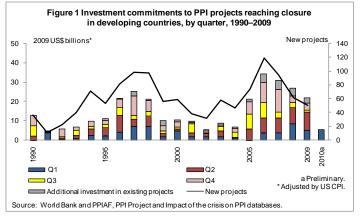
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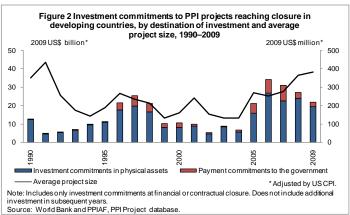
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### Private activity in transport slows down in 2009, but remains concentrated in road projects

Private activity in transport declined for the third consecutive year in developing countries. Investments fell by 20% and the number of projects dropped by 19% in 2009 compared with 2008, according to recently released data from the Private Participation in Infrastructure Database. New private activity in transport was concentrated in road projects, and in a few large developing economies such as Brazil, India, and Mexico.

In 2009, 50 transport projects with private participation reached financial or contractual closure in 20 low- and middle-income countries. These projects involved investment commitments (hereafter, *investment*) of US\$19.2 billion. Transport projects implemented in previous years received additional commitments of US\$2.5 billion, bringing total investment in 2009 to US\$21.7 billion. This investment level represents a 37% decline from the peak reached in 2006 (figure 1). Lower investment in new projects accounts for the investment decline compared with 2008. By destination, lower investment in physical assets explains the drop in total investment compared with 2008 (figure 2).





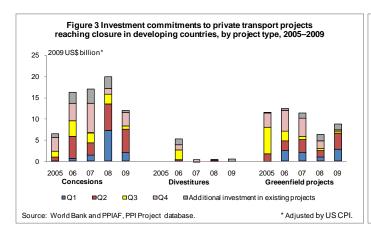
Activity by number of projects experienced a more pronounced decline than investment, falling by 58% compared with 2006. The average project size grew from US\$242 million in 2005 to US\$383 million in 2009, while the median rose from US\$50 million to US \$192 million.

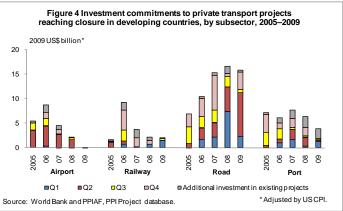
The private activity was concentrated in the first two quarters of 2009, which accounted for 75% of investment in new projects and 64% of new projects. Similar concentration occurred in 2008 before the full onset of the global financial crisis. The backlog of projects from the second half of 2008 and the easing of financial constraints in the first half of 2009 (compared with the second half of 2008) may partially explain the concentration of PPI activity in the first half of 2009. Preliminary data suggests that activity by investment and number of projects in the first quarter of 2010 was similar to that reported in the first quarter of 2009.

This note was written by Ada Karina Izaguirre, infrastructure specialist, and Alexander Nicholas Jett, research analyst, Finance, Economics, and Urban Development Department, Sustainable Development Network, World Bank.

<sup>&</sup>lt;sup>1</sup> Data on transport projects with private participation include primarily medium-size and large projects as reported by the media and other public sources. Small-scale projects are generally not included because of lack of public information.

Concessions and greenfield projects accounted for most of the activity (figure 3).<sup>2</sup> Of the 50 new transport projects, 32 were concessions and represented 65% of investment in new transport projects, while 16 were greenfield projects (mainly BOT [build, operate, and transfer] contracts) and accounted for 37% of investment. The remaining two projects were lease contracts.





**Activity by subsector.** With 32 projects in eight countries, the **road** subsector accounted for most of the transport activity in 2009 (table 1). These projects involve around 6,400 kilometers of road and investment of US\$15.4 billion. Additional investment in existing road projects amounted to US\$0.4 billion, bringing the total in 2009 to US\$15.8 billion. This investment is 4% lower than the level in 2008 (figure 4). The number of projects in 2009 rose by 2 compared with 2008.

Twelve **seaport** projects were implemented in ten countries in 2009. These projects involve combined annual capacity of 3.5 million twenty-foot equivalent units (TEUs) and investment of US\$1.9 billion. Additionally, US\$1.9 billion was committed to existing seaport projects, bringing total investment to almost US\$3.8 billion. That investment represents a 39% drop from the 2008 level.

