliminate the operating subsidies and other transfer of funds to utilities.** At the same time, there was an increasing dissatisfaction with the poor efficiency, quality and coverage in the different infrastructure services. These factors provided a strong incentive to embark on a comprehensive infrastructure reform process. The basic tenet of this process is the

¹⁰ Abel Mejia Betancourt, World Bank: “Meeting Future Water Needs: A reality check?; Ten years of reforms in Latin America”, The Third Water Forum, Kyoto, Japan, 2003.

opening up of the sector to private participation and the separation of the functions of policy setting, regulation and service provision. The “reform model”, as illustrated below, was an objective that most countries tried to achieve.

Graphic 1.2: Reform Model¹¹



- 1.10 **As part of this infrastructure reform process, several countries started to partition their state-owned utilities and began to sell ownership interests in the new companies or grant service provision concessions to the private sector.** These changes advanced rapidly in the telecommunications, power and gas sectors, but have been slower in water, sanitation and roads. At the same time, to conserve scarce public funds, new “green field” infrastructure projects were opened-up to private investments in all sectors, most of them under built-operate-transfer (BOT) or built-operate-own (BOO) arrangements. Additionally, a fee-per-use system was utilized for improvements in highways financed by the private sector, allowing some investment recovery through toll charges. A similar arrangement was implemented for the construction of new power generating plants, transmission lines, gas lines, water treatment plants and others.
- 1.11 **To accommodate the new institutional model, sector reform legislation and new regulations had to be enacted in almost all countries.** The necessary legislation had two main purposes: first, to allow private participation in sectors that had been an exclusive monopoly of state-owned utilities or were reserved by law as an exclusive public sector domain; and second, to establish the new principles that will guide sector development and the regulatory framework for the new private activity.

¹¹ Abel Mejia Betancourt, World Bank: “Meeting Future Water Needs: A reality check?; Ten years of reforms in Latin America”, The Third Water Forum, Kyoto, Japan, 2003.

Table 1.2: Regional Overview of Private Sector Participation¹²

	Fixed Telephones	Power Distribution	Water & Sanitation
Argentina	Divestiture : 1990	Divestiture : 1992	Concession : 1993
Bolivia	Divestiture : 1995	Divestiture : 1995	Concession : 1997
Brazil	Divestiture : 1998	Divestiture : 1996	Concession : 1995
Chile	Divestiture : 1987	Divestiture : 1986	Concession : 1999
Colombia	No	Divestiture : 1994	Manag/Conc : 1995
Costa Rica	No	No	No
Dominican Republic	Private	Divestiture : 1999	No
Ecuador	No	No	Private
El Salvador	Divestiture : 1998	Divestiture : 1998	No
Guatemala	Divestiture : 1998	Divestiture : 1998	No
Honduras	Divestiture : 2000	No	Concession : 2000
Jamaica	Divestiture : 1990	Divestiture : 2001	No
Mexico	Divestiture : 1990	No	Management : 1994
Nicaragua	Divestiture : 2002	Divestiture : 1998	No
Panama	Divestiture : 1997	Divestiture : 1998	No
Paraguay	No	No	No
Peru	Divestiture : 1994	Divestiture : 1994	No
Trinidad & Tobago	Partially private	No	Management : 1995
Uruguay	No	No	Concession: 1997
Venezuela	Divestiture : 1991	No	Private

1.12 **The reform process in the infrastructure sector was made possible, in part by the fast pace of innovation experienced in the 90s particularly derived from technological advancement and “service unbundling”.** Changes in the infrastructure sector were helped by innovations that occurred in economic and technological areas and by strong advances in the theory and practice of regulation. The concept that public utilities are natural monopolies because of economies of scale was challenged by the new ideas about “unbundling” in some segments of public services. The appearance of small and efficient combined-cycle power plants, mobile telecommunications systems and electronic road pricing systems, among others, helped turn the principles of reform into viable businesses. “Vertical unbundling” was first introduced in Chile in 1982 with the division of the national power company into separate generation, transmission and distribution entities and has been followed by other countries in the region. Competition was then introduced within the appropriate segments, particularly in generation. A variation, called “horizontal unbundling” was introduced with the division of a public utility into geographic service areas, which allows for comparisons among separate service providers. Competition was also introduced when different private sector groups bid for the right to earn a concession to provide the services in a given geographical area for a given period of time. Efficiency results akin to those of competition are also obtained with “price cap” regulation, with the concept of a “model company”, where an

¹² Excludes BOT and BOO contracts. In the telecommunications sector, the table shows what has happened with fixed telephone utilities, since in all countries there are concessions for the new mobile phones that have rapidly expanded in the region and some competition in long distance services. In electricity it presents the situation of distribution utilities. It should be noted that power distribution in the cities of Guayaquil (Ecuador), La Paz (Bolivia) and Caracas (Venezuela) has been the responsibility of private companies long before the start of infrastructure reform process.

abstract efficient company is defined by the regulator and used as a benchmark to set tariff levels, and with other variations of “benchmark regulation”.

- 1.13 **In spite of the advances, the quest for competition in infrastructure services remains an elusive one. The prevalence of market mechanisms concentrates mainly in mobile and long distance telecommunications and in the power generation sectors.** Almost all private providers of services need to be regulated to prevent monopolistic practices, undesirable environmental effects and to guarantee the quality of output and the achievement of social objectives in terms of access and affordability by the poorest segments of population. A more decisive political support on the part of the governments of the region was assumed when the Bank Group backed the reforms of the last decade. Such support did not materialize as expected and the quest for appropriate regulatory independence and the trade off between this independence and the necessary regulatory accountability are still part of the unfinished agenda of the infrastructure reform process.
- 1.14 **Overall the telecommunications and electricity sectors display the greatest progress in terms of legal reform following the model proposed, with more than half of the countries having already backed the reform with a sector specific law, and another quarter by means of an appropriately crafted multisector law. The water and sanitation sector falls significantly behind, with less than one quarter of the countries having a law with implications over private participation in the sector. In contrast, concession contracts have been the preferred private participation tool in the water and sanitation sector, although its prevalence is still limited.**

Table 1.3: Regulatory Instruments in Selected LAC Countries¹³

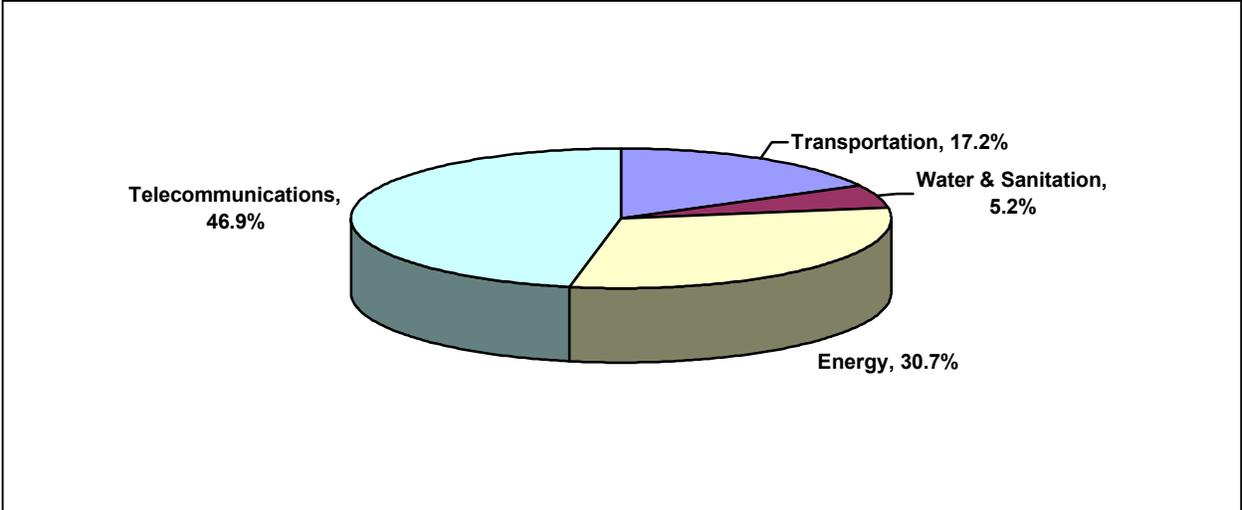
	Telecommunications	Electricity	Water & Sanitation
Argentina	Decree (1996)	Law (1991)	Contract
Bolivia	Law (1994) – Multi	Law (1994) – Multi	Law (1999)
Brazil	Law (1997)	Law (1996)	No
Chile	Law (1987)	Law (1978)	Law (1988)
Colombia	Law (1994) – Multi	Law (1994) – Multi	Contract/Law (1994)
Costa Rica	Law (1996) – Multi	Law (1996) – Multi	No
Dominican Republic	Law (1998)	Law (2001)	No
Ecuador	Law (1995)	Law (1996)	Contract
El Salvador	Decree (1995)	Law (1996)	No
Guatemala	Law (1996)	Law (1996)	No
Honduras	Law (1995)	Law (1998)	No
Jamaica	Contract – Multi	Contract (01) – Multi	Contract (00) – Multi
Mexico	Contract-Law (1996)	No	Contract
Nicaragua	Law (1995)	Law (1998)	No
Panama	Law (1996) – Multi	Law (1996) – Multi	Law (1996) – Multi
Paraguay	Law (1995)	No	No
Peru	Contract-Law (1994)	Law (1996)	Contract – Law
Trinidad & Tobago	Contract – Multi	Contract – Multi	No
Uruguay	Law (2000)	Law (1998)	Law (2000)
Venezuela	Contract – Decree	Law (1992)	Contract/Law (2001)

¹³ Elaborated by OVE using different sources

C. Private Sector Investments in Infrastructure

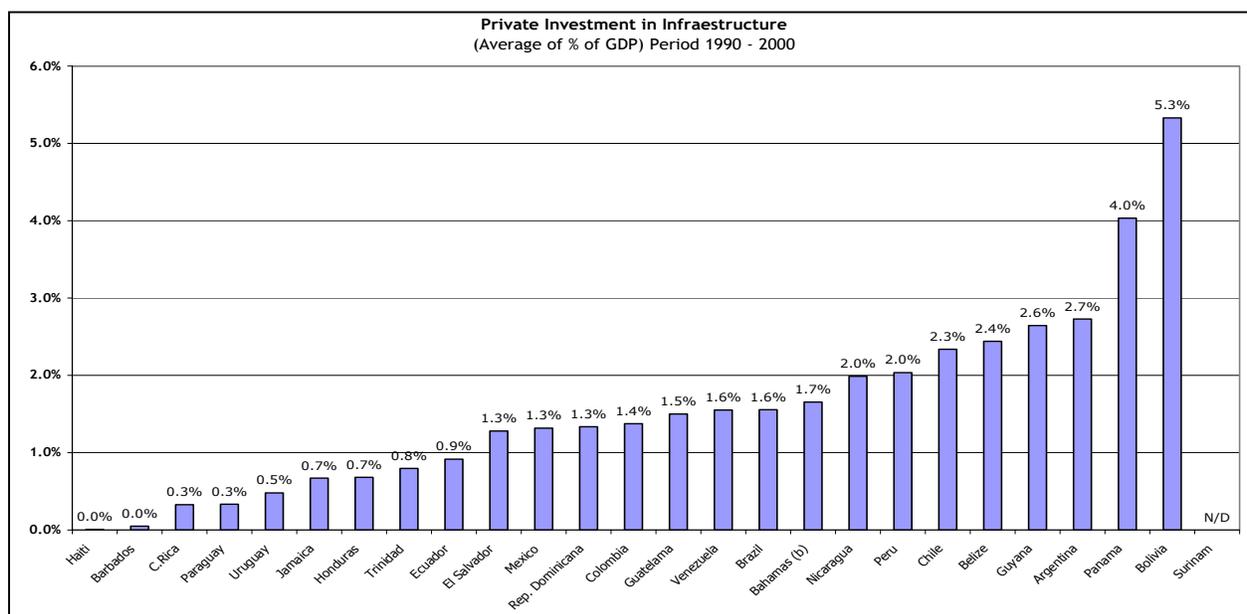
1.15 **Investments flows to infrastructure projects with private sector participation grew in the LAC region from US\$14.6 billion in 1990 to a peak of US\$75.6 billion in 1998.** Due mainly to the financial crisis that have swept global markets, investments declined dramatically to US\$ 38.7 billion in 1999, US\$ 38.3 billion in 2000 and US\$ 23.3 billion in 2001. In the period between 1990 and 2001, asset purchases accounted for about 61% of the total flow received by the region, while management and operations contracts with major capital expenditures (concessions) represented 14% and “green field” projects about 25%. Overall, the LAC region managed to capture the largest share of the funds received by developing countries for infrastructure, with 48% of the total private investment flows. The East Asia and Pacific region, that came second, only received 28% of the flows.

Graphic 1.3: Private Investment for Infrastructure Projects in LAC (1990-2001)



1.16 **The private sector interest was concentrated in a few countries and sectors.** Brazil, Argentina and Mexico have been the top recipients of private investment flows for infrastructure, with totals of US\$130.3 billion, US\$76.7 billion and US\$56.9 billion respectively between 1990 and 2001. They represent 37%, 22% and 16%, respectively, of total investment flows. In per capita terms, Argentina, Panama and Chile occupy the top positions in the region. These investments represent 5.3% of GDP in Bolivia, 4% in Panama and 2.7% in Argentina (see Graphic 1.4). For the region as a whole, telecommunications has attracted 46.9% of total investments, while energy, mostly electricity, accounts for 30.7%, transport for 17.2% and water and sanitation for only 5.2%.

Graphic 1.4: Private Investment in Infrastructure by Country (1990-2001) - As a % of GDP



Source: Elaborated by OVE with data from World Bank, Private Participation in Infrastructure Project Database.

Table 1.4: Investment in Infrastructure Projects with Private Participation 1990-2001 (US\$ million)

COUNTRY	Telecom	Energy (a)	Water & Sanitation	Transport (b)
Argentina	27,425	26,644	8,238	14,351
Barbados	9	-	-	-
Bahamas (c)	485	57	12	243
Belize	-	154	50	-
Bolivia	794	3,180	682	163
Brazil	64,446	43,164	2,905	19,747
Chile	1,433	8,886	3,954	5,179
Colombia	3,263	7,718	272	2,566
Costa Rica	-	319	-	161
Rep. Dominicana	303	1,909	-	834
Ecuador	822	310	550	699
El Salvador	753	985	-	-
Guatemala	1,578	1,373	-	34
Guyana	106	50	-	-
Haiti	2	-	-	-
Honduras	42	182	220	131
Jamaica	392	490	-	30
Mexico	38,247	4,732	644	13,338
Nicaragua	68	347	-	104
Panama	1,578	1,065	25	1,216
Paraguay	279	-	-	58
Peru	8,702	4,025	56	247
Trinidad	215	207	120	-
Surinam	N/A	N/A	N/A	N/A
Uruguay	86	439	361	250
Venezuela	12,190	133	40	368
Total	163,221	106,371	18,128	59,718

Source: Elaborated with data from World Bank, Private Participation in Infrastructure Project Database

a) Includes Gas and Electricity, b) Includes Roads, Rails, Airports and Ports, c) Source: Deal Logic ProjectWare Database

1.17 **Countries of a certain size tend to share similar patterns of private investment in infrastructure.** For example, in larger countries, telecommunications attracted the most investment per capita (\$390), followed by energy (\$299), transportation (\$163) and water & sanitation (\$78). In medium size countries, energy is the most invested sector with \$183 per capita, followed by telecommunications (\$133), transportation (\$88) and much less for water & sanitation (\$29). Finally, in smaller countries, energy is also the most heavily invested sector with \$127 per capita, followed by telecommunications (\$53), water & sanitation (\$37) and finally roads received almost no private investment with only \$6 per capita.

D. Issues in the execution of the Reform Model

1. Independent regulation

1.18 **In practice, the execution of the reform model in the region revealed widespread difficulties for obtaining and maintaining the independence of regulators.** In the case of contract-based concessions, the regulator functionally depends from the public authority awarding the concession, therefore having limited independence. However, contrary to what might be expected, limitations on independence are very similar in the case of law-based reforms. Several countries have set a separate Commission, Agency or Superintendency to act as regulator, but at the same time have established a controlling and/or reporting relationship with the corresponding Ministry, which sometimes has to validate basic decisions of the regulator. In many instances, operating budgets for the regulators are also subject to detailed government approvals and controls, effectively limiting their independence.

1.19 **In several cases the divestiture to the private sector preceded the approval of the regulatory legislation and the appointment of independent regulators.** Evidently this approach limited private sector participation to those investors willing to take the high risks involved in starting operations within an uncertain legal environment, who in turn asked for a high risk premium as compensation. For example, this was the case of telecommunications in Argentina.

1.20 **In some countries a regulatory body has been formally established, but this has not been enough to attract any significant private sector participation.** In general these regulators have been bestowed with limited capacity or power to act over the dominant state-owned companies, having additionally the limitation of a more limited market size. In bigger countries, such as Argentina, Brazil, Colombia or Peru, having adequate regulatory instruments and institutions at the national level has not been enough, as appropriate regulatory institutions at the local level are also required, particularly in the context of decentralization of the 1990s. This is especially valid in the water and sanitation sector, where concessions are increasingly being granted at the municipal level. This has also been the case for the power sector in smaller economies.

1.21 **The approval of legislation or the issuance of an executive decree establishing the regulatory framework demonstrated to be only the first step, perhaps the easiest one, in a long road towards greater welfare.** Neither laws, nor decrees guarantee the

existence of adequately functioning regulatory institutions. This is a task that takes time and requires continuous efforts over some years. Not only the issues are complex, but also they require a level of individual and institutional competence that is scarce among the public sector.

2. Prevailing Public Presence of Infrastructure Service Providers

1.22 **The applicability of regulatory concepts under the framework of the reform model, originally designed for supervision and control of private utilities, to the vast number of public enterprises still remaining in the infrastructure sector of many LAC countries has not been adequately examined.** For example, price cap tariffs will induce a search for efficiency in privately owned companies but may have a completely opposite effect on public companies. A search for more appropriate regulatory solutions in sectors with a mixture of public and private companies, common in many LAC countries, is an upcoming item in the agenda as reform permeates into existing sectors and advances into new ones, such as mass transport, solid waste management or irrigation.

1.23 **In spite of the large investments flows, only a small proportion of the services are in private hands in infrastructure, and that is even the case for countries that moved decisively into the process.** This can even be appreciated from the financing data of multilaterals, that indicates that only less than 10% of the resources devoted to infrastructure goes to private sector projects. In Argentina, with one of the more visible privatization programs only 62% of urban consumers are customers of private concessions of water and sanitation, and private distribution of electricity reaches less than 70% of all residential users. With the exception of Chile, in all other countries the proportion of population receiving power, water and sanitation services from private sector companies is way much smaller than in Argentina or Chile. For instance, it can be mentioned that there are no private companies that distribute electricity to the general public in Mexico, Paraguay, Trinidad and Tobago and Uruguay and no private water and sanitation services in 34 out of the 41 cities in the region with a population larger than 1 million.

