

IEG EVALUATION BRIEF

About IEG-IFC

IFC's Independent Evaluation Group (IEG-IFC) independently evaluates IFC's investment and technical assistance and advisory operations and reports its findings to IFC's management and Board of Directors.

About Evaluation Briefs

Evaluation Briefs are summaries of IEG-IFC reports based on country, sector, or thematic evaluations. The series also includes original IEG-IFC research on topics of interest to IFC staff.

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IFC's Experience in the Transport Sector

IFC's Independent Evaluation Group (IEG-IFC) reviewed IFC's investments in the transport sector between 1990 and 2005. IEG-IFC found that:

- Between fiscal years (FY) 1990 and 2005, IFC made 125 transport commitments supporting projects with a capital value of \$14 billion, investing \$2.2 billion for its own account (6 percent of the commitments) and mobilizing \$1.4 billion of B-loans.ⁱ
- Since 1998, when IFC made transport a priority as part of a strategy to support infrastructure generally, it has succeeded in growing its transport investments in absolute terms and as a proportion of the portfolio.
- Transport projects achieved a significantly higher proportion of positive development outcomes compared to other sectors in IFC.ⁱⁱ
- Returns on IFC's investments in transport projects were lower than average during FY90-05. Since FY06, the net profitability of the sector has improved.

IFC has grown its investments in transport

Since 1998, IFC has prioritized its support for transport projects in developing economies. In the FY1990-05 period, IFC supported transport projects with a total capital value of \$14 billion. As part of its support, IFC committed \$2.2 billion of funds for its own account, split approximately 90 percent as loans and 10 percent as equity. In addition, IFC raised \$1.4 billion in the form of B-loans from other lenders, a high mobilization rate relative to other sectors. The balance of project funds were raised by sponsors and other private investors. Transport investments represent an increasing proportion of IFC's portfolio, accounting for 4.1 percent of commitments in the period FY90-95, 6.1 percent in FY96-00 and 6.9 percent in FY01-05 (see Figure 1 and Table 1).

The proportion of IFC transport investments dropped between approval and commitment (3 percent) was much lower during the 1990-05 period, relative to all other sectors (16 percent). Cancellations of commitments were also lower for transport (0.3 percent vs. 3.7 percent).

Two-thirds of IFC's transport investment has been in LAC...

IFC's transport portfolio has a strong bias towards Latin America and the Caribbean (LAC), which ac-

counts for 67 percent of commitments compared to 37 percent for other sectors (see Figure 2). By extension, IFC's transport commitments are relatively under-weighted in other regions, although there has been a noticeable increase in the Europe and Central Asia (ECA) region since 2002.

This pattern of concentration in LAC, and more recently ECA, reflects the progress in these regions with privatization of transport infrastructure, contracting with the private sector for the delivery of transport services, and developing the institutional and regulatory frameworks to support private investment in the sector. Also, in middle-income countries generally—and the large economies in LAC and ECA are no exception—one of IFC's roles has been to help improve the transport sector and stimulate export-led growth through trade. As a consequence, 92 percent of IFC investment in transport has been in middle-income countries and of that, 72 percent has been to improve trading infrastructure as opposed to mainly domestic transport systems.

...while much of its technical assistance has been focused in Africa

IFC has also supported the transport sector with technical assistance and advisory services (TAAS) delivered by its Trust Funds (TATF) and Advisory Service De-

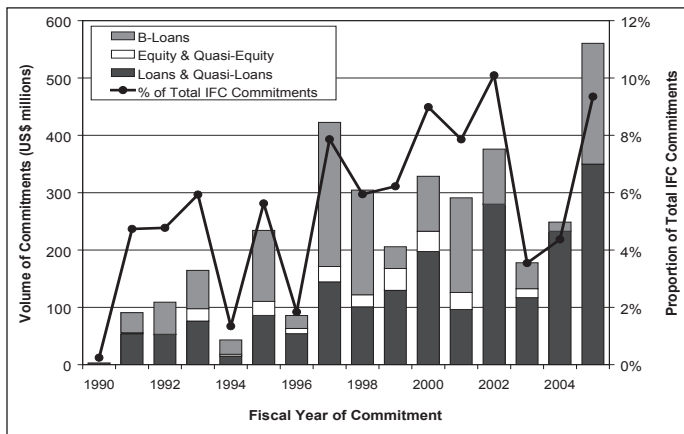
IFC'S EXPERIENCE IN THE TRANSPORT SECTOR

partments. Between FY90 - FY05, TATF supported 39 projects with a total cost of \$5 million—this was about 3 percent of total TATF activity over the period in terms of number and cost.