Table 1.5: Population served by Private Water Companies

Country	Population
Chile	86%
Argentina	62%
Bolivia	28%
Colombia	13%
Ecuador	25%
México	19%
Uruguay	17%
Honduras	16%
Brazil	1%
Peru	0%
Nicaragua	0%
Panama	0%
Paraguay	0%
Costa Rica	0%
Venezuela	3%
El Salvador	0%
Guatemala	0%

3. Limited Local Capital Market Financing

- 1.24 **The absence of long-term funding in domestic markets is a key constraint to increased participation by private investors because revenues are usually generated in local currencies.** Because of this, foreign borrowing and the issuance of American and Global Depository Receipts to raise funds in the stock exchanges of the United States and other countries, has been widely used by private investors all across the region as a temporary substitute. This has made infrastructure investments flows to the region highly dependent on the fluctuations of international capital markets and has increased the risks premiums. Presently, foreign flows have shown a downward trend, restricting further development of infrastructure with private funding.
- 1.25 **Due to the deterioration of conditions in the global markets, the flows of funds to the LAC region and to other developing countries have decreased in recent years.** This will have an impact on the expansion plans of existing private investors and will necessarily slow down any deepening of the process of private participation in infrastructure. Under these circumstances, multilateral financial institutions are likely to be called to play a counter cyclical role and substantially increase their level of direct lending for infrastructure. Likewise, increasing interest was found in the region for new flexible financial vehicles attractive for a growing mass of local pension funds and institutional investors. This would be key to decrease the financial exposure of multilaterals, as the private sector regains confidence and reenters the market. This new types of instruments would have the potential benefit to increase the financing in local terms and would provide less degree of volatility to long-term investments of the region.

4. Limited Number of Interested Private Sector Operators

- 1.26 **An interesting fact to note is that the number of investors and the degree of competition in transactions for private sector participation has been much more limited than initially planned.** For instance, fewer than ten international companies were potential participants in all bids for the concession of water and sanitation services in large cities across the region. This already reduced number has continued to shrink providing increased bargaining power to private sector providers still interested to participate, challenging possible benefits of privatization schemes proposed. According to a recent survey of private power investors¹⁴, in the past two years seven firms decided to exit from markets in developing countries and two went into receivership, while there were seven mergers. The results of that survey also reveal that the most important factors to attract private investors would be: (i) the adequacy of the legal protection system; (ii) the level of tariffs and the degree of consumer payment discipline; and (iii) the regulatory system and the fairness in the adjudication of tariff adjustments.

5. Frequent Renegotiations of Contracts

- 1.27 **Renegotiations and detailing of privatization concession contracts has become so frequent that in some sectors the average time between modifications and or**

¹⁴ Lamech, Ranjit and Saeed, Kazim, "Private Power Investors in developing Countries: Survey 2002 – Preliminary Findings", The World Bank, presented to the Energy Forum 2002, June 5, 2002.

renegotiations of contracts is less than two years¹⁵. Public sector officials are often in dire need of support during negotiations in order to level the field with their much more experienced private sector counterparts. The lack of information and track record in many sectors are demanding increasing skills and information for proper benchmarking, contract models, renegotiation formulas, and mediation and arbitration mechanisms. The limited degree of private interest is increasing the demand of public authorities to support their improvement in skills, institutional capacity and transparency of information.

6. Tariff Adjustment, Access, and Affordability for the Poor

- 1.28 **An element often overlooked in the application of the reform model was the existence of satisfactory tariff adjustments mechanisms and the establishment of clear schemes to compensate access and affordability of services by lower income families or in remote locations.** These mechanisms are necessary to assure the financial viability of utilities and attract private investors with a more sustainable prospective. In many instances the affordability of services has been overestimated, not considering the facts that many of the lower income segments have been not paying the service before the privatization. For the most vulnerable segments of the population this can not be solved simply by increasing the collection efficiency of the private operator, but conceiving ex-ante targeted and clear mechanisms to assure basic level of affordability and access. This could avoid later on re-negotiation of contracts or public backlash to privatization for denial of services, that end up creating more uncertainty and very costly to the State. While the LAC region has made advances in recognizing the crucial role of tariffs and the overall assessment indicates that the situation is in general better than that of regulatory institutions, substantial improvements in establishing appropriate tariff adjustment mechanisms are still needed.

7. Focus on the “Mechanics of the Reform” at the expense of the “Results”

- 1.29 **The debate has just recently focused on more substantive long-term effects, such as the impact on economic growth, employment, poverty reduction and the environment.** Yet no comprehensive analysis is available regarding the impact of private investment in infrastructure in the LAC region. However, in these areas it is difficult to separate the impact of private participation in infrastructure from other complementary and related public actions (such as regulations, governance, modernization of the state, reallocation of public expenditures, etc.) and widely accepted conclusions are not yet available. The situation is not as simple as initially expected. Private participation is definitely not the silver bullet everyone was expecting, however, the lack of properly set studies precludes any attribution statement as to what would have happened if private sector had not participated.
- 1.30 **In terms of improvement of capacity for electricity and basic telecommunications, the preliminary results indicate that capacity has grown faster in countries where more private participation took place,¹⁶ but with a modest difference.** This was

¹⁵ “Concessions and Regulatory Design – Fifteen Years of Experience”, Jose Luis Guasch, World Bank, 2001

¹⁶ For the purposes of this analysis, Costa Rica, Ecuador, Paraguay, Uruguay were considered with less private sector participation for both the electricity and the telecommunications sectors. Colombia was also considered with

found analyzing the results obtained in terms of increased coverage, costs of services and the evolution of quality of infrastructure for electricity and basic telephony in 20 countries of LAC. For example, in the electricity sector, installed capacity between 1990 and 2000 grew at an annual rate of 5.4% in countries that have more private sector participation, but also grew fast in countries with less private sector participation such as Costa Rica or Uruguay, where the average annual growth rate for the same period was 4.9%. Likewise, in telecommunications, countries with more private sector participation grew at a 16.7% annual rate, while the rest also grew at a fast rate of 13.2%. It seems like countries made the required investments at about the same pace regardless of whether the operators of the services were private or public. The abundance of supplier credit in the electricity and telecommunications sectors, the two sectors that account for almost two thirds of private investment in infrastructure in the region, may have played an important role in helping both private and public enterprises keep pace with investments.

- 1.31 **The same preliminary analysis shows that unit costs to consumers grew much faster in privately operated utilities, than in their publicly owned counterparts.** In the telecommunications sector this has been particularly acute. Privately owned telephone utilities increased unit rates in basic telephony eight-fold over the period 1990 to 2000, while publicly owned telephone utilities doubled them over the same period. In electricity for retail consumers, a less acute, but a similar effect is observed, with private distributors more than doubling unit prices while public counterparts increased them by roughly sixty percent from 1990 to 2000.
- 1.32 **Price increases were however accompanied by an improvement in the quality of services and a large improvement in productivity per worker at the utility companies.** For example, privately managed telecommunications companies in the LAC region increased their productivity per worker almost 250% over the past decade. An increase that may have translated in reduced workforces, but certainly meant higher profits for the private operators being able to lower costs while unit prices were allowed to rise significantly. On the other hand, public operators productivity, increased less, but also at a very healthy pace. For example, public telecommunications operators like those in Uruguay or Costa Rica, increased their average productivity per worker by more than 150% over the past decade. This may be a reflection of pressures to “streamline or privatize”, the beneficial effects of technology, or a combination of both. Also this could reflect a self-selection bias, given that in countries that did not reform, like Costa Rica and Uruguay, utilities in public hands had comparatively a better track record in services to the public, and reforms faced strong opposition because the majority of the public was satisfied with them and suspicious of the alleged advantages brought by privatization.
- 1.33 **A recent study coordinated by the Research Department of the Bank shows high microeconomic benefits of privatization in several countries.** The former public sector owned utilities had increases in output after the privatization of 23% in Peru, 25% in Argentina and Chile, 38% in Colombia, 41% in Brazil and 53% in Mexico. Operational

less private sector participation only in the telecommunications sector. Haiti, Honduras, Jamaica, Mexico and Venezuela were included in the group of less private sector participation only in the electricity sector. The rest of the countries were considered with more private sector participation.

efficiency measured in terms of output per worker presented increases of 112% in Peru, 92% in Mexico, 88% in Chile, 46% in Argentina, 45% in Brazil and 20% in Colombia. The short run impact on employment was negative, as excess workers were eliminated from the payroll, but this effect has a tendency to disappear in the long run when indirect effects were taken into account. There were also huge increases in profits and in net tax collection by the Governments.

8. Increasing Public Dissatisfaction with “Reforms”

- 1.34 **There is all across Latin America an increasing disapproval of the privatization process, which in 2001 averaged 64% for the region and reached as high as 78% in Argentina and Colombia.** While the increase in the quality and quantity of services is to a great extent acknowledged by the public, the complaints focus mainly on the increases in tariffs, the lack of consumer protection, the dismissal of workers, the perception of excessive profits of private utilities and especially on the corruption that has accompanied the process. This popular opinion indicator point to the urgent need to improve the regulatory framework and its institutions and to increase transparency and openness in the transactions. They also indicate that there is a growing concern by citizens in LAC that calls for improved actions by the private companies, the government, the regulators and even the judicial system.
- 1.35 **The long-term sustainability of the infrastructure reform process requires a better recognition of its advantages by the population at large, a recognition that must be based in objective facts regarding the effects on tariffs, availability and quality of services. However, such basic information is not available region-wide in any systematic way.** Any effort to support the development and consolidation of that information would render a great deal of transparency, providing more legitimacy to the reforms by allowing access to the public and consumer organizations to that information, as well as incentives, providing policy makers and regulators with stronger basis to look for more efficiency and benchmarking in regulated utilities.
- 1.36 The situation has evolved dynamically and the hard facts of reality have started to emerge, decreasing popular support to reforms, forcing countries to reconsider the original regulatory design and search for appropriate adjustments. In summary, it appears like LAC countries rushed for the approval of a regulatory framework and invited private sector participation without a clear understanding of its full implications. There was not a clear definition of the national objectives, nor an understanding of the balance of maintaining a degree of comfort needed to attract private investors in the long run and at the same time providing satisfaction to the public with the results of this reforms, where the reforms were only a mean to an end of better services providing more access and affordability.

9. Regional Integration Initiatives

- 1.37 **The launching of regional initiatives and the advance of the integration processes in the region created new challenges for the implementation of the infrastructure reform process. It becomes necessary to develop a regional planning capacity and to**

harmonize national regulatory policies and frameworks. So far, reform has been mostly tackled at a national or local level. However, significant synergies could be achieved by extending facilitating the integration political boundaries. This has already been started in the energy sector, with cross border electricity and gas connections, but even there, significant voids exists in the legal, financial and regulatory aspects facing these multinationals projects. For instance, the Mesoamerican Initiative for Energy Interconnection already anticipates the establishment of a regional regulatory agency for the involved countries and a network operational manager, but these issues has not been analyzed in other areas or projects.

- 1.38 Two recent regional proposals have focused interest in the development of infrastructure links across countries of the region. They are the Regional Infrastructure Integration of South America (IIRSA) initiative and the Puebla - Panama Plan (PPP). The IIRSA initiative was launched at a Summit of all South American Presidents held in September, 2000 in Brasilia, where an “Action Plan for the Integration of South American Infrastructure” was adopted. The PPP initiative was launched at a Summit of Mesoamerican Presidents in June 2001 in El Salvador. Both initiatives are receiving technical and financial support from the IDB, as well as from other multilateral financial institutions, such as the Andean Development Corporation (CAF), Financial Fund for the Development of the River Plate Basin (FONPLATA) and the Central American Bank for Economic Integration (BCIE).

II. MIF STRATEGY IN SUPPORT OF PRIVATE PARTICIPATION IN INFRASTRUCTURE

2.1 This chapter reviews the evolution of the MIF strategy in support of private participation in infrastructure. As per the MIF Establishing Agreement, MIF strategy is supposed to support country priorities and be congruent with the IDB Group strategies, policies and programs. Therefore all relevant documents from the members of the Bank Group were analyzed. Special emphasis was placed on determining the consistency among several strategic documents, such as Operational Policies of the IDB, the Agreements establishing the MIF and the PRI, the Perry Report of 1996, the MIF Working Group Report of 2000, Country Papers and various strategy and budget documents. A more comprehensive version of this analysis is included in Annex II.

A. The IDB Group Strategy and Policies

2.2 **The infrastructure sector has always been considered by the IDB as a fundamental element for the economic and social development of the region. In fact, the first loan approved by the IDB in 1961 was destined to the infrastructure sector. Between that date and December 2002 the Bank Group has provided about US\$39,796 million in loans for energy, transportation, communications and water and sanitation, which represents 33.7% of its total lending activity in the period.** The Bank's Economic and Social Progress Report for 2001 states that "infrastructure is an essential determinant of productivity and growth, since it helps in the reduction of transport costs, expands markets and facilitates the transmission of information and knowledge".

2.3 **IDB funding for the infrastructure sector in the last twelve years amounted to US\$18,652 million. MIF funding played an important role as a source of technical cooperation funding 51% of all the independent technical cooperations approved by the Bank Group in this area of infrastructure since 1994.** Although this meant a strong commitment to the infrastructure sector on the part of the Bank Group that managed to almost double its historical funding for the sector over the last twelve years, the participation of this sector was reduced to 25%. As expected, the majority of the funding corresponded to Public Sector Loans, which amounted to 86% of the total funding. Private Sector Loans resulted lower than initially expected, hovering around 30% of the Bank Group annual approvals for the infrastructure sector..

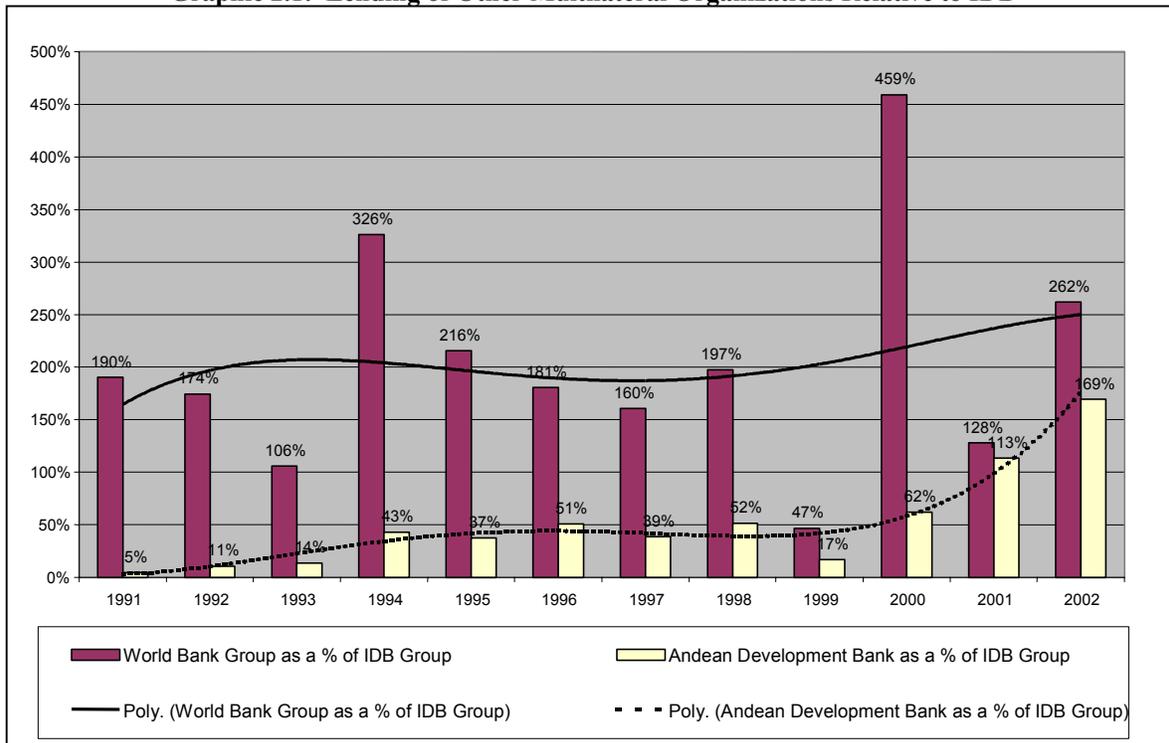
Table 2.1: IDB Group Lending and Technical Assistance for Infrastructure (US \$ million)

Years	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	TOTAL
Public Sector Loans	1493	2027	2631	1304	1452	1365	1801	1438	937	502	748	373	16070
Technical Coop.	22	8	4	9	5	11	10	12	8	10	6	7	113
PRI Loans	-	-	-	-	123	167	181	193	590	507	274	311	2346
IIC Loans/Equity	-	-	6	3	-	1	10	10	-	-	-	9	39
MIF Operations	-	-	-	8	10	9	8	19	11	9	4	5	84
Infrastr. as % of IDB	28%	34%	45%	25%	22%	23%	34%	16%	16%	19%	13%	15%	25%
TOTAL	1515	2035	2641	1324	1590	1553	2010	1672	1546	1028	1032	705	18652

2.4 **Despite the initial fast pace, overall infrastructure funding by the IDB reached a peak in 1993, and started a declining trend since then.** The decrease in public sector loans could not be compensated by funding to the private sector, as it was expected after the establishment of the IIC in 1989 and the PRI in 1995. Funds approved in 2002 are only about 27% of those approved in 1993. In contrast, the LAC region needs even higher infrastructure investments by both the public and it is worrisome that the funding provided by the IDB had decreased. According to the estimates presented in that Chapter 1, a commitment level of US\$2.0 billion per year would only represent about 3% of the regional requirements for new investments and the maintenance of the existing stock. A low level, that is unlikely to help restart the investment cycle in infrastructure.

2.5 **In contrast, other multilateral organizations seemed to have maintained a high level of direct lending to the LAC infrastructure sector over the 1990s.** For instance, the World Bank Group, an organization whose area of activity extends not only to the LAC region, has maintained twice the level of investment in LAC infrastructure than the IDB Group, that only focuses on LAC. Similarly, the Andean Development Corporation, a subregional organization, has steadily increased its investment in infrastructure from only 5% of IDB group approvals in 1991 to an amount equivalent to 62% of IDB Group approvals for infrastructure in 2000. In 2001 and 2002, the Andean Development Corporation clearly overtook the IDB Group in the infrastructure sector with 113% and 169% of IDB approval amounts respectively. Most of this lending was directed to the public sector. For example, the IFC averaged less than 5% of the World Bank approvals.

Graphic 2.1: Lending of Other Multilateral Organizations Relative to IDB



- 2.6 In order to guide the actions of the IDB Group in infrastructure, management prepared a strategy document entitled “Fostering Infrastructure Development in Latin America and the Caribbean”. The Board of Directors formally considered this document on August 30, 1995 (GN-1884-1). The document recommends that infrastructure continue to be one of the main components of IDB activities and indicates that – within the context of improved efficiency in supply and support for the long run sustainability of services - loans, grants and technical assistance should focus on one or more of the following objectives: (i) Expansion of infrastructure coverage; (ii) Improved quality of service and (iii) Achievement of social and national objectives.
- 2.7 **Given the changed economic and political environment of the region, the strategy document recommends that Bank’s technical assistance and MIF projects “help in the design and implementation of new regulatory regimes, of sector strategies to increase private sector participation and of improvements in public investment management at the national and local levels”.** It also highlights the “importance of supporting the development of domestic financial markets in order to expand the types of funding available to private infrastructure projects”. In this sense, it recommends that the IDB Group examine a variety of new financing techniques, such as local infrastructure funds, bond insurance, securitization and leasing, as well as political risk insurance and reinsurance. Finally, the document recommends that “the Bank takes a leading role in creating the enabling environment for market-based solutions in infrastructure and be a focal point on best practices to improve infrastructure services in the region”. This last responsibility has been entrusted primarily to the Infrastructure and Financial Markets Division of the Sustainable Development Department (SDS/IFM).
- 2.8 **On August 15, 1995 the Board of Directors approved the Public Utilities Policy (GN-1869-3), which applies to both public and private operations in electricity, natural gas, water supply, waste water disposal, telecommunications and refuse collection.** This policy (OP-708) establishes the following objectives for the Bank’s interventions: (i) Ensure long-term sustainability of the services; (ii) Achieve economic efficiency; (iii) Safeguard quality; (iv) Promote accessibility and (v) Meet wider national objectives, in particular the protection of the environment.
- 2.9 **The document states that the single most important contribution to the joint achievement of objectives is “to separate the roles of policy formulator, regulator and entrepreneur”.** The public sector authorities have a direct responsibility for policy formulation, while a separate autonomous public sector body should implement the regulatory regime. The service provider can be either a public or private utility, but should have a purely entrepreneurial role - which means that corporate decisions should be taken on a purely commercial basis within the limits of an adequate regulatory framework.

- 2.10 **The Public Utilities Policy is complemented by several sector policies, namely those for energy, electric energy, telecommunications, transportation and sanitation. Some of these policies have become outdated and do not address current issues.** In 1999, the Board of Directors started a comprehensive process to review all sector strategies, policies and guidelines, agreeing to a timetable in October 2001 (GN-2077-13 Rev.). According to such timetable, by the end of 2003 the Bank Group would have available an updated Infrastructure Development Strategy that would replace outdated policies such as those of telecommunications, transportation and maintenance. In turn, the Public Utilities Policy have been recently complemented by specific Guidelines related to Basic Sanitation (CP-2592), incorporating particular aspects of this area and addressing many of the issues raised by OVE in the evaluation of the policy regarding the sector (RE-270).
- 2.11 In late 1997, the Board approved the Operational Guidelines for Private Sector Infrastructure Lending without Government Guarantees. The document details the objectives, instruments and criteria for eligibility of countries and projects, establishes sector priorities and describes the approval processes to be followed. This document has been very effective in consolidating and streamlining the processing of private sector infrastructure operations.

B. The MIF Strategic Approach to Infrastructure Reform

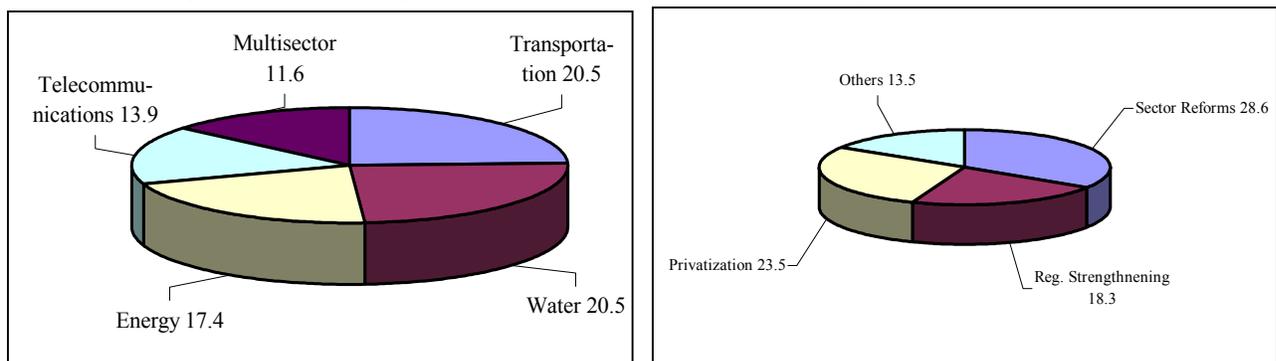
- 2.12 With respect to the infrastructure reform process, the Establishing Agreement states that the MIF can finance: (i) diagnostic studies to identify existing constraints to private investment; (ii) preparation of national plans to reform policies and the legal environment; (iii) advisory services to implement the proposed reforms; (iv) design and implementation of privatization programs; (v) training of the workers that are displaced as a consequence of the reforms and/or the privatization process; (vi) training of personnel of regulatory institutions and others that are necessary for the adequate functioning of market mechanisms. In simpler words, there are no limitations in the assistance that the MIF could provide for infrastructure reform. However, MIF assistance must be consistent with the policies, strategy and programs of the IDB Group.
- 2.13 **The MIF strategy to encourage the growth of the private sector has undergone numerous refinements since the inception of the institution. The “Perry Report of 1996” (MIF/GN-41 Rev.) noted that the MIF mandate was too wide and insufficiently focused** and proposed particular areas where it should concentrate its activities. It specifically established as a priority area “the development of a legal, regulatory, contractual and supervisory environment that promotes private investment in infrastructure and in public services (transport, energy, telecommunications, potable water and sanitation)”, together with the development of local capital markets to finance infrastructure projects. It also recommended the establishment of “special activity lines” with pre-determined funding amounts. Among these activity lines it suggested the support for the

- preparation of bidding documents and contracts for infrastructure concessions to the private sector.
- 2.14 **The document “MIF Strategies, Priorities and Principal Operations Guidelines for 1997 and 1998” (MIF/GN-41-7) adopted some of the recommendations of the Perry Report, but changed the emphasis and thrust of others.** In particular it expanded the regulatory and supervisory activities to be supported by MIF to all financial markets, while maintaining the emphasis on private participation in infrastructure.
- 2.15 **The Working Group on MIF Strategy issued its report on July 28, 2000 (MIF/GN-56) proposed the implementation of project clusters and stressed the importance of some key attributes of MIF interventions. While an analysis of the implementation of the idea of project clusters is outside the scope of this study, it is surprising that given the importance of the regulatory activities in infrastructure, they have not been incorporated into a cluster.** The general conclusion was that MIF had played an important role in the development of the private sector in the region and that this type of assistance was “now needed more than ever” keeping central characteristics of innovation, sustainability, demonstration effect, partnership and additionality, but concentrating around certain basic activities. The way to concentrate them was through a group of related projects jointly formulated (Clusters), supported and reviewed, in agreement with a general strategy approved by the Donors Committee. Each Cluster was conceived to be supported by a technical expert that would regularly visit the executing agencies to facilitate execution and promote the exchange of experiences.
- 2.16 **MIF has also introduced the concept of “lines of activity”, whereby donors approve an umbrella program under which a series of similar small project could be approved with abbreviated procedures (“fast track”).** So far, in the infrastructure area, lines of activity have been approved for: (i) microfinance institutional strengthening; (ii) preparation of concessions; (iii) airport security and (iv) infrastructure development in C and D countries.
- 2.17 **The first line of activity for the preparation of bidding documents for concessions was approved in August 1997, with funding to be provided by MIF limited to US\$300,000 per operation.** Concessions are defined in broad terms and include operating agreements, management contracts, leasing contracts and Buy Operate and Transfer (BOT) contracts. Funding is also available for the contracting of professional consultants for the negotiation or re-negotiation of the agreements. The line of activity to consolidate sector reform and strengthen the regulatory framework and institutions in C and D countries was approved in October 2001, with a limit of US\$500,000 per operation. As will be seen latter, both lines have been little used, with only four operations credited to the first one and three to the second one.

2.18 The line of activity for airport security was approved on November 2001 to provide support for the implementation of the new regulations adopted by the International Organization for Civil Aviation, modify and adapt the regulatory framework for civil aviation and strengthen administrative services and training. Up to the end of 2002 there are nine operations approved, which have benefited Nicaragua, Guatemala, Jamaica, Suriname, Trinidad and Tobago, Uruguay, Honduras and El Salvador.

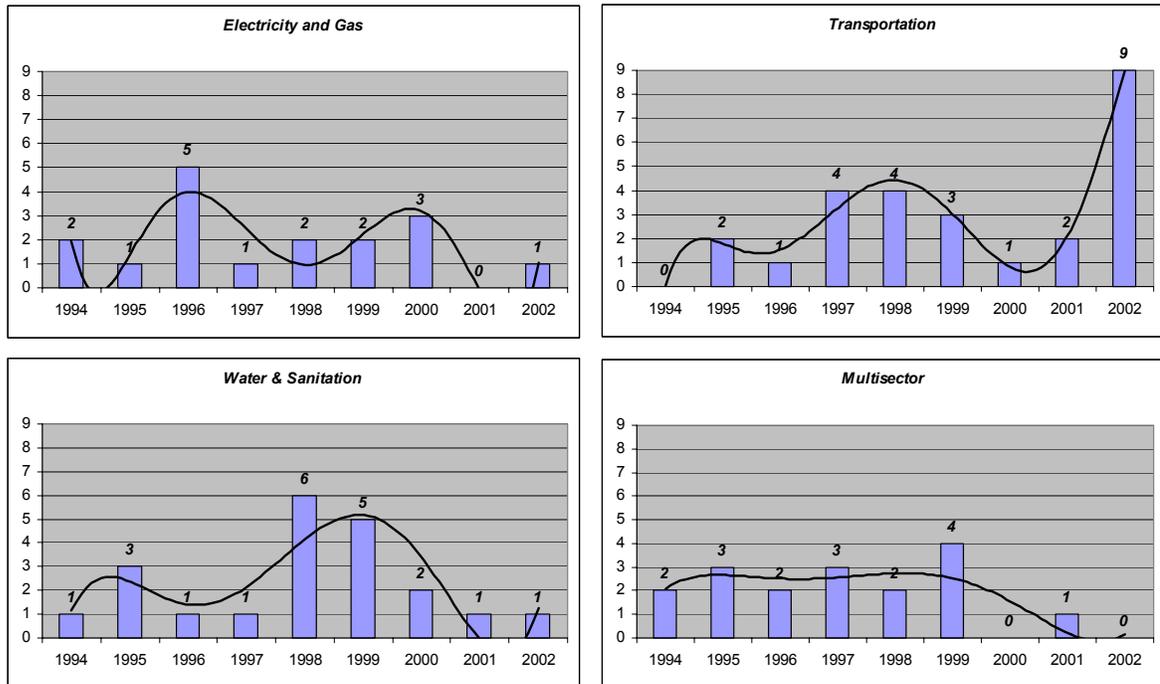
2.19 **Through the end of 2002 the MIF has approved 86 operations in 23 countries to support private participation in infrastructure, for a total of US\$ 83.9 million. This amount represents slightly over ten percent of the total resources committed by MIF through that date.** Classified by sector the distribution of the approvals was: 26 operations in the transportation sector for US\$20.5 million, 21 in water and sanitation for US\$20.5 million, 17 in energy for US\$17.4 million, 5 in telecommunications for US\$13.9 million and 17 were classified as multisector projects for US\$11.6 million. One project directly related to the protection of consumers of public utilities was included among multisector operations, leaving all other MIF consumer protection and competition promotion projects outside the scope of this group, as they will be the subject of a specific evaluation. Classified by their key objectives: 26 operations were basic Sector Reforms to initiate an environment for private participation (US\$28,6 million), 19 for regulatory strengthening (US\$18,3 million), 26 for specific Privatization or Concession transactions (US\$23,5 million), and 15 for Others, i.e. Regional Training (US\$13,5 million).

Graphic 2.2: MIF PPI projects by Sector and by Functional Objective (US\$ Million)



2.20 **The sequence of introduction of these projects over time shows that electricity and multisector projects led the way in 1994. Soon after, in 1995 water & sanitation and transportation projects started to be developed in a repetitive manner. Telecommunications projects only start in 1996, but approvals never exceeded one project per year. Multisector projects were approved at an average pace of two per year since 1994 and later were virtually abandoned after 1999. All sectors seem to have experienced a second wave of projects around 1997 to 1999.**

Graphic 2.3: MIF Approvals by year – selected sectors



2.21 **Out of the 86 operations approved by the MIF to support private participation in infrastructure, 14% of the operations (12) were cancelled before they could start execution, the highest rate of all MIF groups evaluated.** Another 38 operations have been fully disbursed and 3 are still in execution, but have disbursed more than 75% of the resources assigned by the MIF. Other 12 operations are in the middle of execution, with disbursement levels between 25 and 75%. Finally, 21 operations are in a very early stage, with disbursement levels lower than 25%.

2.22 **Among the transportation projects, there are 26 projects for a total of US\$20.5 million that supported the legal and regulatory framework for the concession of highways, as well as supporting some specific transactions.** The other major component in the transportation sector is related to airports, which has 12 projects for a total of US\$7.99 million. This sub-sector includes the support for the concession of two airports (Barbados and Jamaica), a regional project for Central American aviation, as well as 9 projects to improve airport security under the line of activity mentioned above. There are also three projects for private sector participation in ports (Barbados, Belize and Nicaragua) and three projects to restructure and prepare concessions for urban mass transport in Chile, Panama and El Salvador.

2.23 **The projects in water and sanitation have also supported the granting of specific concessions, but also included the restructuring of the sector and support for regulatory reforms and institutions.** In this sector, the MIF has started to work directly with some provincial and local governments (Santa Fe

- and Mendoza in Argentina and the cities of Bucaramanga and Goias in Colombia and Brazil respectively). The decentralization process in the sector and the increasing importance of local governments in providing infrastructure services has opened new venues of potential activity.
- 2.24 **In the energy sector, the great majority of MIF operations have supported the restructuring of the electric sector and the strengthening of its regulatory institutions.** There were only two projects directly related to the gas sector: the regulatory framework for natural gas in Mexico and the concession of a gas pipeline in Uruguay. Only the latter one was finally executed. There is also a regional project for the harmonization of petroleum markets in Central America and one for renewable energy in Peru that also had to be canceled before it began execution.
- 2.25 **Three telecommunications projects have supported the restructuring of the sector and the expansion of competition of the sector (two in Trinidad and Tobago and one in Guyana), while a fourth one has focused on the design and implementation of the regulatory framework (Uruguay).** The classification multisector involves reforms and the creation of regulatory institutions that are applicable in several sub-sectors, as well as the creation of a university training network and support for consumer protection (Brazil).
- 2.26 **Between 1994 and 1999 the average level of MIF approvals to support private participation in infrastructure was US\$10.9 per year. Approvals decreased significantly after 1999, being US\$3.9 million in 2001 and US\$5.3 million in 2002.** MIF activities supported different objectives, such as sector reform, regulatory strengthening and support for specific privatization or concessions. Support for sector reforms accounted for 34% of MIF funding, while support for specific privatizations and concessions was 28% and regulatory strengthening 22%. It is interesting to note that although there are 26 projects that directly support privatizations and concessions, only four have been processed through the special line of activity.
- 2.27 **Three quarters of the MIF projects in this group benefited C & D countries and 60% in terms out of the total resources provided to support private sector participation in infrastructure.** On the other hand, regional operations, accounted for less than ten percent of the funding and only three operations. It seems like the complexities involved in the approval and execution of regional projects, have prevented greater utilization of them, despite the economies of scale that could have been achieved by sharing some of the elements developed through MIF projects on a regional basis.
- 2.28 **The sequencing of MIF interventions vis a vis those of the rest of the Bank Group follow a discernable pattern. The MIF led the way in electricity and multisector projects, advancing the bulk of its approvals with respect to the rest of the Bank Group by about two years for electricity and one year for multisector projects. In contrast, MIF trailed the rest of the Bank Group in**

sectors such as transportation and water & sanitation, where MIF has approved the bulk of its projects about 18 months later than the rest of the Bank Group in the transportation area and 6 months later in the Water & sanitation sector. By country, we also observed a similar pattern, with MIF leading the way by an average of 18 months in roughly 50% of the countries and trailing the rest of the Bank Group by approximately 2 years in the other half of the countries. MIF led the charge in countries like Bolivia, Costa Rica or Jamaica, while trailing in countries like Mexico, Peru, Trinidad & Tobago, Venezuela y Uruguay.

- 2.29 **MIF has been one of the leading sources of technical assistance grants in the infrastructure sector, although recent initiatives by other donors are increasing the funding for the sector, proving the existence of a strong demand and pointing to potential areas of future MIF work.** For example, the Public Private Infrastructure Advisory Facility (PPIAF) launched in July 1999 is a multi-donor technical assistance facility—initiated jointly by the governments of Japan and the UK, working closely with the World Bank Group. PPIAF accepts proposals on a quarterly basis, attracted over 50 requests for assistance since its start. Requests of \$75,000 and below, however, are considered on a rolling basis. For activities already approved, funding averaged about \$220,000; the largest commitments have been around \$450,000, but activities as small as \$30,000 are also being funded. Currently, financing for the facility is in the range of \$18-\$20 million a year. One of the flagship products funded by PPIAF is the country framework report (CFR) for private infrastructure. These reports, which involve extensive consultations with a range of stakeholders, are intended to be a one-stop source of information on a country's sectoral plans in key infrastructure areas, its policy and regulatory framework, and the barriers and opportunities for private participation. They are also intended to set out a forward-looking agenda for the promotion of private participation in infrastructure.

III. EVALUATION OF PROJECTS TO SUPPORT PRIVATE PARTICIPATION IN INFRASTRUCTURE

- 3.1 **This chapter summarizes the results of an in-depth evaluation of 86 MIF projects to support private participation in infrastructure following the methodology developed by OVE** in 2002 for the MIF evaluation (Annex II). The list includes completed projects and those currently in execution, between the years 1993 to the end of 2002. The evaluation comprised visits by the evaluating team to 36 executing agencies in charge of those projects. It also incorporated the results of a survey sent to all MIF executing agencies and the completed responses on approximately 68%.
- 3.2 In addition, the evaluation is supported by in-depth Case Studies of 19 of the projects and standardized Project Briefs of the remaining 67 projects. The Case Studies and Project Briefs were prepared by interviewing executing agencies, project beneficiaries, IDB specialists, strategic partners and other relevant parties.
- 3.3 Bank Group documentation such as Country Papers, project documents, mid-term and final evaluations, project completion reports (PCRs) and Project Performance Monitoring Reports (PPMRs) were also analyzed. Supporting written information was also gathered from governmental and privates sources in the countries where the projects took place. The MIF project files maintained in Country Offices were a particularly rich source of information. These included feasibility or sector studies (when they existed), project design documents, consultant terms of reference, plans of action, PPMRs, official Bank documents for time extensions, transfers of budget resources between categories and official Bank correspondence.
- A. Relevance**
- 3.4 **According to data gathered from evaluations of individual projects, most projects in this area of private participation in infrastructure were well grounded on knowledge of the initial situation,** perhaps due to the close working relationship that MIF has established with the Bank during the design of the projects. The evidence indicates that almost 90% of the projects were guided by diagnostic or sector studies.
- 3.5 **A clear majority of projects in support of private participation in infrastructure seem to have been in accord with country strategies, Bank strategy and industry needs.** Less than 5% of the projects were regarded as non-relevant to the context of the country, the context of the private sector or the context of the infrastructure sector or sectors the projects were addressing. However, with few exceptions, project documents did not provide evidence of the country's strategy as laid out in Country Papers and why MIF would be better suited to fulfill those objectives.