Just over half of these TATF projects (40 percent by cost) were in frontier countries, mainly, in the Africa region. In contrast to LAC, private participation in transport infrastructure in Africa is relatively low, and so establishing the right legal and regulatory framework is an important precursor to increased private investment in the future. Typically, TATF projects were related to privatizations and feasibility studies on private operation of ports and shipping, air transport, and cargo facilities.

IFC also completed 13 advisory service assignments in transport, accounting for 16 percent of total advisory activities. Again, slightly more than half of this advisory work was in Africa, and nine of the assignments were in airlines and airports.

Figure 1: IFC's investment in transport has been growing in volume and as a proportion of its commitments



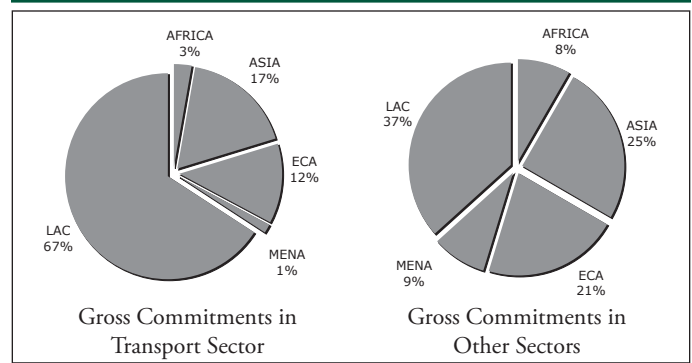
IFC's transport investments have yielded strong development impact

Among a sample of 22 IFC transport investments evaluated between 1996 and 2004, 19 achieved high development outcomes (86 percent by number and 75 percent by volume), while 15 achieved high investment outcomes (68 percent by number and 58 percent by volume).^{iv} Fifteen (68 percent by number) achieved “win-win” outcomes, indicating that at the individual investment level they made a satisfactory-or-better contribution to devel-

Table 1: IFC has supported a variety of projects within the transport sector

Sub-Sector: (Figures in US\$ millions)	FY1990-1995		FY1996-2000		FY2001-2005	
	No. Projects	Net Commitments	No. Projects	Net Commitments	No. Projects	Net Commitments
Airports and Airlines	0	0	0	0	7	147
Passenger and Freight Rail	2	26	5	52	9	202
Shipping Companies	7	91	2	48	8	124
Transit & Ground Passenger Transport	0	0	3	100	1	37
Oil and Gas Transport or Pipelines	8	105	3	87	2	65
Port & Harbor Operations	8	56	16	147	14	280
Highway Operations (including Toll Roads)	1	14	8	190	2	64
Other Support Activities for Transport	1	40	4	109	8	185
Storage and Warehousing	1	6	3	25	2	18
TOTAL	28	338	44	758	53	1,121

Figure 2: Most of IFC's investment in transport has been in LACⁱⁱⁱ



opment in a country and yielded a satisfactory-or-better gross profit contribution towards IFC's financial capacity for future development outreach. These results compare favorably to projects in other sectors across IFC (see Figure 3).^v

The development impacts of IFC's projects are evaluated based on multiple attributes of their contribution to a country's economic development, and ratings are based on a synthesis of their performance across four underlying indicators: commercial success; economic sustainability; environmental and social impacts; and contribution to private sector development. The evaluated transport projects supported by IFC have yielded better than average impacts in all four indicators.

In particular, these projects have made strong contributions to economic growth; their economic rates of return have been substantial and in all cases have exceeded their financial rates of return indicating that they have generated benefits for other members of society beyond the project company's owners and financiers. On average, for each \$1 invested, the evaluated projects returned \$1.50 in financial benefits and \$2.25 in economic benefits.

These projects have also tended to have lasting, positive impacts on the enabling environment. An example of such a project is a concession toll road between two large cities in a South American country. Large economic benefits were unlocked by upgrading the road and enabling more efficient commercial transportation between the two cities, plus improved safety measures resulted in a significant drop in accident and fatality rates. Moreover, the project helped improve the structuring and administration of subsequent concession contracts in the country.