Box 3.1: The Water Sector Reform in Argentina – A Concerted Effort of the Bank Group

Argentina led the way in efforts to privatize water and sanitation services. In 1991, it set the process in motion with the award of a concession for services in Corrientes, followed in 1993 by the privatization of services in Greater Buenos Aires, the country's largest metropolitan area, and the world's largest privatization of water and sanitation services at the time. Subsequent privatizations took place in Santa Fe and Tucumán in 1995, Formosa in 1996, Santiago del Estero and Cordoba in 1997, and Buenos Aires province in 1999.

Since its inception, the MIF has been strongly committed to water and sanitation reform in Argentina. The Bank had been providing support for the sector since the 1960s, with the result that some MIF operations were carried out in close cooperation with the Bank.

By 1993, the Argentine government had consolidated the legal and regulatory framework for water and sewer service in metropolitan Buenos Aires, had established a regulatory agency, and awarded a concession for service to a private consortium (Aguas Argentinas), headed by Lyonnaise des Eaux-Dumez, which started up in November 1993. Given the importance of provincial participation in water and sewer service delivery in Argentina, IDB loans 621/OC-AR and 855/SF-AR, which were cofinanced with the World Bank, helped fund a global credit program for provincial and municipal water and sanitation service.

To further this effort, the MIF approved two operations: a water sector reform program (MIF ATN/MT4742-AR) and a program to private water service and establish a regulatory agency in Mendoza (ATC/MT4743-AR) to help capitalize Obras Sanitarias de Mendoza (OSM), the country's largest provincial water service operator, to strengthen Ente Provincial de Agua y Saneamiento (EPAS), and to promote the development of the country's more than 150 small municipal and local operators. At the outset, water service coverage was approximately 72% (with 55% provided by OSM) but sewer service coverage was only 37% (with 33% provided by OSM).

The sale of OSM SA was a resounding success: 8 sets of bidding conditions were sold, 5 consortiums submitted bids, and 4 qualified. The bidders included international concerns such as Grupo Alfa (headed by Aguas de Barcelona and Suez Lyonnaise des Eaux), the Enersis Group, the Saur Group, and Enron. Ultimately, the concession for the technical operation was awarded to a group led by Saur International together with Enron, Italgas and Inversora Mendoza SA (local investors), as was the public share offering to capitalize the OSM SA joint venture. Under the concession, water service coverage expanded from 72% to 81%. At the same time, sewer service coverage continued to hover around 37%. Under the project, the EPAS was strengthened to the extent that it could handle the bidding successfully. However, it was unable to prevent a gradual deterioration in its capacity. EPAS began operating with a highly qualified staff of 25 professionals whose task was to design and implement a regulatory framework for the sector. Upon completion of the project, however, its professional staff was lured away by more attractive salaries in the private sector, and were replaced with almost twice as many professionals who were less qualified but well-connected politically.

In 1997, the MIF approved a technical cooperation program to strengthen the Santa Fe Province Sewer Service Regulatory Agency (Ente Regulador de Servicios Sanitarios de la Provincia de Santa Fe) (ENRESS) (MIF ATN/MT5613-AR). One unusual feature of this program is that it was approved nearly 24 months after a concession for service had been awarded for most of the province. In December 1995, a private consortium headed by Lyonnaise des Eaux took over Aguas de Santa Fe's operations and 90% of its equity. The utility company provides water and sewer service in the province's 15 most densely populated municipalities, home to over 70% of the population. The employees retained control of the remaining 10% of the share capital. In 1996, the Bank's Private Sector Department designed its first water and sanitation service operation, with funding of US\$30 million from Window A and US\$55 million from Window B (AR-0211). At the request of the PRI and given the perceived weakness in the provincial regulatory agency, the MIF was approached for support for this program.

The project seeks to improve the risk profile of Empresa Aguas Provinciales de Santa Fe, through an amended regulatory framework that could lower the cost of its investment plan, by allowing the Bank to participate in the financing, and to demonstrate that the private sector could develop water and sanitation services with private financing. In addition, an effort was made to strengthen the regulatory agency sufficiently so that it could be responsible for improving the quality of service in areas not put out to concession, in 250 smaller communities where some 30% of the population resides.

Although ENRESS was not sufficiently strengthened in the process, the concessionaire continued to implement its investment plan and made significant improvements in service and quality coverage. In fact, the concession was awarded in August 1995 and 5 years later, in March 2000, the MIF project had not yet started up owing to delays in the Legislature. However, the concessionaire was able to make significant headway. Since 1995, water service coverage has broadened considerably from 70% to 95% and sewer service from 40% to 63%. Since 1995, raw water production has increased by 80% in Santa Fe and 45% in Rosario, putting an end to chronic supply problems. When the concession was awarded, the parameters for chlorine treatment, bacterial count, and turbidity were 63%, 94%, and 95%, respectively. Today these figures approach 100% in accordance with the targets set in the concession bid, all of this under a severely weakened regulatory framework, as ENRESS was experiencing changes in management as a result of a new government administration and a chronic lack of resources.

It seems, however, that in the future ENRESS may be called upon to play a more important role in consumer protection. Since the devaluation of the peso in December 2001, the concessionaire has raised rates between 40% and 50%, a move that has led civil society organizations, business associations, neighborhood associations, and environmental groups to set up the Provincial Water Rights Board which convened to call a non-binding referendum in which more than 250,000 persons apparently expressed opposition to the concession. As a result, the province's executive branch set up a negotiating committee in August 2002. The members of the committee were the Ministry of Public Works (MOP), the Legislative Assembly, and ENRESS. The Committee suspended the targets set by the concessionaire, established a user assistance fund to help low-income users and the concessionaire undertook to suspend all legal action against accounts in arrears and to keep rates unchanged. This emergency arrangement which was originally supposed to last only 120 days, continues in effect to this day, an indication of the important role that ENRESS could play in resolving this situation

3.6 There is a clear predominance of C and D countries among beneficiaries of this group where MIF resources play a key contribution in obtaining access to key technical consultants. Almost three quarters of the projects, 61 out of a total of 86 projects, benefited C and D countries, representing almost two thirds of the total funding approved in this area. The following Box describes one of these projects.

3.7 The relevance of MIF activities is closely related to its flexibility and to its capacity to act in a rapid manner. The privatization process must take advantage of the “windows of opportunity” that appear in a certain country at certain moments. If the reaction is delayed and too much time is spend in processing the request and meeting conditions for disbursement, the opportunity is lost and the MIF contribution becomes irrelevant. A specific case were this occurred was in the concession of the Caracas–La Guaira Highway in Venezuela, were delays in the approval process caused the MIF project to be approved after the concession had been made and was therefore canceled. Should the project have been approved sooner it could have likely prevented many flaws in the concession process, that affected not only this transaction, but the overall credibility of the private participation process in the country. On the contrary, a MIF intervention displayed good flexibility in Jamaica as it promptly switched gears from the electricity to the telecommunications market.

B. Effectiveness

3.8 Overall effectiveness of the projects to support private participation in infrastructure was fairly low, but mostly because the goals were too

ambitious and generic. Effectiveness measures the extent to which stated project goals were actually achieved. It does not, however, assess the appropriateness or ambitiousness of the goals, a dimension that falls within relevance. In general the defined goals did not establish clear objectives in terms of population to be served by the private sector, expansion and quality of services, levels of private investment or performance of regulatory institutions. Even in cases where support was provided for specific privatizations/concessions, the goals were often not defined in terms of final results but only in terms of intermediate products, e.g., preparation of bidding documents.

- 3.9 **The evaluation has found that MIF projects whose objective was “sector reform” were executed in countries and sectors where such reform effectively materialized in slightly less than 50% of the cases. MIF projects whose objective was “privatization or concession” also experienced an achievement rate of 50%, meaning that transactions occurred only in 50% of the projects. Finally, MIF projects geared towards strengthening “regulation” seemed to have faced more difficult odds, as appropriate regulation and institutional framework for its execution materialized in less than 20% of the cases, demonstrating the long way to go in this critical area.**
- 3.10 **In terms of sectors, Water and Sanitation projects ranked the lowest in terms of effectiveness, perhaps as a reflection of the difficulties faced in a very sensitive area for private sector participation and a resistance in the application of programs perceived as part of the “reform model”.** Projects that ensure political support, an appropriate management of risks and allowed for flexibility in the approach utilized were relatively more successful. Multiservice projects, dealing with several major sectors at the same time, also ranked low. In many instances the reform of only one of the sectors included in the projects could advance. This created a lack of focus that dispersed resources away from promising reforms and delayed execution of project components. More recently, too widely defined project objectives in terms of sectors, had been gradually abandoned by the MIF as a valid approach.
- 3.11 **Transportation and Energy and Gas projects were relatively more effective.** Relatively less established areas of action, such as Consumer Participation or Contract Negotiations among others, rank surprisingly high overall. The success of MIF in these new areas highlights the potential for MIF to continue making inroads into the area of private participation in infrastructure. However, the process by which these programs were conceived is not established, as MIF seems yet to lack a standardized process to bring these new products to market.
- 3.12 **A key element for effectiveness is a clear definition of the issues to be resolved and of the expected results. It was found that executing agencies that took a leading role in defining these issues and results (more ownership) obtained better results.** When issues were not well defined or were identified mainly by the Bank or outside experts not working directly within the beneficiary institution, the results were almost always less than satisfactory. A good example

of a well-defined program is the Project to Strengthen the Water Regulatory Entity in Chile. The agency had been operating for some time but wanted to improve its performance to face its new responsibilities related to the privatization process. They approached the MIF with a very specific Action Plan that was refined in the dialogue with Bank's experts, leading to a very effective program.

- 3.13 **The detailed analysis of projects indicates that effective MIF projects in the area of infrastructure share a set of characteristics. They tend to have a thorough identification of risks. Usually these are projects where it is common knowledge that risks will be high, but the MIF Donors Committee has decided they are worth pursuing anyway, due to the combination of expected rewards and urgent need.** Moreover, highly effective projects usually have built into the program risk mitigating actions. In fact, the most successful projects, such as the Mass Transport Program in Panama, are built completely around risk mitigation, therefore all their actions are directed towards mitigating resistance from bus operators, the public and potential investors. Finally, highly effective projects tended to experience significant changes during implementation. However, these changes contributed to increasing the effectiveness of the programs, as was the case in the Program for the Water and Sanitation Sector in Mendoza where the initial goal of separating the technical operator from the financial investors was abandoned midway, but effectiveness was increased.
- 3.14 **From the detailed analysis of projects, a number of issues affecting project effectiveness seem to be recurring.** Lack of political support tops the list, having been a negative factor dampening project effectiveness in almost one third of the cases. The second and third issues affecting effectiveness were sector specific issues and consumer opposition that played a role in about one fifth of the cases. Executing agency specific issues were the issue most significantly affecting performance in another one fifth of the cases.
- 3.15 **The MIF projects in support of private participation in infrastructure display an unusual incidence of project cancellations. Early cancellations cast a doubt on the project identification process, although they may have been an effective way for MIF to rescue resources in areas where its utilization would have been sub-optimal.** Out of 86 projects approved since the start of the MIF until the end of 2002, twelve projects were cancelled before they could even start, bringing the cancellation rate to almost 14%, one of the highest of among all areas of activity of the MIF. This is equivalent to one project cancelled before it even started execution, out of every seven projects approved. The reasons behind cancellations vary, however there are some emerging common themes. The top cause for cancellations is the change in political support, resulting in reversals of decisions to involve private sector participation. In contrast, cancellations can also stem from decisions to speed up the private participation process by means of single source contracting or non-competitive awarding processes. Unwillingness to submit to the conditions imposed by the project and administrative delays have

also been a cause for cancellations, as alternative sources of funding which carried fewer restrictions substituted MIF funds.

- 3.16 **It was found that the projects in this group were able to adapt to the changing needs of clients, external events and to required changes in the original project design in more than 80% of the cases.** It was not unusual for executing agency priorities to change or for a severe financial crisis to occur that required the project design to adapt to the new circumstances. The evidence indicates that as executing agency priorities changed during the course of project execution, activities were altered and the project continued disbursing.
- 3.17 **The comparatively high ability of the projects in this group to adapt to changing circumstances was due, in part, to a great commitment with results on the part of the Bank Group, which resulted in a great deal of flexibility.** According to evidence derived from country office documents, mid-term evaluations and PPMRs, more than three quarters of the projects enjoyed a high flexibility on the part of the Bank Group when circumstances changed during execution.
- 3.18 **This relatively liberal policy regarding changes, although has been a great boost on project effectiveness, has led to a certain inability to establish and track specific goals.** Changes were usually allowed without a need to reflect them in the Bank Group monitoring system, as both old and new goals would fit the generic description of goals initially stated in the project documents. This has led to an inability to track results and establish the real issues affecting effectiveness, as difficulties are not adequately highlighted and communicated, such that they become a learning to be incorporated in future projects.
- 3.19 **About 20% of projects within this group were approved under one of the three lines of activity the MIF has established in the area of infrastructure. Except for the Aviation Safety Line of Activity, all other lines of activities have experienced a low utilization due to a higher than expected requirements for project approval.** It is true that most of the projects under the Airport Security Line of Activity are too recent to draw definite conclusions. However, early indications show that effectiveness of projects within a line of activity seems to depend strongly on how well adapted the design has been to the circumstances and the type of specialized technical monitoring received. For instance, in aviation, lack of technical support for project monitoring was observed by some executing agencies that had previously been encouraged by the leading technical role that the MIF had at the start of the operation. The projects in the privatization and concession lines of activity were much narrower and due to the mandate of the line, some limitations were imposed on the size and type of countries, e.g., less than \$300,000 or C&D countries, which made it difficult to apply them beyond municipal level issues.

Box 3.2: Solid Waste Management – Privatization and the Environment

Metropolitan San Salvador accounts for nearly 44% of national GDP, with a population density of 3,550 inhabitants/km² and a population of just under 2 millions. This small enclave covering only 4% of the country's land area is the heart of much of the country's political, economic, and social life and a source of worsening environmental degradation and pollution caused by rapid population growth and weak central and local government institutions. It is precisely in the metropolitan area's poorest neighborhoods that pollution is most evident, where 37% of the population is estimated to be poor and living in areas highly vulnerable to earthquakes, flooding, and hurricanes.

The amount of solid waste produced in the Greater San Salvador urban area has increased substantially. In the metropolitan area as a whole, nearly 1,200 tons of garbage is produced daily and collected by the municipalities. Municipal solid waste collection and management capacity is poor, with the result that waste is discharged in gullies and small watersheds in the municipalities, thus adding to the pollution, unsanitary conditions, and environmental degradation. In many municipalities, up to 25% of homes lack garbage collection service and waste is burnt, thrown into gullies, or buried.

The Municipality of San Salvador (AMSS) had been carrying out a municipal development program (ES0118) with the Bank. In 1997/1998 it was compelled to seek an emergency solution to the imminent closure of the only dump in the metropolitan region. After quick consultations with international contacts, it decided that a 20-year BOT (build, operate, transfer) concession for the construction and operation of a new sanitary landfill would be awarded to a consortium headed by an international company in cooperation with 10 of the 14 municipalities in the metropolitan area. The concession for the entire solid waste management system included a sanitary landfill, a materials recycling station, a traffic station, an access road, and a commitment to offer social and educational programs in the project area.

By 1999, the joint venture (MIDES S.E.M. de C.V) that had been awarded the concession had already constructed a significant percentage of the facilities. However, diverging political interests between the municipalities and social pressures from workers in the informal sector who used to earn their living by sifting through the trash for material to recycle brought the works to a stand still amid public protests in which the police was forced to intervene. The new landfill at Nejapa went into operation on 12 April 1999, only days after the MIF technical cooperation project was approved. However, individuals who had been recycling waste around the dump site at the neighboring city of Mariona organized demonstrations that led to the closure of the site that had only recently been inaugurated.

In the face of these difficulties, the MIF approved by the short procedure a program to support negotiations on the BOT sanitary landfill (MIF ATN/MT 6423-ES) under a Line of Activity for MIF concessions. An effort was made to arrange for fast-track implementation in less than 12 months in order to strengthen immediately capacity to analyze the 20-year BOT concession already awarded and to help establish a strategy to mitigate the untoward effects so that the project could be carried out successfully. To accomplish this aim, international experts were to be hired as consultants since it was felt that only consultants of this kind could have a favorable impact at this late stage of the negotiations. The consultants would look at the contractual documents and the local institutional framework, review the financial projections, and construct models and replicate them to facilitate the negotiations. Lastly, assistance would be provided to establish a strategy to mitigate any unfavorable effects.

The project was highly effective. As a result of the negotiations, agreements were signed between the concessionaire and each municipality. In addition, the prices were renegotiated, representing an annual saving of approximately US\$876,000 for the municipalities. An annual supervision fee of US\$100,000 was generated for use in strengthening municipal capacity in solid waste management. Lastly, efforts were made to involve workers displaced from garbage recycling on a microentrepreneurial basis in the new system with employment in the recycling plant or in trash collection.

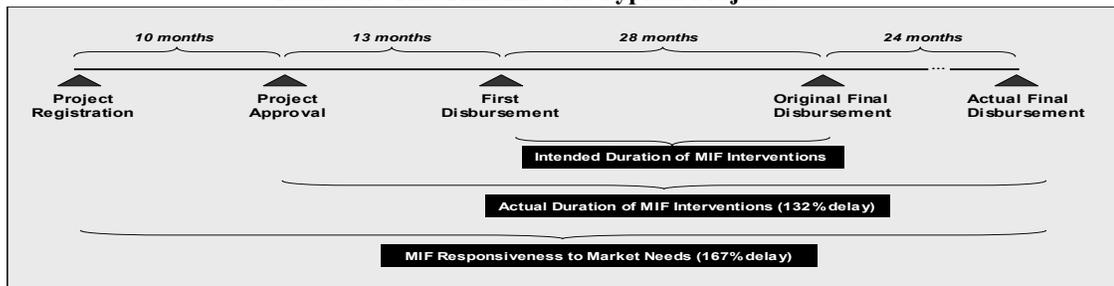
C. Efficiency

3.20 Efficiency deals strictly with the input-output relationship. Namely, the amount of inputs, financial or otherwise, that was necessary to achieve a particular output. The dimension falls short of addressing events that go beyond

output, such as outcomes or measuring impact, as those dimensions should get captured under effectiveness and relevancy, as long as they had been made explicit goals of a particular project.