IFC supported Brazil's port privatization program

Brazil's ports had long suffered from low productivity, high operating costs and inadequate maintenance. Handling charges in Brazil were roughly double that of international ports, and these high charges and inefficiencies were estimated to cost Brazilian exporters up to US\$5 billion per year in lost export opportunities. As part of its program to increase the competitiveness of the Brazilian economy, the Government of Brazil passed a ports modernization law in 1993, which transferred port administration to state port authorities and required that the private sector operate the ports. IFC has assisted in this privatization process by providing funding to the new private operators for upgrading and expanding port facilities. For example:

- IFC supported the rehabilitation and expansion of the container terminal at the Port of Rio Grande, following the award of a 25-year lease in 1997 to a private consortium. IFC helped the company purchase four cranes, expand the length of the quay and repair and upgrade existing facilities. The \$50 million project has enhanced transport logistics for Southern Brazil, resulting in increased exports and higher local employment with more skilled and better-paid jobs. The private operator introduced new technology and know-how and achieved a 234 percent increase in productivity over a five year period, increasing container moves from 80,000 per annum to over 300,000, well ahead of forecasts.
- The Port of Salvador in the State of Bahia in Northeast Brazil

was privatized in 2000 with the award of a 25-year lease to a private company. IFC arranged funding for part of a \$20 million project to purchase two portainers and container handling equipment, paving of the container storage area, and construction of a warehouse and administration buildings. The private operator played an important role in increasing overall container volumes by nearly 300 percent between 2000 and 2005. As a successful project in a relatively poor and less developed part of Brazil, it played a vital role in increasing exports from the region, attracting other firms into the area (including Continental, Bridgestone, Pirelli, Monsanto, and Ford), and inducing follow-on investments in local transportation logistics.

- The government-built (and previously unused) container and steel products terminal of Sepetiba is being operated under a 25-year lease awarded by the Port Authority of Rio de Janeiro in 1998. IFC is assisting the new private operator in a phased \$140 million redevelopment of the container terminal including the purchase of seven cranes, conversion of an existing dolphin berth into a straight quay, and the construction of a rail connection. Due largely to an intense competitive reaction from the neighboring port of Rio, Sepetiba's operations in terms of container moves and profitability have not yet met expectations. The project has, however, helped reduce congestion at ports across Southeast Brazil, and the increased competition has resulted in a dramatic drop in tariffs for importers and exporters.

Net returns on IFC's transport portfolio were lower than average over the period

Whereas the development impacts of transport projects have been strong, the returns on IFC's investment portfolio in the sector (10 percent of commitments) during FY90-05 lagged those across IFC as a whole. Overall, transport investments yielded a net profitability rate of 1.1 percent after swap effects compared to 3.4 percent for IFC overall. Since FY06, however, the net profitability of the transport sector has increased to 2 percent of average outstanding investment.

The lower profitability in FY90-05 was due in part to IFC having made relatively few equity investments in the sector when,

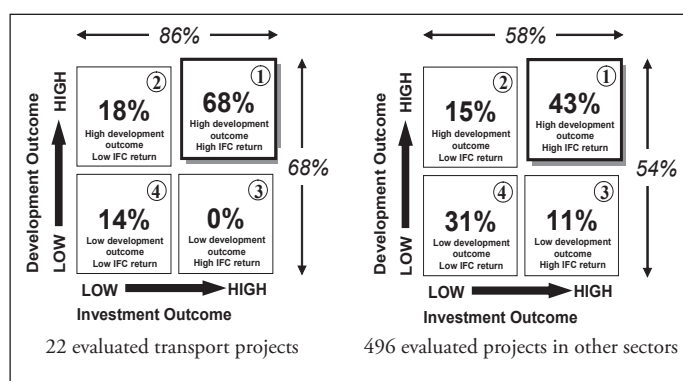
across all sectors on average, equity investments tended to be the main contributors to IFC's profits. Moreover, where transport projects involved concessions, the complexity of the contracts and lead time for IFC appraising and structuring its investment resulted in high administrative costs and further pressure on profitability.

Lessons from the evaluated projects provide further insights on the pattern of development and investment results in the transport sector:

- *Growth in traffic may be slower than forecast:* Traffic or volume forecasts prepared by sponsors may have an upward bias, possibly as a result of the competitive pressure to win a concession and, possibly, to make the project more attractive to investors. In practice, actual throughput can be lower than forecast or require a longer growth period to reach target levels. Hence, the income generated may not be sufficient to service the company's loans and/or equity income for investors will be delayed (depressing rates of return). On the other hand, the benefits of improved services, faster journey times and increased safety are realized immediately by users and the economy.