- 3.21 **Overall, 50% of all private participation in infrastructure projects ranked showed high or medium-high in terms of project efficiency. The loss of efficiency in projects, to a large extent, resulted from poor planning of activities during the project design stage.** Less than 50% percent of the projects had adequately detailed at the time of approval the project activities, the resources that would be necessary for project completion or the time schedules for the various activities that would take place.
- 3.22 **Of the 38 MIF completed projects to support private participation in infrastructure, only 1 was completed on time and the average delay in execution time was 24 months. One of the most important determinants of project efficiency is the management of execution time.** Project administrative and fixed costs accumulate as time passes by and some of the outputs may become outdated and irrelevant. It becomes clear immediately that most projects take significantly longer to execute than initially planned. The average project is designed to be executed in 28 months, but it actually takes 65 months, or a little over 5 years, from the time of approval until final disbursement. Of this delay, an average of 13 months is spent meeting conditions precedent to the first disbursement.
- 3.23 **To assess the MIF’s responsiveness to executing agency requests, we have built a metric that starts counting from the time each request for technical cooperation is officially logged onto the Bank’s system.** Such a metric is intended to provide an indication of the lag between when the Bank/MIF received the project request from the executing agency and when the project is approved by the Donor Committee. This delay averaged 10 months, making that an average project planned for 28 months of execution actually take a total of 75 months from request to final disbursement, when delays of 10 months, 13 months and 24 months are added before and during execution, due to approval, first disbursement and final disbursement delays respectively.

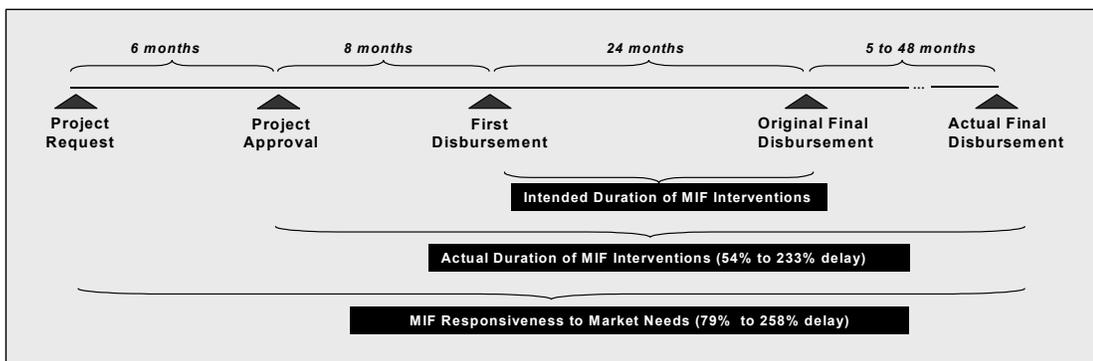
Table 3.1: The Timeline of a Typical Project



- 3.24 **The projects approved under the different lines of activity were supposed to have much shorter approval and execution processes and in fact reduced the**

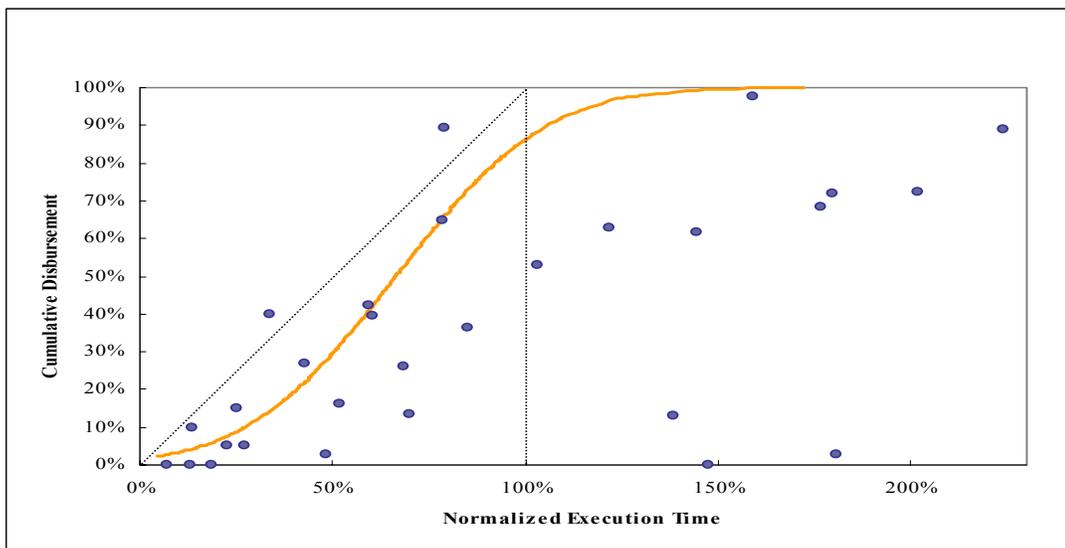
period of registration to approval by 60%. However, this was not necessarily the case for the execution. The typical project approved under a line of activity in this area is designed to be executed in 24 months. In addition, most projects last longer than expected due to difficulties during execution. Delays vary widely, ranging anywhere from 5 to 48 months. A positive example of the importance of timeliness was the Line of Activity project in El Salvador to support the concession of a Sanitary Landfill. The situation was difficult because the concession had already been granted and immediate assistance was needed to renegotiate the start up of operations, which faced public opposition. Had the project not been skillfully adapted and quickly approved to fit the situation, it would not have been nearly as successful.

Table 3.2: The Timeline of a Line of Activity Project



3.25 Overall this group of projects in support of private participation in infrastructure ranks much worse in terms of disbursement performance than the rest of MIF projects in other areas. About 75% of the projects in this group fall behind the average disbursement curve for MIF projects.

Graphic 3.1: Normalized Disbursement curve MIF Infrastructure projects



- 3.26 **The analysis of projects highlights a series of themes that characterize highly efficient projects. The qualification of executing team members is the most distinguishing factor in MIF interventions.** In projects with lean, highly qualified and dedicated executing teams, like the Program for Divestment of Tourism Assets in Ecuador (see Box below), where a three-woman-team moved along the program, despite bidding related delays, performing on their own many of the tasks initially planned for consultants. This generated significant cost reductions and the focusing of consulting advise on high value added activities. Secondly, highly efficient projects tend to engage only specialized advise on a narrow, critically important area. This was the case in the Program to Support the Negotiation in Telecommunications in Trinidad and Tobago or the Aviation Safety projects. Finally, highly efficient projects seek standardization in order to amortize the costs. This was the case in concessions programs like the one in Uruguay, where the tools were applied to transportation, energy and water and sanitation services.

Box 3.3: The Divestment of Idle State Owned Tourism Assets – An Efficient Effort

For Ecuador, tourism is a major source of foreign exchange, employment, and economic growth. By 1999 tourism accounted for 1.6% of GDP, with the tourism sector posting annual growth of nearly 10% throughout the decade, a level well above all other sectors of the economy. The government proposed to help develop the tourism sector, in cooperation with the private sector, to create transparent, participatory, and cooperative processes that promoted the sustainable and dynamic development of the tourist industry. With this aim in mind, in 2000 under Executive Decree 259, the Ministry of Tourism (MINTUR) was accorded full authority to act as sole agent in charge of guiding and facilitating the promotion of tourist activities.

During the 1980s, the Ecuadorian Tourism Corporation (CETUR) worked on the construction of State-administered tourist facilities. Following the merger of CETUR and the Ministry of Tourism in 1998, these activities were transferred to MINTUR. More recently, MINTUR designed a tourism competitiveness plan with the help of the World Tourism Organization. While the plan was being prepared, it was found that a new tourism act was needed to amend the 1997 Tourism Act and that the properties that MINTUR had inherited through its merger with CETUR were to be divested so that the private sector could play a leading role in the development of tourism infrastructure.

The purpose of the new law enacted in December 2002 was to reaffirm the role that MINTUR would play as regulatory body for the sector and to draft a legal framework to strengthen the sector. The MIF was prepared to assist with the disinvestments of these properties as a means of speeding up the MINTUR targeting process. To this end, a program for divestment of Ministry properties was approved in 2001 (MIF ATN/MT 7511-EC). The assets considered for privatization included hotels, inns, refuges, restaurants, a speed way, a museum, and equity in 6 companies, for a total of 34 properties with a preliminary value of US\$6 million.

The purpose of the MIF program was to make the process transparent and efficient and to ensure that the proceeds of disinvestments would be kept safe under a fiduciary arrangement that made it possible to enhance tourism activities. Every effort was made to make sure that the methodology used for disinvestments could be replicated in other State privatization initiatives. The potential use of the methodology in other areas of the public sector would be significant since it was estimated that in just the executive branch alone there was more than US\$600 million in fixed assets. This did not include assets in other parts of the public sector or those at the provincial and local level.

An innovative trust mechanism, with clear rules, that could be administered by an independent trustee, was designed for administration of the proceeds from these sales, thus limiting the potential risks of having the government administer the funds. The fund, which began operating under the MIF program, was called the Tourism Promotion Fund. In accordance with the Tourism Act behind it, the fund would be used to promote tourism by Ecuadorian and foreign nationals under an irrevocable commercial trust agreement, with the State being the donor and the beneficiary, and this independent trust would be funded from the following sources: one thousandth of the value of the fixed assets of all tourism enterprises; the proceeds from the sale of properties

belonging to the Ministry of Tourism; the fees paid for tourism concessions; revenue from MINTUR administration; allocations from the National Budget; US\$5 per air fare sold in Ecuador for foreign travel; and funds received from governments and international organizations, or from any other grant.

The program has been structured so that for the first time Ecuador can use a Commercial Trust to channel public and private investment to promote growth in a particular sector of the economy. In addition, the project tests the feasibility of this method for disposal of assets as an alternative to the fire-sales that occurred in the past where control of the asset development plan and any opportunity of maximizing the return on the sale were lost once the transaction was concluded. Lastly, instead of diverting the resources received to current spending, the proceeds from the sale are placed in a fund in which earnings are reinvested, helping to make it self-sustaining.

- 3.27 Overall project to support private participation in infrastructure ranked poorly. More than 75% of the projects have encountered serious delays in execution, ranking below the norm in terms of the expected disbursement rate, even when normalizing it to account for the typical disbursement pattern of all MIF projects (“S curve”).** Data from the case analyses and executing agency surveys indicate that the most months were lost by the executing agencies on trying to motivate and obtaining political support for reforms, an average of 27 months per project. The next largest delay was related to approving the projects and authorizing the required counterpart funds (12 months), the acquisition of hardware and software (9 months), followed by delays related to the contracting of consultants (7 months) and meeting conditionalities for eligibility (4 months).
- 3.28 When classified by type of project and sector, the same data sources indicate that Water & Sanitation sector projects and Regulatory strengthening programs pose the most challenges in terms of execution, with almost 90% of the projects falling behind the normal disbursement pattern.** These types of projects are followed, in terms of difficulties, by Transportation sector and Sector Reform projects. However, the highest variance in delays, meaning that projects gone sour take the longest of all, are experienced in Privatization and in those projects dealing with several sectors at the same time (Mutisector projects).

Box 3.4: The Energy Sector Reform in Uruguay – A Good Selection of Executing Agencies

Uruguay needed to come to grips with the problem that its water resources were being exploited to the maximum and that it has no other sources of energy. Major investment was required to modernize the electricity sector and eventually to install additional power generation capacity and international grids, in the context of an embryonic regional electricity market. Development of a natural gas industry, which did not exist in the early 1990s, would also require significant investment if natural gas was to be imported from Argentina. These prospects highlight the need to create sector conditions attractive to private investment in order to supplement public resources while according priority to using existing resources as efficiently as possible. This problem was compounded by the presence of oligopolistic and monopolistic structures in the electricity and hydrocarbons markets, which are dominated by UTE and ANCAP, respectively.

The MIF provided unwavering support for energy sector reform in Uruguay. Four successive technical-cooperation operations that complemented one another were prepared for the sector, in a combination that proved effective for launching sector reform, which is still in progress. The first energy sector reform operation (MIF ATN/MT 5276-UR) was approved in 1995. The following year, support was provided for a concession of the Buenos Aires – Montevideo oil pipeline (MIF ATN/MT 5232-UR). Not long afterwards, under another MIF operation to strengthen the public works and services concession system (MIF ATN/MT 5533-UR) approved in 1997, additional support was provided for the oil pipeline concession. The

repercussions were understood to go much further than the concessions of works alone, in light of the potential to open up the Uruguayan energy market. Most recently in 2002, the MIF approved a program for energy sector regulatory support (MIF ATN/MT 7909-UR) that further consolidated energy market regulation.

The MIF's support for energy sector reform in the country also resulted in positive changes. The reasons for its success in Uruguay were rooted not only in continual monitoring through a chain of successive operations but also in the choice of the executing agencies. For the first few projects, Dirección Nacional de Energía (DNE), the entity with overall responsibility for the energy sector, was selected as the executing agency, making long-term planning for the sector with optimal use of resources a possibility. In more recent operations, Unidad de Regulación de Energía y Electricidad (UREE), the sector regulatory body established only in 2000, was selected as the executing agency, thus reinforcing earlier sector and institutional reforms.

- 3.29 **Almost half of the executing agencies have not had previous experience with the MIF or Bank and therefore communicating Bank administrative procedures and requirements was crucial for project efficiency.** However, it was found through surveys and case analyses that before eligibility for disbursements, only about one third of executing agencies had received information on the MIF and Bank administrative procedures, including information on acquisitions, contracting and disbursements. The administrative difficulties reported above by the executing agencies are likely to be related to their lack of knowledge of MIF/Bank procedures.
- 3.30 **Another efficiency problem is related to the hiring of consulting services and lack of utilization of the material developed in previous projects. All projects in this group required consulting services, and in many instances, they were substantially the same across different projects.** During the course of the evaluation, it was found through case analyses that the same consulting firms were contracted to do substantially the same work in different countries, even though substantial portions of the work could have been transferred without major changes. This repetition was very acute in the sectors of electricity and aviation safety, and to a lesser extent in all projects related to regulatory issues, regardless of the sector.
- 3.31 **There was a lack of cross communications among projects and of sharing of experiences, which could have been useful since almost all countries were facing similar problems to transform their infrastructure sector and establish adequate regulatory institutions.** The MIF/Bank did not facilitate access to other similar work realized under its sponsorship, nor it supplied access to a roster of qualified consultants, or any sort of reference on the expected cost of different pieces of work. It was verified through surveys of the executing agencies, that although a majority of MIF projects had originated in coordination with other Bank Group Programs, only about half of the projects kept that coordination during execution.
- 3.32 **Another drawback on efficiency stemmed from the lack of precision in the definition of the terms of reference.** Widely defined terms of reference led to projects whose priorities were changed during execution, to accommodate the

needs of the executing agencies. Mostly all MIF projects dealing with multisector privatization, usually executed by presidential commissions, were widely focused, and therefore low on efficiency. On the contrary, the most efficient projects were those in which objectives were narrowly defined. For instance, the MIF conducted an efficient project in Trinidad and Tobago, where the scope of work for the consultants was limited and well focused and administrative procedures for contracting and disbursements were well explained by the MIF/Bank and closely followed by the executing agency. For example, this led to a successful renegotiation of an existing contract with a telecommunications provider in one of the countries, which virtually amounted to the opening-up of the sector to other private participants. All of this was achieved with less than US\$300,000 in MIF resources.

- 3.33 **Some of the projects included “contingent recovery” components. Recovery could have enhanced the overall productivity of MIF resources. However, less than 25% of the resources were ever recovered.** Only 8 of the 86 projects analyzed were designed with a contingent recovery line. The recovery was contingent on the successful conclusion of private participation processes and MIF funds were to be returned by the winning bidder. For example, the MIF was able to recover part of its contribution in the case of the privatization program in the Dominican Republic due to the financial success of the sale of the electrical companies. However, several months passed and neither the MIF nor the executing agency knew how to apply the recovered proceeds. After legal consultations it was determined that the recovered proceeds no longer belonged to the MIF and were to be utilized by the Government of the Dominican Republic in “activities compatible with the furthering of the reform of the electrical sector”. This highlights the lack of a systematic approach towards maximizing the utilization of the recovered resources and potentially a lost opportunity for the private sector to reaffirm the value of the products generated by MIF projects by their willingness to repay them.

D. Innovation

- 3.34 The innovativeness of a project is defined in terms of the delivery of a new product or service or the improvement in the process or method of delivering an existing product or service. Innovation in projects was also demonstrated in terms of the amount of attention and inquiries the project attracted from outside entities, the degree of imitation of the project by others or its adoption into the “mainstream” of project ideas.
- 3.35 **From the case analyses performed by OVE, it can be concluded that MIF projects in the area of private sector participation in infrastructure involved many innovative elements.** Innovation was introduced mainly at the project design stage, where almost all projects had at least one innovative element. However, innovation dwindled down during execution and closing of the projects, as executing agencies struggled to reach at least the basic goals set forward for the projects. Nevertheless, as an average, 7 out of every 10 projects in this group had

at least one innovative element that was later imitated or utilized by others within or outside the Bank Group. This highlights the fairly successful demonstration effect achieved by the projects in this group.

- 3.36 **Innovations developed in the projects within this group have been unfairly overlooked given some technical specificities and innovations introduced in older concepts.** However, they have been very valuable and hold future potential, not only for the MIF, but also for continued cooperation with the rest of the Bank Group. For instance, the MIF has developed projects like to Modernize Urban Transportation in Panama, integrating and supporting Small Bus Operators, or the Support for the Renegotiation of a Sanitary Landfill in El Salvador, where three essential innovative elements were present. Firstly, both projects involved co-investments between the public and the private sector. For example, in the case of Panama, the public sector would rebuild the infrastructure, while the private sector would cover the cost of new vehicles and ticket collection systems. This opens a distinct possibility for the Bank to cooperate with MIF in cofinancing the private sector portion. The same combination could be worked out with PRI, if the public sector portion were to be undertaken by another private enterprise. Secondly, both the projects were directly concerned and very beneficial to the environment. For example, the sanitary landfill in San Salvador helped solve an acute water contamination problem. Lastly, both projects were focused on implementation, as an integral part of the value the MIF was providing to executing agencies. So much so that special provisions were made to ensure the participation of hands-on, experienced consultants. Many of the same elements were present in other projects, like the Program to Support the Divestment of Tourism Related Assets, where the MIF helped develop a Trust Fund where public and private contributions would be used to benefit the tourism industry in Ecuador.

Box 3.5: Urban Transportation – Innovative Cooperation between the Public and Private Sectors

As in dozens of other urban centers in Latin America and the Caribbean, growth in Panama City has been uncontrolled. Fierce competition has made the urban transport system financially unsustainable and operators ran a deficit, making it impossible to maintain and replace units. Further compounding this problem were high levels of pollution and hazardous driving conditions, with as many as 60 traffic accidents daily. Bus ridership was clearly on the decline. In 1985, buses accounted for approximately 75 percent of daily travel. By the first quarter of 2000, the percentage had fallen to 48 percent. The use of the motorcar, which was increasingly replacing bus transport, grew at approximately 10 percent a year, begetting delays and urban congestion.

Transportation fares had not kept pace with costs for over 20 years. At the same time, competition had reduced profitability drastically. The private sector did not appear to be interested in resolving this dilemma on its own. For instance, when a number of private operators once introduced air-conditioned buses and began charging a fare of US\$1, because of competition they were forced to gradually lower the fare within 18 months to as little as US\$0.20, a price well below their operating costs and insufficient to permit replacement and maintenance of units. The lack of any uniform regulations and cutthroat competition between operators did not create an environment conducive to improvements in service or efficiency. Moreover, the sector had fallen prey to union organizers who literally sold the route permits, often at prices in excess of US\$50,000 for the best routes.

Until the Autoridad de Tránsito y Transporte Terrestre de Panama (ATTT) was created in 1999, responsibility for urban transport was divided between three ministries, with a confusing array of overlapping

functions. When it was established, the ATTT took on full legal and regulatory responsibility for restructuring the entire urban transport sector without the need for further legislative changes to enact these reforms. In addition, it was able to become financially self-sustaining through revenues from annual licensing fees and fines for minor traffic offenses, with full political support.

In May 2001, the transport unions, CONATO and CANATRA, signed a standard rate agreement with ATTT, which led to violent mass protests. As a result, the new rate schedule was suspended for 7 months. Just 5 days before the suspension was due to expire, a court suspended the introduction of the new rate, triggering a transport sector strike. Three days later, the new rate was enforced by presidential decree but would only apply in the case of vehicles that satisfied the conditions set out in the May 2001 agreement. Operators were granted a special extension to March 2002 to comply with the standards.

The MIF is now helping the ATTT with the restructuring of the urban bus sector in Panama through a highly innovative approach that involves joint public and private investment and the cooperation of all union organizations in the sector. To accomplish this aim, an effort is being made to consolidate the regulatory framework and to promote participation by the private sector in making significant improvements in service. This included reducing the average age of bus fleets and raising productivity so that operations were attractive enough to attract private investment estimated at US\$100 million for replacement of existing fleets. The State would in turn provide US\$40 million for investment in road works and road markings and US\$30 million in credit facilities made available through Banco de Panamá.

Given the obvious complexities in implementing reforms of this kind and its highly sensitive political nature, the ATTT sought assistance from entities that had had experience implementing similar reforms in other countries. The MIF program was instrumental in making this advisory assistance available to the ATTT and it is highly unlikely that this support could have been gained without the MIF's involvement. The agreement with the consulting firm selected through the program provides for a system of technical consultation and in-service training with Transmilenio, Bogota's new privately-owned public transport company. Transmilenio is a world-class example of what fast and effective reform of urban transport can achieve and is the model that the MIF is trying to adopt in Panama City. In a little under three years, from January 1998 to December 2000, the Transmilenio system was put in place. The system consists of dedicated center lanes on major arteries, feeder networks, and a smart station system. The trunk lines are served by articulated diesel buses with 160-passenger capacity and feeder lines for 80-passenger capacity buses. The system has the capacity to move up to 45,000 passengers an hour in each direction, including express service at an average speed of 26.2 km/h, well above the 10 to 18 km/h speeds under the previous system. Transmilenio is able to sustain itself without subsidies with an average fare of US\$0.36 and approximately 630,000 workday trips. Bus fatalities have been cut sharply and particle emissions are down more than 30%. Productivity is very high, with 1,945 passengers per bus per day and a daily distance traveled of 325 km per bus.

The MIF program thus seeks to replicate in Panama the innovative mechanisms that Transmilenio used to attract private investment. In Bogota, investment was made through a public and private trust in which former bus operators participated as shareholders. By imposing minimum capital requirements, small operators and investors were encouraged to join together. The municipal and national governments invested US\$5 million per kilometer to cover the cost of upgrading trunk roads, stations, yards, and garages. Under the investment plan to 2016, investment would be made of some US\$1,970, of which US\$1,296 would be contributed by the State and US\$674 by the district. The investments made by private concessionaires would be US\$974 million, of which US\$900 million would be used for the purchase of 4,475 articulated buses and US\$74 million for fare collection equipment. According to the DNP of Colombia, the investment would pay for itself by the mid-point of the 15-year planning horizon. Transmilenio is currently operating 165 articulated buses and 240 non-articulated buses, with a stellar public image.

3.37 Other innovations hold equal promise. For example, the utilization of the legal framework, already present in the countries, for the benefit of private participation in infrastructure was pioneered by MIF. This was evident in projects like the Support for Competition in Telecommunications in Trinidad & Tobago or the Support to Consumer Protection Organizations in Brazil. The project in Trinidad & Tobago was engineered such that the process of renegotiating a contract with

- the monopolistic, private sector provider of telecommunication services in the country would end up opening up the market to competition, as the incumbent relinquished exclusivity in exchange for other guarantees it needed. This was done without the need to modify any law or submit to parliamentary debate any open-ended issue related to opening of the market. Similarly, in Brazil, the consumer association the MIF backed was very active utilizing the existing court system in defense consumers.
- 3.38 **MIF has been innovative in utilizing the existing communications and promotion channels to advance the process of private participation in infrastructure.** For example, the Support to Consumer Protection Organizations in Brazil utilized radio and TV campaigns to reach an audience of more than 1.5 million consumers. Similarly, the Program to Support Concessions in Uruguay utilized Uruguay XXI, an existing international investment promotion network.
- 3.39 **Other innovations promoted by MIF relate to standardization. For example, the Program to Support Road Concessions in Chile, the Program to Strengthen Water and Sanitation Regulation in Chile, the Program to Support Concessions in Uruguay or the Program for Water Reform in Mendoza, all developed standardized methodologies that MIF could transfer elsewhere.** In the case of Chile, the road concessions program found that one the most cumbersome issues related to the expropriation in order to gain the right of way for roads. They decided to automate the process and developed a computer-based system that helped them manage the process with significant gains in efficiency and effectiveness. In the water and sanitation sector, the Chilean regulator developed a standardized cost collection mechanism in which operators are required to report very precise information that is later factored into a automated tariff system. In Uruguay, MIF helped the executing agency standardize all the elements and processes involved in a public concession, greatly facilitating the closing of several transactions and the creation of an inventory of concessionable projects. This experience is highly applicable to other countries. Finally, in Mendoza, the challenge of water and sanitation regulators was related not only to regulating the largest operator serving the largest metropolitan areas, but also to improving and guaranteeing the services provided by almost 200 smaller operators. With the help of MIF, the regulator created a state of the art system to regulate, train and assist smaller operators.
- 3.40 **MIF was also instrumental in all issues related to factoring in the consumer into the privatization processes.** This was done, not only through the direct support of consumer protection organizations, but also by introducing innovative customer support modules at the regulatory entities MIF helped create. For instance, the Customer Service System at the Water and Sanitation Regulator in Chile is a superb example of this type of innovation promoted by the MIF and whose importance goes well beyond the resolution of complaints. It is widely accepted, that negative customer perceptions are the biggest threat to the privatization process. Future work with regulatory entities in all areas related to consumer participation, may widen the political support base for reform and

provide for well-funded, sustainable means of on-going consumer protection within the umbrella of the regulatory entities. Similarly, the MIF helped create Employee Ownership Programs in some private participation processes such as the one in the water sector in Mendoza. Properly addressing workers interest is another stabilizing factor the MIF has contributed through projects in this area.

- 3.41 **Regional integration processes are an area of recent interest to the MIF, and hold a promise for future cooperation with the Bank Group as integration processes like the Puebla-Panama Plan advance. So far, MIF has contributed interesting innovations through its regional training programs for regulators.** This holds the advantage not only of facilitating the setting of compatible regulations, but also of helping develop the think-tanks where different integration projects get detailed or conflicts get iron-out.
- 3.42 **Although the reforms in infrastructure have been in the forefront of economic changes in the region for some years, they is still plenty of opportunity for innovation in almost all countries and particularly in less mature sectors.** For instance, the MIF Project to Support the Infrastructure Concession System in Chile was highly innovative, despite Chile's relatively advanced reform process. In spite of having successfully privatized the power and telecommunication sectors and several public companies, the new concession system for roads introduced in Chile in 1995 represented a major innovation that was subject to extensive and heated debates, with the intervention of politicians, academics, civil society and the private sector. Once Congress had approved the necessary legislation it was necessary to establish an efficient institution to conduct the process and this is were the support of MIF became essential. This new institution has successfully completed the privatization of roads with a total private investment estimated at US\$3,500 million. At the present time, the Government is expanding the system of private concessions to the building of public hospitals, and others.

E. Sustainability

- 3.43 **Sustainability relates to the ability of the countries to sustain the reforms and the executing agencies to carry on with the services produced or supported via the projects after MIF funding ceases.** There are two fundamental issues in this respect: (i) is the privatization/concession process that has been initiated sustainable?; and (ii) will the regulatory framework be maintained and are the regulatory institutions sustainable?. The answers to these questions are likely to vary across countries and sectors, but some general considerations can be made.
- 3.44 **There is an increasing trend against private participation in infrastructure that could pose difficulties to the sustainability of the changes initiated in the 1990s.** As reported by the Latinbarometro Surveys, the general public has increasingly turned against the privatization process, with a percentage of respondents believing that the process has not been beneficial to the country raising from 57% in 2000 to 64% in 2001. Only in Brazil, Chile, Panama and

Paraguay has the percentage declined, but it still a high 50% in a successful country such as Chile. Several recent initiatives, such as water services in Cochabamba, Bolivia, electricity in Arequipa, Peru, telephones in Paraguay, electricity in the Dominican Republic or electricity in Ecuador, have been either canceled or suspended. On the other hand, there is a growing number of studies and academic evidence suggesting that the privatization process had a positive effect on consumers' welfare, economic growth and efficiency in the use of scarce resources.

3.45 Service affordability has become a more pressing issue, facing utilities, regulators and governments with the need to develop urgent solutions. It was expected that a strong growth in income per capita would accompany the decade of the 90s. However, growth has been uneven and a growing number of unemployed see themselves in a poor position to pay for the privatized services. For example, in Argentina in 1998, even before the devaluation of the peso, utility bills represented 10% or more of total income for one third of the population. A group in which the average rate of unemployment was almost 30%. To varying degrees, similar situations repeat themselves in the rest of the region. For instance, in the Dominican Republic, hikes in electricity rates prompted violent public rallies and direct tariff intervention by the executive branch of government.

3.46 Consensus building involving the different areas of the public sector and existing and potential participants from the private sector has proven to be an effective tool to tackle these complex situations in a sustainable manner. Piecemeal, last minute interventions from the executive branch are perceived as a destabilizing factor by most private investors, according to a recent survey¹⁷. In contrast, organized, consensus building activities may increase the overall efficiency of the system and prompt a more sustained flow of private investment over the medium to long term. The case of the electricity sector in Colombia and the several planning, consensus building meetings held in the city of Santa Marta are often credited with helping a bankrupt electrical system find viable exits and reach agreements in terms of capacity planning and critical private / public sector cooperation areas. The Santa Marta meetings were organized with no more than \$50,000 in help from multilateral organizations and constituted a forum where the different parties could negotiate and compromise.

Box 3.6: The Santa Marta Meetings – Building Consensus for Electricity Reform in Colombia

In 1984, the Colombian electricity sector was virtually bankrupt, according to the assertion of the Minister of Energy and Mines at the time. Multilateral Banks had been supporting the sector for thirty years, without any major variation in their approach. However, the overbuilding of hydroelectric power plants brought a high debt load, that because of a rapid devaluation of the peso, had suddenly mushroomed from \$1.8 billion to \$3.5 billion. Experts agreed that it was time to (a) stop new construction in the electricity sector, such as a planned \$3 billion hydroelectric project called URRA (b) make better use of installed capacity, and (c) increase tariffs. The trouble was that there was no central authority overseeing the system, and there were dozens of stakeholders at a national and local level, whose interest were diverging.

¹⁷ Lamech, Ranjit and Saeed, Kazim, "Private Power Investors in developing Countries: Survey 2002 – Preliminary Findings", The World Bank, presented to the Energy Forum 2002, June 5, 2002.

The Minister, who was new and seeking priorities for a work program was delighted at the proposal made by missions of the multilateral banks to debate the issue with all stakeholders and try to come up with a consensual solution. A three-day conference was scheduled for April 1985. The Bank's Representatives in Bogota assisted the government in drawing up a list of participants and handling the logistics. In the interim, the Bank sent comments on the URRA project, the major beneficiary of which was a huge utility called CORELCA. The Bank's view-that the project had no justification and that the electricity sector needed to diversify away from its heavy reliance on hydroelectric power-set off a firestorm.

The invited stakeholders included the ministers, permanent secretaries, heads of the utilities and their contractors, several mayors (because some of the utilities were municipal), congress people, several expert consultants, and members of the opposition party. The special interest groups who wanted to keep building more hydroelectric plants also wanted to attend and were invited. Although the Colombians were initially reluctant to do so, they accepted the suggestion to include six project department people from the World Bank and the Inter-American Development Bank, because they too were stakeholders. All the above mentioned people accepted the invitation, so that the invitees collectively had the power to change the electricity sector, a bipartisan group that could carry forward any commitments they made, despite the fact that elections were only a year away. The invitations were signed by the Ministers of Finance, Mines and Energy and Development Planning. Two facilitators were engaged to conduct the process of discussion and development of agreements.

But, when participants got to Santa Marta, the small northern town where the conference was to be held, they encountered that a new member of the local conference team chosen by the Minister of Planning flatly vetoed the participatory approach already agreed on. She wanted a conventional "talking heads" conference and insisted that "the Ministers want to make speeches, not participate in games."

After many hours of exhausting arguments about the agenda, an agreement was reached. The four ministers would give introductory remarks. Then the facilitators would take the floor to introduce the process. With this, the conference launched into the diagnostic phase, designed to understand the economic, political, and cultural context of the Colombian electricity situation and to stimulate the group to come up with as many ideas as possible. The participants were divided into heterogeneous groups of ten, structured to include people from across the spectrum of the energy sector and each with a group facilitator. They were told to come up with ideas and listen to each other without comment or judgment. Questions would be allowed but only to clarify, not to criticize. Next, it moved to the stakeholder analysis phase, during which the themes and priorities for change and understanding the potential reaction in the political environment were discussed. The same groups formed again. They were to listen fully to each other first and then debate, pushing the limits of each idea. Finally, an action plan phase was structured so that clear outcomes and commitments emerged from the conference. Among the concrete recommendations were: the development of a "rector" or some kind of governing entity, for managing the electricity, a new policy direction, including a freeze on new construction for five years; diversification from hydroelectric to other power sources via conversion of existing power plants (hydroelectric had gotten 90 percent of the investments in the sector over the previous thirty years); and geographic diversification (the majority of power generation was in one watershed). A change in the structure and levels of tariffs, including external borrowing to buy time. During the final session of the conference, the group focused on next steps and designated a mid-level task.

Years later, it was perceived that the conference had fundamentally changed the working climate. The key actors in the sector moved from a situation of inaction to a commitment to detailed proposals for change, seen in the many activities that were set in motion. For instance, the task force completed the report, and the Minister of Mines and Energy held a series of workshops to review and obtain commitments to implement the work plan. The report was used in the government's political negotiation process in the Parliament. The Minister of Mines and Energy began implementing some of the workshop recommendations before the final report was even completed. He immediately froze construction and set up an interim coordinating body called the Technical Energy Board. This board was the forerunner of the National Energy Board, whose creation required and eventually received the approval of Congress. The National Energy Board, which then replaced the Technical Energy Board, worked in cooperation with all the entities in the sector to carry out sector wide planning responsibilities and formulates policies and investment programs for the sector.

Later, with broad support, the Minister integrated the electricity and energy sectors and brought them under his aegis (previously, the electricity sector had gone around his ministry through its own contacts reporting directly to the ministers of finance and planning). The Minister personally reported the conference conclusions to the World Bank and the Inter-American Development Bank and got their support for financing an energy sector study to help formulate a detailed energy strategy grounded in the Santa Marta conference report along with two follow-up workshops to help design coordination mechanisms and implementation plans.

The new policies set the stage for the World Bank, the Inter-American Development Bank, and the Export-Import Bank of Japan to each make \$300 million loans, temporarily alleviating the financial crisis. By the time the loans went to the Bank's Boards, in autumn 1987, the Colombians had already met most of the conditions-which they themselves had proposed in the first place. Several of the key workshop participants went themselves to become Ministers.

The process that began at Santa Marta, however, did not stop. A second strategy session was held in Santa Marta in 1990. This strategy session led to the design of a three-year effort to restructure the power sector. Unfortunately, Colombia encountered serious shortages of electricity in the early 1990s, and all major cities suffered frequent blackouts. A once-a-century drought-probably caused by "El Nino" exacerbated by the country's over-reliance on hydroelectric generation and the failure to maintain the actual availability of alternative electricity capacity in the country, highlighting the fact that these types of situations are recurring over time and that appropriate solutions mechanisms may be in the best interest of the countries, the private sector and potentially an area of interest for the MIF.

- 3.47 **The MIF has demonstrated the potential to develop focused technical assistance to act against the roots of the backlash in public opinion. Even though the MIF executes relatively small, individual interventions, its work in areas such as consumer protection, better regulation, appropriate institutional frameworks, adequate tariff schemes that provide access and affordability, transparency and generation of information has targeted some of the most difficult issues in infrastructure reform.** While there is uncertainty about the overall sustainability of the privatization process, there is still time. Based on the past experience the MIF could organize to provide a more systematic support in these efforts. MIF brought a greater emphasis on the transparency of the transactions, so that their design was done in a more equitable fashion, where the long term benefits to the population were well taken care and spelled out. At the same time, some projects like the ones supporting regulatory institutions or the consumer protection project placed an emphasis in explaining the benefits of privatization to the public and in incorporating civil society.
- 3.48 **The chief concern in the evaluation of sustainability is that despite all effort made during the past decade, evidence from the case analyses suggest that additional efforts must be made in developing regulatory capacity in almost all countries.** Most regulators have difficulties dealing with the processes involving the setting of tariffs in a way that promotes productivity, while fostering needed capacity investments. Likewise, consumer protection is weak, often reducing itself to bloated consumer complaint processing systems, which lack any real impact on consumer perceptions. Neither public opinion nor private investors have a strong degree of confidence in present institutions and substantial strengthening must take place. The sustainability of the overall privatization process itself also depends heavily on the adequacy of the regulation process. MIF

has advancing in the direction of better regulation by financing some national and regional initiatives to provide training for regulators. The Bank Group could cooperate in this effort by conducting a profound analysis of regulatory weaknesses in each country and proposing long-term remedial programs.