- *There may be competing transport infrastructure:* Many projects are expected to thrive by offering new, more efficient infrastructure and services to customers. Container ports are a good example of where there can be an unexpected and strong competitive response from existing nearby ports, which may be state-owned or privately-operated. Competition may take the form of substantially lower, often unus-

Figure 3: The outcomes of evaluated transport projects compare favorably to those in other sectors



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Table 2: IFC investments in transport yielded a net profit overall

Net profitability for investments active in FY90-05 (shown as percent of outstanding balances)	Transport Portfolio	ALL IFC
<i>Loan portfolio:</i>		
Average loan outstanding balance	100%	100%
Interest received	6.4%	7.1%
Fees received	0.7%	0.7%
Loan loss provisions	(3.2%)	(1.9%)
Cost of funds (after swap effects)	(2.5%)	(3.4%)
Administrative expenses	(2.3%)	(2.2%)
Loan net income	(0.9%)	0.4%
<i>Equity portfolio:</i>		
Average equity outstanding balance	100%	100%
Dividend income (and equity fees)	3.9%	6.0%
Realized gains on sold/closed investments	6.0%	5.3%
Administrative expenses	(2.4%)	(2.4%)
<i>Active investments:</i>		
Current valuation, net of provisions	8.7%	19.4%
Original cost or disbursement	(7.2%)	(13.7%)
Unrealized gains on active investments	1.5%	5.7%
Equity net income with unrealized gains	9.0%	14.6%
Total net income (loss) with unrealized gains excluding profit from Treasury operations.	1.1%	3.4%

tainable, tariffs or customer tie-in arrangements, and while it may not last for an extended period of time, it can adversely affect IFC-supported projects in the early years of operation and cause financial stress. Customers, however, benefit straight away from reduced prices and longer-term—from improved services.

■ *Concession contracts may not provide the private operator with the protection envisaged.* Robust traffic projections and strong sponsors may not be enough to mitigate the negative impact of major changes in government policy, particularly in a country where the legal and regulatory framework is not well developed. Although concession contracts may allow the private operator to raise charges to end-users to protect it from inflation or devaluation, such terms may be unenforceable if they are politically unpalatable, for example at a time of economic crisis.

Management Comments

Management recognizes the high development impact of the transport sector. IEG-IFC's finding of strong development outcomes in IFC's transport investments is a confirmation of IFC's strategic focus on supporting private sector involvement in this area. The performance of IFC's transport portfolio reflects success in sub-sectors, which benefit from market conditions and access to foreign currency revenues. It also highlights the higher risks present in markets with underdeveloped regulatory environments and in sub-sectors with mismatch between local currency revenues and foreign currency obligations. Management continues to see the transport sector as a priority for widening IFC's development impact. Looking forward, Management considers it important that IFC maintains investment activities throughout the sector (including difficult sub-sectors) in close coordination with World Bank Group operations (such as technical assistance on business environment reform). IFC will also look for opportunities where careful project selection and appropriate structuring (alternative instruments to straight equity) can bring greater development impact and above-average returns.

END NOTES

ⁱ When IFC syndicates a loan, IFC is the sole contractual lender, acting on behalf of both itself and so-called B-loan participants. Participation agreements are signed between IFC and each participating financial institution in the B-loan. The participant's relationship with the borrower is, therefore, indirect through IFC, with IFC as the sole lender of record and administrator of the loan. The participant's involvement, however, is known to the borrower and is included in any publicity for the transaction.

ⁱⁱ Each year IFC's investment departments evaluate a random sample of investments that have reached early operating maturity and rate each operation on nine indicators. IEG-IFC independently reviews these reports and project files, and verifies each rating (or re-rates it as appropriate) to ensure that evaluation standards are applied consistently throughout IFC. The results described here comprise 22 projects in the transport sector evaluated from 1996 to 2004, which is a representative sample of approximately 50 percent of the 43 qualifying investments approved and subsequently disbursed by the Board between 1990 and 1999. Qualifying investments are those made in new or follow-on projects and exclude restructurings.

ⁱⁱⁱ Key to regions: LAC—Latin America and the Caribbean; MENA—Middle East and North Africa; ECA—Europe and Central Asia; ASIA—South Asia and South-East Asia; AFRICA—Sub-Saharan Africa.

^{iv} Note that investment outcome is a measure of gross profit contribution quality at the level of an individual investment. It is sample-based and does not, therefore, signify overall portfolio profitability. As is common for any investment portfolio, the overall profitability of IFC's investments in transport is driven by large gains or losses on a small number of investments.

^v The performance differences that are remarked upon in the text are statistically significant, even based on the relatively small sample of evaluated transport projects. Some caution should be exercised, however, in quoting success rates given that a change in the rating of one project would account for an approximate 5 percent swing in the overall success rate.

Resources

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