Box 3.7: Building the Skills for Long term Sustainability

While most countries in the region have been moving forward with the privatization of many services, a small number are still in the phase of deciding whether to proceed with privatization and if so to establish the scope of the process. All countries are faced with the task of training new professional staff to regulate the present and future activities of private operators, to administer joint public and private initiatives and concessions. In recent years, the IDB through initiatives spurred by its Regional Operations Departments, the Multilateral Investment Fund, and the Sustainable Development Department in cooperation with other institutions, has prepared technical material and organized activities to help direct the Bank's efforts and its policy dialogue in the areas of regulation, privatization, and infrastructure project financing. The SDS Infrastructure and Financial Markets Division has been actively supporting research and the dissemination of information on these issues. One of the Bank's initiatives in this field was prepared with the help of the Harvard University Kennedy School of Government (KSG). In one of these initiatives in 1997, the IDB entrusted KSG with the task of designing a two-week executive seminar to discuss the needs of its member countries in the areas of infrastructure and financial markets. This seminar on "Infrastructure in a Market Economy" combined case studies, talks, and conferences, to create an intensive high-quality teaching experience for policy officials and senior professionals.

In 1999, the MIF approved a regional program for the establishment of a university network for education and training in infrastructure privatization and regulation (MIF ATN/MH-6631), which was carried out by the Regional Technical Cooperation Division of the Bank's Regional Programs and Integration Department, with the support of an external advisor. The general objective of the program was to create regional capacity to provide training in privatization, regulation, and financing of infrastructure and to foster joint activities with universities in the region in an effort to deepen understanding of regulation and financing of infrastructure services. The specific objectives of the program were: i) to increase the availability and relevance of training in regulation and financing of infrastructure services in Latin America; ii) to boost the supply of teaching materials, case studies, and instructors in the region, in areas targeted under the program; and iii) to set up and support an institutional network in the region that can offer quality training in these areas.

The Bank has now signed agreements with 5 universities selected for their capacity and commitment. Also, on 9 September 2000, it signed an agreement for services with KSG to remain in effect until 31 January 2004, to assist the universities selected with the strengthening of training capacity in infrastructure, financing, and regulation. Accordingly, 3 meetings were organized for network members in: (1) Boston, in May 2001, (2) Cartagena, in January 2002, and (3) San Salvador, Brazil, in November 2002, with a fourth meeting planned for Lima in August 2003. Also, 6 case studies were presented and discussed, and a further 10 are in preparation. Moreover, since the first half of 2002, most of the universities involved have been designing, or have begun to design, new master's level courses, specializations, and/or practical courses in this topic. Lastly, an Intranet site was designed for internal use, which will be converted subsequently to an Internet website.

Another initiative to supplement the foregoing was approved by the MIF in 2000. The idea behind the energy regulation program (MIF ATN/MH-7046-AR) was to develop a program for specialization in regulation and to disseminate it and to strengthen the executing unit in order to ensure that it will continue to be sustainable after project completion. The program will be divided into basic, intermediate, and advanced modules and will close with an international seminar. The program will be supervised by a foreign university, which will act as external advisor, in an effort to ensure academic excellence and quality in the training for participants in the program. Unlike the KSG program, the present one received substantial local counterpart funding support from Argentine energy regulatory bodies, which had earmarked resources for specialized training for their staff under the program.

Demand for technical training in energy regulation has grown exponentially in the last 10 years not only in Argentina but also across the region. For instance, when the program commenced, potential demand for

training in the country was high. In the electricity sector, there were 1 local regulatory body, 13 provincial regulatory agencies, 4 in the process of being established, 44 power generation companies, 50 power distribution companies, 47 transport companies, 2 marketing companies, and 408 large users. In the gas sector, there were 1 national regulatory agency, 22 producers, 2 transport companies, and 9 distribution companies. Yet, the regulatory bodies had not explicitly supported any long-term professional development initiatives although ample resources were available and were routinely used to pay for training in various national and international institutions.

Centro Argentino de Regulación Energética (CEARE), the executing agency, with the help of the MIF, earmarked these resources to set up a quality program, as the requirements of the Argentine and regional markets permitted, with some likelihood of becoming self-sustainable in the future. Also, during project execution, it was found that the potential existed to produce a distance-training program. CEARE has received emails from nearly 1,000 regulatory agencies in the region and plans to provide them with proper information and encourage them to take part in the activities. An innovative grant program was also arranged that would be offered to associations of consultants, so that the content could be disseminated to other colleagues and clients.

- 3.49 **None of the executing agencies involved in MIF projects within this group had produced, at the time of project approval, a long-term plan to increase regulatory capacity to desirable levels or presented an analysis of the overall institutional framework to guide and supervise the privatization process.** Almost three quarters of the projects failed to conduct an evaluation of executing agencies in terms of their institutional abilities. Similarly, more than 80% of the projects failed to analyze previous, relevant experience of the executing agencies, with similar type of projects or conduct any type of analysis on their financial capacity or operational capabilities.
- 3.50 **The process by which executing agencies were selected was not conducive to long term sustainability.** Case analyses indicate that the selection process was highly passive. In 60% of the cases, executing agencies were selected primarily because they were the only entity enabled by law to carry out the types of activities defined by the project. Although this may seem the only possible choice, this was done regardless of previous experience, or even the fact that many of those agencies existed just on paper. Only in 20% of the cases were executing agencies selected on the basis of their technical and perceived executional merit.
- 3.51 **The evaluating team independently assessed the resources committed by executing agencies. Overall, it was encountered a high degree of integration of projects into the mainstream of the organization's work. However, almost half of the projects suffered a low quality of counterpart commitment,** both in terms the quality of human resources as well as in regards to other resources committed to the project. Sustainability of the executing agencies themselves was weak, which may pose a serious threat to what was stated above if no further strengthening of the institutions is obtained. MIF resources were badly needed to promote change. However, after MIF resources got depleted, more than 75% of the executing agencies had difficulties covering their costs. The majority of those were public agencies in charge of some sort of regulatory and, or supervisory duty. This highlights the importance of budgetary commitments from the countries and a good alignment with their overall goals.

3.52 **This institutional base is a very important asset for the MIF and the Bank Group, which could facilitate exploring ways to leverage the value of the network of vibrant executing agencies it has help build through its support of private participation in infrastructure.** The MIF has been committed to the “institutional strengthening” of its executing agencies. However, the definition of what “institutional strengthening” means has been too generic and has weakened the effectiveness of MIF activity as no control could be established on results, apart from the tracking of activities performed, e.g., training hours delivered. In addition, only in a few cases, a competitive process was put in place to select the best-qualified team members or institutional array according to a set of pre-agreed criteria based on skills standards that MIF could help institutionalize on a regional basis. This focus on the selection, stability and long term nurturing of human resources and institutions has proven very beneficial in the few cases where it has occurred.

F. Additionality

3.53 Additionality measures the degree to which MIF financial and technical resources were instrumental in achieving the expected results of the project. We also distinguished a second sense of additionality in the assessment of whether the project held important lessons for similar projects or offered insights into how executing agencies and/or the MIF can manage similar projects or processes.

3.54 **Without taking into account the contributions of other multilaterals and those of the private sector, the MIF represented less than one half of a percent relative to overall Bank group funding for infrastructure. Therefore, additionality of MIF resources is a great challenge that obligates the MIF to find very specific areas where it can play a critical role and provide a key contribution.** MIF is a relatively small player in the field of infrastructure. While MIF destined a total of less than US\$85 million to infrastructure related activities, the rest of the Bank Group destined more than US\$18,000 million over the same period.

3.55 **The evidence indicates that 50% of MIF projects in support of private participation in infrastructure rank high or medium-high in terms of additionality. In half of the cases, the expected results could have been achieved without the contribution from the MIF.** However, this may have been so at the expense of significant delays needed to obtain funding from alternative sources. In some cases, MIF resources allowed the undertaking of highly relevant studies that could not be afforded within the limited budgets available, while in others it allowed the hiring of the best specialized consultants to provide advice on legal issues or negotiations of contracts. In a many instances the fact of having a key piece of the reform for private sector participation financed with a MIF project provided the visibility to more focused attention and resources, that otherwise would not have been there without MIF assistance. In some cases, MIF projects were a necessary first step or complementary to future investment loans from the Bank or PRI.

- 3.56 **Highly additional projects often empower some entrepreneurial groups within the public sector.** From the analysis of cases performed by OVE, some common patterns have emerged regarding highly additional projects. This proves not only that MIF funding can be highly additional and the MIF has a role to play in the sector, but also that the patterns can be replicated in future MIF activity. This was the case in the handling of Tourism Related Assets in Ecuador or the support for the National Energy Administration in Uruguay.
- 3.57 **Highly additional MIF projects were also concerned with the development of advanced tools for negotiation or the management of the processes of private participation and regulation.** Support to deal with problems related to renegotiations is increasingly needed and is very frequent as a result of privatization. This was the case in MIF supported negotiations in the telecommunications sector in Trinidad & Tobago or those related to a Sanitary Landfill in El Salvador. This was also present in projects like the Support for Concessions in Uruguay, Chile and Ecuador or the Strengthening of Water Sector Regulation in Chile, where standardized tools were developed. Had not been for MIF, it is very unlikely that such emphasis could have been placed on an issue as important as standardization, whose implications go well beyond productivity, to get into the core of the stability and repeatability of the private participation process.
- 3.58 **The MIF has also generated highly additional projects revolving around the protection of the weakest links in the privatization process.** For example, the MIF has developed projects aimed at protecting consumers, workers or small and medium enterprises, as it was the case in the Consumer Protection Program in Brazil, the Employee Ownership Program in Mendoza or the SME Bus Operations in Panama. This was also the case, even with informal workers, as the MIF set out to address the concerns of informal garbage recycling people in El Salvador, in the context of a renegotiation over a Sanitary Landfill in San Salvador. Even though those weakest parties were of concern to the Bank Group, the MIF played a significant role in delivering effective options to them.

Box 3.8: Consumer Protection – The Next Frontier

The wave of privatizations that swept the region in the second half of the 1990s made it essential to strengthen regulatory frameworks. In its new regulatory role, governments need to strike a balance between the interests of investors, operators, and consumers. Typically, consumers have been poorly represented, creating the perception of abuses and lack of transparency that work against the long-term sustainability of the privatization model.

Founded in 1987, the Instituto Brasileiro de Defesa do Consumidor (IDEC) is a consumer NGO that has no links with the private sector, government, or political parties. Its sole mission is to defend the consumer, even representing the latter before the courts in a class action suit. In fulfilling this aim, IDEC has a product and service evaluation program, and its findings are published in Consumidor S.A., a magazine that members receive as part of the US\$30 annual membership fee. IDEC also publishes books to inform consumers of their rights and to promote discussion of issues in legislative and judicial circles.

In 1999, the MIF approved a project for public services consumer protection to be implemented by IDEC. The project marked IDEC's first experience taking funds from an institution and not from consumers, yet it also turned out to be a monumental step forward in strengthening consumer organizations. The aim of the project was to increase consumer participation in the privatization of public services, particularly in the

water supply, sanitation, electricity, and telecommunications sectors. The idea was to improve the supervision and control of services. Initially, activities were limited to the states of Sao Paulo, Rio de Janeiro and Paraná, which together account for 37% of the country's population. Sao Paulo and Rio de Janeiro were selected because the privatization process was already well advanced but was sparking heated debate. In Paraná, however, where the process was still in its infancy, there was a desire to see it through from the outset.

In the water sector, the state of São Paulo, which launched the process with the Limeira concession in 1995 (the first concession for sanitation awarded to a private company in Brazil), like various other municipalities, tried to reverse the shift towards concessions and return to the previous situation of service delivered directly by government. According to IDEC, some experiences with privatization had been disastrous, with sharp increases in rates accompanied by poor service, with complaints of corruption in the privatization process filed with the Attorney General's Office (Ministerio Público).

In the electricity sector, since 1995 when the process began, consumers had been subjected to steadily higher rates, which by 1996 had already increased by 40% and always exceeded the consumer price index. For example, 200 Kwh of power consumption represented 19% of a minimum salary in 1996. By May 2002, however, the percentage had risen to 29%. By August 2002, the portion of the minimum salary that was needed to pay for 200 Kwh of power consumption had risen to 34%, underscoring the immediate need for a response to address consumer concerns.

In the telephone sector, Telebrás, the federal telephone utility company, controlled all telephone concessionaires in the country, including Telepar in Paraná, Telerj in Rio de Janeiro, and Telesp in São Paulo. In July 1998, the government broke Telebras up into 12 regional holding companies, and its equity was sold off to the private sector in what was the largest public share offering in the country's history. Since then, while the service grew exponentially, ANATEL, the regulatory agency, saw its supervisory capacity overburdened on numerous occasions. IDEC filed complaints against ANATEL and the companies involved. In 1999, for example, in initial legal proceedings, IDEC was successful in having a rate increase suspended for 6 months, and the utility companies were ordered to refrain from rate adjustments until the targets of minimum quality set by ANATEL had been reached. It is estimated that potential revenue equivalent to approximately US\$80 million was lost as a result of the suspension.

Under the MIF program, international specialists worked with local experts on an assessment of the impact that the legislative framework governing public services in the water, electricity, and telecommunications sectors would have on the consumer. Action plans and models were designed to assist with supervision of public services. The training program included expanding training to another 15 consumer support organizations in 11 states. Also, workshops were held for 76,900 students in 70 schools in São Paulo; 37,500 students in 50 schools in Rio de Janeiro; and 23,000 students in 20 schools in Curitiba. Lastly, TV campaigns reached 3.5 million residents, radio commercials over 600,000 individuals, and a final seminar was held to disseminate the lessons learned to society and special interest groups.

Thanks to the publicity that the project received, IDEC has been able to expand its membership base to over 40,000, publishes Consumidor S.A., a magazine that is the first of its kind in Brazil which tests and compares products and provides guidance to consumers. Since 1987 the NGO has filed over 1,000 class actions suits in defense of consumers, providing a consumer orientation service, publishes books and specialized courses, and has a website (<http://www.idec.org.br/>). At present, IDEC's annual budget exceeds US\$1,600,000, allowing it to continue its activities.

3.59 The MIF has also played a very additional role in some projects that the objective itself was the development of networks and the sharing of lessons learned. Although this is an area of future work, the MIF has recently started approving projects to support a network of universities to train regulators. Similarly, it approved a project to transfer lessons learned from Bogota to Panama City in the area of mass urban transportation. Although, these projects are still immature, preliminary results show a high additionality from the MIF.

G. Evaluability

- 3.60 This dimension examines the extent to which projects to support private participation in infrastructure were designed so as to yield measurable results and how often was the exercise of evaluation undertaken. The evaluation team reviewed if the indicators were appropriately defined, if an adequate level of resources was budgeted for project evaluation activities and if the evaluations provided valuable lessons learned that were later disseminated.
- 3.61 **Overall, the evaluability of private participation in infrastructure projects has been very low.** We have distinguished three elements of a project's evaluability: *baseline data* which is usually collected in feasibility or sector studies during the design stage of a project; *project goals* that are stated in measurable terms; and, appropriately selected *benchmarks* that are also stated in measurable terms. Only about 25% of the projects have fully developed baseline data, against which to compare project results and only 30% have established a complete set of goals against which to measure project results. Less than 10% of projects used any sort of benchmark to help in the definition of project goals and to guide project execution. Taken as a whole, less than 25% of all the projects met minimal evaluability criteria, meaning that they had adequate baseline data, goal indicators and project benchmarks.
- 3.62 **It was found that significant disparities between the self-reported ratings quoted in the PPMRs system¹⁸ and those assigned to each project over the course of this independent evaluation¹⁹.** Out of the comparison of ratings for 39 projects²⁰ for which we have both the ratings assigned to each project by OVE during the course of this evaluation, and those assigned by the PPMR system to the same projects we found that PPMR rating are over-optimistic in more than 60% of the cases, casting a doubt on the reliability of self reported data. The gap between the two classification systems is wider in regards to the achievement of development objectives (DO). About 62% of projects receive a more optimistic rating through the PPMR than they do through the OVE rating system. This may be a reflection of the methodology utilized by OVE in which other sources of

¹⁸ The MPPMR system was implemented starting in 2000 providing key step forward in terms of availability of information and instilling a culture of monitoring and evaluation in the IDB Group. About 21 projects to support private participation in infrastructure had already concluded execution by that time and therefore were never tracked by the PPMR system. In the years 2000, 2001 and 2002, the number of private participation in infrastructure projects tracked by the PPMR system was 32, 30 and 28, respectively.

¹⁹ The apparent difficulties experienced by the self-reporting mechanism utilized to build the MPPMR ratings become more evident as PPMRs are compared against the project-by-project ratings assigned during the course of this evaluation. It should be note that OVE utilized similar although not exactly the same concepts to rate projects. Effectiveness is similar the achievement of development objectives (DO) utilized in the PPMR. Efficiency is similar to the implementation progress (IP) utilized in the PPMR, as the strongest determinant of efficiency is adherence to the time schedule.

²⁰ This number of projects is the largest possible set over which such comparison could be made. This takes into account that no PPMR data exist for cancelled projects and that no OVE Rating could fairly be assigned to early stage projects.

sector information, such as coverage, tariffs, quality of service or market dynamics information were also factored in.

- 3.63 **There is also a significant gap in regards to implementation progress (IP), as 41% of the projects had received a higher mark through the PPMR system as they did via the OVE independent evaluation.** This may be a consequence of OVE's factoring in the analysis of potential risks and the lack of appropriate contingency actions to move forward implementation. In that sense, OVE ratings may be a sort of leading indicator of future challenges to come, as the implementation calendar progresses and imminent difficulties, not appropriately disclosed by executing parties in the PPMRs, start coming into play.
- 3.64 **Significant delays in project execution were widespread, but rarely triggered an investigation or evaluation on their real causes.** Even though almost 80% of the projects in this group suffered delays during execution, there was no system in place to trigger mandatory evaluations over those projects whose delays exceeded a pre-agreed threshold. Delays were reported utilizing the normal monitoring procedures, namely PPMRs, but often highly global explanations were accepted for the delays. In addition, the few evaluations conducted on significantly delayed projects did not have enough latitude to produce a fast reassignment or cancellation of the remaining MIF resources.
- 3.65 **The evaluation component of MIF projects seem to have be treated more as an administrative requirement than a useful management and learning tool to advance institutional knowledge and promote lessons learned in future project design.** Evaluations were often kept in the country offices files without any further dissemination. This evaluation effort of OVE contributed to collect many of them that were not available before, even some that were officially destroyed in Country Office files.
- 3.66 **No project in this area has undertaken any sort of impact evaluation, leaving MIF with an incomplete understanding of the aggregate results of the interventions or their medium-long term implications in a sensitive area.** Despite the relative availability of information in the area of infrastructure development, only a limited amount of resources was originally allocated for evaluations, and less than 5% of the projects conducted anything more than a summary project completion report. This is especially wasteful not only because of the potential reliance on public information, but also because the typical MIF executing agency in this group of projects is uniquely positioned to conduct this type of evaluation as part of their normal business, as regulators or planning entities.

H. Summary of Project Performance

- 3.67 The projects in this group had been highly relevant to the development of the private sector. In some cases, like in C and D countries, the immediate, direct effects of the MIF projects were very significant in terms of GDP and number of

beneficiaries, dealing in some cases in areas whose importance was comparable to 10% or more of the GDP and the project reach had consequences over millions of beneficiaries. Effectiveness and Project Evaluation characteristics had also been weak. Low effectiveness was particularly noticeable in the achievement of an adequate regulatory framework that would assure the development of effective and efficient infrastructure services. This may have been a reflection of the complexity of the tasks at hand, but has necessarily to be reviewed in search of improvements and clarification as to when MIF assistance could be effective given the influence the political decision processes affecting the reform. So far, independently of the causes, the fact is that many MIF projects in this group fail to meet a good part of what they set out to do and the evaluation mechanisms are incapable of tracking results preventing an open discussion on potential improvements.

- 3.68 The issue of sustainability of the reforms that allowed private sector participation certainly is the context under which the success in key areas such as regulation would play a key importance. Here is important to note that the some MIF projects innovated with new approaches, particularly in the strengthening of the weakest links in the process, such as the protection of the consumer, smaller operators, and enhancing transparency. The additionality of the MIF is a key challenge in this capital-intensive area, where the MIF is only a small player, but some components of operations and projects allowed to identify promising areas. Any further activity of the MIF in this area is called to a more selective approach key functions building upon its previous network of institutions, using regional synergies and supporting integration processes, generating more information for benchmarking and legitimacy, and providing a solid basis for protection of the consumer and enhanced competition in areas when feasible.

IV. SUMMARY OF FINDINGS AND CONCLUSIONS

- 4.1 This chapter presents a compilation of the findings and conclusions derived from the evaluation of MIF activities to support private participation in infrastructure. The findings fall into two categories: specific and general. Specific findings are those related to the thematic areas of private participation in infrastructure. The general findings are related to administrative or procedural matters that affect MIF project activity in general.
- A. Support for Private Participation in Infrastructure**
- 4.2 Infrastructure based services are central to the activities of all households and businesses and a major factor in economic growth, poverty alleviation and environmental sustainability.
- 4.3 **According to some estimates²¹, infrastructure investments needed in the LAC region as a whole could amount to 4 to 6% of GDP annually. Available investment capital has been insufficient, covering an average of only 2 to 3% of regional GDP.** The largest share of these requirements is represented by the electricity sector, which would need about 40% of that annual investment. Roads follow in order of importance, with a requirement of about 30% and water and sanitation and telecommunications with a requirement of 15% each one.
- 4.4 **Private investors have been concentrated in a few countries and sectors.** For example they privileged the telecommunications sector, which received about 43% of total private investment in infrastructure in the LAC region. Private operators also invested heavily in the energy sector, mainly in electricity that accounted for 32% of annual private investment. In contrast, water and sanitation and roads were much less attractive to the private sector, receiving only 5 and 20% of private investment respectively.
- 4.5 **As part of the “Washington Consensus” in the 1990s, the focus of most of the action of multilaterals has been “increased private sector participation”, the mean, and much less so with the end, i.e. better services, more accessible and more affordable, which in turn will have a positive impact on private sector productivity.** However the debate has recently focused on more substantive long-term effects, such as the impact on economic growth, employment, poverty reduction and the environment. In these areas, widely accepted conclusions are not yet available, however, initial assessments show worrisome issues of justified public sentiment against some aspects of privatization, stated in Chapter 1. The strengthening of the regulatory framework seems like the main task to achieve the desired gains, while minimizing the negative aspects of privatization.
- 4.6 **However, the creation of adequate regulatory institutions and the compromise with results is a lengthy process that requires a long-term**

²¹ Marianne Fay, op. cit.

commitment by the countries, the IDB Group as a whole. It is a process of institution building that requires a clear definition of final objectives, a good identification of weaknesses and deficiencies and well defined action plans. Without adequate institutional strengthening, the bargaining power of operators has resulted much more superior than that of regulators. This was accentuated by the unexpected concentration of potential private bidders interested in participating. For instance, fewer than ten international companies were potential participants in all bids for the concession of water and sanitation services in large cities across the region. A similar situation was repeated in other sectors and also happened with public sector companies that still provide the majority of services of the region.

- 4.7 **The MIF and the rest of the Bank Group should be conscious of the potential benefits of strategic coordination, advancing towards more synergetic efforts with other parts of the IDB Group.** Efforts could be made in the direction of greater coordination of the MIF and the rest of the Bank Group, and particularly with the PRI and the IIC. One way to do that could be the provision of continuous specialized technical support for this group of projects, both at the design and implementation stages and gaining insight from them on specific bottlenecks and issues to be resolved to improved private participation. Additionally, given the innovative nature for the Bank Group of some of the new types of areas led by MIF, new opportunities for private sector financing could arise and be sequenced (i.e. mass urban transportation, aviation, consumer protection). This value added service could also support and interact with the Regional Departments in the preparation of specific country and regional strategies, identifying key opportunities for the MIF in closer coordination with PRI and IIC, and regularly visit executing agencies to review individual projects, helping in findings solutions to the new issues that may appear during execution.
- 4.8 **As a leader in promoting private participation, MIF could support the generation of appropriate information regarding the availability, price and quality of infrastructure services, so that the greater transparency benefits users and existing and potential investors. Such consistent and complete working information set is unavailable on a region-wide basis, hampering the visibility of potential opportunities for the private sector as well as policy-making and regulatory activities.** Key performance indicators of infrastructure services in terms of quality, price, capacity and coverage could be critical for benchmarking efforts of utilities regulators in the region, promoting efficiency and transparency of public services delivery. Consumer organizations and policy makers would be also great beneficiaries of this type of endeavor. In addition, MIF could consider further support, not only to the regulatory entities, but also to the planning areas within government, e.g., Ministries of Planning. These areas would be the most appropriate venues to undertake major corrections and/or global optimization of the sectors, which would in turn lead to new areas for

private sector participation²². As was noted previously, in all countries there is a growing popular concern with the participation of private sector in infrastructure and this is in part motivated by the lack of information and transparency²³.

- 4.9 **MIF should continue with its policy of expanding activities in C and D countries, particularly in establishing adequate regulatory institutions and in attracting private investors, in general due to its smaller size and special needs.** In several aspects, the infrastructure sector reforms have copied what other more developed countries or much bigger markets in the region have implemented, without adequately adapting them to size of markets, the general weakness of the government and the lack of adequately prepared human resources. MIF activities can make an important difference in these countries if the strategic focus recommended above is followed.
- 4.10 **In addition, it must strive to continue its highly innovative projects in countries of all sizes but being more selective in areas of high MIF additionality, given its relatively smaller size, novel characteristics or relative scarcity of funding, and leveraging upon its network of institutions from previous experiences. The MIF has already made inroads into areas that are in the frontier of private participation in infrastructure.** For instance, MIF could consider further participation in: (i) Strengthening of regulation at the local level and/or of small local operators; (ii) Application of concession tools to other areas of infrastructure, such as health care, etc; (iii) Promotion of alternative means of private sector participation, such as management contracts or local level concessions; (iv) Coordination of regulatory activities among countries involved in integration schemes; or (v) some thematic areas like Consumer protection, Training of regulators, Urban transport, Solid Waste Management, among others.
- 4.11 **There is a general deficit in the protection of the weakest links in the opening of infrastructure services for private sector participation.** For example, there were only a few but relevant MIF projects aimed at protecting consumers, workers or small and medium enterprises, as it was the case in the Consumer Protection Program in Brazil, the Employee Ownership Program in Mendoza or the SME Bus Operations in Panama. This was also the case, even with informal workers, as the MIF set out to address the concerns of informal garbage recycling people in El Salvador, in the context of a renegotiation over a Sanitary Landfill in San Salvador. Even though those weakest parties were of concern to the Bank Group, the MIF played a significant role in delivering effective options to them and in improving their level of participation.

²² ADERASA, a regional association of water regulators initially backed by a MIF project in Colombia, has compiled a list of about sixty key indicators for the water and sanitation sector that would help shed light on the situation of the sector. Such uniform and systematic database is still unavailable from any other source, requiring a limited amount of resources that this association is struggling to raise. The same situation repeats itself in most other sectors.

²³ As indicated above, another important factors are the lack of transparency in the transactions and the existence of non-equitable designs, where the interests of consumers and national objectives have not been defined adequately.

- 4.12 **There is a continuous of options and tools that can be used to involve private sector in the construction and delivery of infrastructure related services. For example, MIF projects have encountered numberless difficulties in its quest to privatize water and sanitation services across the region.** However, viable arrangements are being tried by many water utilities in the region, involving less radical levels of participation, such as concessions to manage the commercial areas in exchange for a portion of the improvements in accounts receivables. The MIF should explore the development of new ways of private sector participation which allow this type of flexibility at the design stage, without losing the discipline to guide implementation with a defined, specific goal.
- 4.13 **Harmonization and support of key aspects that promote the convergence of regulatory aspects and regional regulatory institutions would provide promising benefits, particularly for smaller countries.** The IDB Group is heavily involved in regional infrastructure integration processes, such as the Regional Infrastructure Integration of South America (IIRSA) initiative and the Puebla Panama Plan. With the exception of power in Central America, the necessary coordination of regulatory schemes has not been adequately examined nor promoted. Both the PPP and the IIRSA initiative have developed a rich diagnostics and plans of action that could facilitate the identification of specific areas of high additionality for MIF intervention in the future. MIF is financing a project to harmonize petroleum purchases in Central America and could take a leadership role in the regional infrastructure integration area. Finally, MIF has been instrumental in developing new approaches that involve the private sector in urban transport in Chile, Panama and El Salvador. These experiences could be expanded to other countries of the region, since almost all of them face similar problems.
- 4.14 **An area also of great potential for MIF use is the development of new financial instruments that would allow long-term funding mobilization in domestic markets, particularly in domestic currencies.** This could be explored in coordination with all the rest of the Private Sector arms of the Bank Group, calling for synergies and sharing experiences in different areas. This development should be closely developed in partnership outside the Bank with private investors, capital market regulators, local pension funds, among others, using as an example successful interventions pursued in Venture Capital and Microfinance.

B. The Identification, Design, Implementation and Evaluation of Projects

- 4.15 **The effectiveness of MIF interventions will be greatly increased if individual projects are part of a long-term sector strategy to create adequate regulatory institutions or examined from the perspective of their overall impact on the promotion of private sector participation.** Although most of the projects that have been evaluated are individually highly relevant, they appear not to have been the result of a comprehensive long-term strategy to create adequate conditions for private sector participation in infrastructure. Mostly the projects are responses to

specific problems and needs, as identified by Bank's staff either from headquarters or field offices.

- 4.16 **While the data has not allowed us to measure the total time between the presentation of a request and first disbursement or project completion, this is undoubtedly a lengthy process²⁴. The Lines of Activity had been effective in reducing 60% the delay to get the project started (first disbursement).** Private participation in infrastructure is a fundamental reform that must be implemented when political “windows of opportunity” are present. These opportunities may disappear if no action is taken immediately or if there is excessive delay in perceiving concrete results from the reforms. There were also large delays in the execution of this group of project, with actual execution surpassing the originally envisaged time on the average by 24 months. The existence within MIF of previously approved “lines of activity” was supposed to shorten the period of preparation of new projects and simplify the execution, but there is no evidence that this has effectively happened.
- 4.17 **Successful “line-of activity” projects seem to share a set of characteristics that may shed light on potential areas for improvement.** First, the purpose of the line is defined very narrowly, as in the aviation case, so that approval is streamlined due a good amount of the research and preparation work already been done. Second, strong ownership and adequate incentives have not yet been provided for the rest of the Bank Group to have a vested interest in MIF line of activity projects within the infrastructure area. These types of incentives are present in MIF line of activity projects in other areas such as microfinance. Third, timing is crucial in order to capture the “political window” that allows further private participation in infrastructure. The evaluation has found no evidence that the lines of activity had reached anywhere near the degree of flexibility that mechanisms such as the one utilized in the past in the Bank for the Fund of Special Operations, by which “Short Term Missions” consisting of the assistance of specialized consultants for a total of less than \$30,000 could be approved quickly by the management of the Bank and contracts were expeditiously made by the Bank on behalf of the executing agencies. According to the evaluation, there is demand for similar fast disbursement mechanisms and MIF could adapt approval levels, themes and participants to suit its interests.
- 4.18 **The policy of MIF to avoid the financing of second stages of a project has lead to the design of more complex projects that are larger than necessary.** MIF should recognize that the process of building adequate regulatory framework and institutions is a long-term process that is better supported by a gradual approach that may require additional assistance, form the MIF or some other parties.

²⁴ The date when a request is presented to the Bank is not recorded. The average time for this group of projects between the registration of the request and first disbursement is 23 months and between registration and project completion is 75 months.

- 4.19 **The evaluation revealed that in most projects the goals and objectives were too general and did not lend themselves to future evaluation. In many cases there is only a definition of outputs while in others the objectives are too broad and general. This is an area of project design that should receive more attention.** Project objectives should be clearly identified and the complementary actions that are necessary to achieve them must be clearly spelled out in the documents. In very few cases the risks were identified and in those cases there was a tendency to minimize them, when it is well known that the projects are all dealing in a risky field of activity.
- 4.20 **Project effectiveness requires a clear definition of the issues to be resolved and of the expected results, keeping in mind that private participation is only a mean to improved quality, access and affordability of services. That should be measured.** Executing agencies that take a leading role in defining these issues and results have proven to be significantly more successful. When issues were not well defined or were identified mainly by the Bank or outside experts not working directly within the beneficiary institution, the results were almost always less than satisfactory.
- 4.21 **Effective MIF projects in the area of infrastructure shared a set of characteristics. They tend to have a thorough identification of risks, which are understood and accepted by the MIF Donors Committee.** Moreover, highly effective projects are usually built completely around risk mitigation, therefore all their actions are directed towards mitigating resistance to reform from the main stakeholders. **Finally, highly effective projects require during all phases adequate political support or the ability to adapt to changes in such support. Consumer and worker support also plays an important role that needs to be factored into all MIF projects in the area.**
- 4.22 **The quality of executing teams is a distinguishing factor. In projects with lean, highly qualified and dedicated executing teams it is not uncommon for team members to perform on their own many of the tasks initially planned for consultants. This deserves strong attention since eligibility and should be confirmed when projects are prepared.** Good executing generated significant cost reductions and the focusing of consulting advise on high value added activities. Secondly, highly efficient projects tend to engage only specialized advise on a narrow, critically important area. Finally, highly efficient projects seek standardization in order to amortize the costs. This was the case in concessions programs like those in Uruguay and Chile, where the tools were applied to transportation, energy and water and sanitation services.
- 4.23 **The quality of executing agencies depends on the selection process. Executing agencies that are thoroughly analyzed prior to being engaged as executors tend to be more successful.** However, in general there is lack of staff adequately trained on regulatory matters. Training programs should be incorporated in all projects that deal with regulatory aspects, unless MIF decides to undertake this as a separate activity available for a whole group of countries.

The advantage of this last solution is that it will eliminate duplication and allow for the use of existing synergies, but it will be more complicated to implement. Several executing agencies are overburdened with other activities and the MIF project suffered the spillover effect of this fact. In these cases it is better to include a complete analysis of the capacity of the executing agency to undertake all its responsibilities, but this is seldom done. The fact that executing agencies are often the only entity authorized by law to conduct this type of project does not exempt project preparation teams from arbitrating all possible direct and indirect means to maximize the probabilities that team members will be selected based on their merits and that they will be granted job stability and adequate training.

- 4.24 **Operations that deal with sector reforms and regulatory aspects need to be designed with flexibility to accommodate the inevitable changes that will occur during execution.** These are issues where not all difficulties and problems can be envisaged from the beginning and unexpected circumstances are likely to appear. Delays in project execution can also lead to changes in project components, since certain aspects of the reform process should not be postponed and priorities will inevitably change as time passes by. While in practice there was flexibility in some projects, this is a matter that should be considered in the design of all new operations.
- 4.25 **In general there was little technical follow-up of the implementation of this group of projects, since specialists in the Field Office dealt primarily with administrative and procedural issues.** Technical support is needed and synergies could be obtained if that supports helps to share lessons and experiences among similar projects in the region. Significant delays were common, without them triggering any sort of mandatory evaluation to be conducted by an independent party and with the ability to redefine the project objectives.
- 4.26 **Moreover, MIF projects should not be considered as independent and self-sufficient, as their complementarity with other actions of the IDB Group has emerged as a strong factor for success.** Although there are similar projects in different countries across the region, we have found very little cross communication among projects and almost no sharing of experiences. MIF should be more active in this area and promote across country meetings of executing agencies and sector regulators. MIF is in an ideal position to play an important role in the creation of a “bank of knowledge” on infrastructure sector reforms and regulatory strengthening and in the dissemination of best practices and lessons learned. In some sectors, such as electricity, telecommunications or water, regional organizations of regulators have been organized, making them potential candidates for MIF to engage as executing agencies for these purposes.
- 4.27 **More than 50% of MIF funding in this area was destined to pay for consulting services. However, with the available information it is difficult to provide an overall evaluation of the quality of the consulting services received by the different executing agencies.** The agencies should be asked to provide feedback and rank the quality of the consulting services received and they

- could be an important departure point to avoid future duplication of mistakes. Since there are not many firms providing the required specialized services and some of them have intervened in several projects, it would be useful to the overall process of reform in the region to distribute information about past experiences with specialized firms to newcomers. Alternatively this could be done in a more informal manner through the promotion of regular meeting among executing agencies where this information would be shared.
- 4.28 **Having already approved 86 projects in the area of infrastructure covering all LAC member countries, the MIF could strive to distill and propagate lessons learned to improve the design and execution of future initiatives.** According to the evaluation, no mechanisms were in place to share lessons learned. Project knowledge resided with the specialists preparing and implementing the project and so far, no systematic use has been made of the network of specialized professionals and the contacts within most regulatory institutions in the region. As part of the evaluation a detailed contact list of experts has been prepared for MIF to utilize in potential future initiatives, such as collaboration groups, information gathering efforts or training programs.
- 4.29 **The Bank/MIF need to improve the evaluability of projects, facilitating the application of the new PPMR system and the execution of Intermediate and Final Project evaluations.** Project goals should be explicit, well defined and subject to measurement. The MIF should ensure that every project budget is provided with funding for monitoring and evaluation and every project should be evaluated. These results should be fed back into the monitoring system, making them readily available in the Intranet and distributed among interested parties. Evaluation and dissemination of results and experiences is important given the innovative character of most operations, particularly in specific sectors and among emerging networks (i.e. associations of regulators recently formed). Even specific operations with the specific purpose of sharing lessons, training, benchmarking and dissemination of information should be used, using leading exemplary cases and the network of former executing agencies as the institutional platform.
- 4.30 **Except for the Aviation Safety Line of Activity, all other lines of activities have experienced a low utilization.** According to this evaluation, this seems to reflect, not a lack of interest or relevance of the lines themselves, but operational difficulties in getting projects approved. Even though it approved the lines, the MIF has been reluctant to qualify projects arguing that the operational departments would utilize the resources with a low level of additionality. However, line of activity projects, when approved, had usually been very effective limiting the risks and resources committed by the MIF to achieve certain goal. In addition, line of activity projects tend to be narrower and better defined, including in the aspects related to the indicators used to measure its performance. In that sense, lines of activity form an integral part of a balanced MIF portfolio.