Two new concessions for small **airports**, involving investment of US\$58 million, reached financial or contractual closure in two countries in 2009. That is the lowest airport activity since 2002 when private activity declined substantially in the aftermath of the terrorist attack of September 11, 2001 and the consequent drop in air traffic.

Four new greenfield **railway** contracts, involving investment of US\$1.8 billion, were implemented in three countries in 2009. Additionally, US\$0.2 billion was committed to existing railway projects, bringing total investment to almost US\$2 billion. New projects include two metro lines (one in China and the other in India), an intercity railway in China, and a rolling stock operator in Peru.

**Activity by region.** New private activity in 2009 was highly concentrated by country. The top two countries, Brazil and India, accounted for 56% of investment and 38% of new projects (figure 5). With China and Mexico added, the top four represented almost 75% of investment and more than half of new projects.

<sup>2</sup> This note uses the term *concession* as defined in the PPI Project Database methodology, a narrower definition than that commonly used in the transport literature. That broader definition includes not only BROT (build,

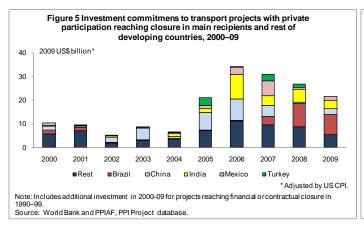
rehabilitate, operate, and transfer) and ROT (rehabilitate, operate, and transfer) projects but also BOT (build, operate, and transfer) projects, which the PPI Project Database classifies as greenfield projects. In other infrastructure literature, such as that for water and electricity, the term *concession* refers mainly to contracts dealing with operation and expansion or rehabilitation of existing assets.

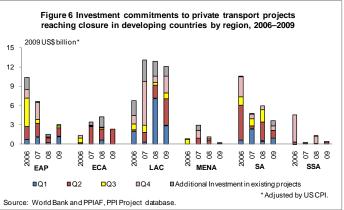
<sup>&</sup>lt;sup>3</sup> Investment in seaport projects may be underestimated because of the lack of public information on investment figures for some projects.

Table 1 Summary of transport projects reaching financial or contractual closure in developing countries in 2009

	Projects	Investment		Subse	ctor		Тур	e of private	participation
Region and country		commitment (US\$ millions)	Airport	Railroad	Road	Seaport	Concession		Management or lease contract
East Asia and	Pacific								
China	3	2,513	-	2	1	-	-	3	-
Indonesia	1	60	-	-	-	1	-	1	-
Philippines	2	96	1	-	1	-	1	1	-
Vietnam	1	200	-	-	-	1		1	-
Europe and C	entral Asia								
Bulgaria	1	5	-	-	-	1	1	-	-
Poland	1	2,203	-	-	1	-	-	1	-
Ukraine	1	130	-	-	-	1	-	1	=
Latin America	and the Ca	ribbean							
Argentina	1	6	1	-	-	-	1	-	-
Brazil	8	7,357	-	-	6	2	7	1	=
Chile	2	481	-	-	2	-	2	-	-
Dominican	2	630	-	-	2	-	2	-	-
Mexico	4	1,221	-	-	4	-	1	3	-
Peru	6	828	-	1	4	1	5	1	-
Middle East a	nd North Af	rica	•				•	•	•
Algeria	2	108	-	-	-	2	2	-	=
Syrian Arab Republic	1	45	-	-	-	1	-	-	1
South Asia			•				•	•	•
Bangladesh	1	-	-	-	-	1	-	-	1
India	11	2,840	-	1	10	-	8	3	=
Sub-Saharan	Africa								
Guinea	1	159	-	-	-	1	1	-	-
Senegal	1	264	-	-	1	-	1	-	=
Total	50	19,145	2	4	32	12	32	16	2

Source: World Bank and PPIAF, PPI Database.





In **East Asia** four countries implemented seven projects, distributed across all subsectors, including: one airport, two railways, two roads, and two seaports. **China** implemented three projects (two railways, and one road) and accounted for nearly all of the new investment in the region in 2009 (table 2). **The Philippines** implemented two concessions; one to upgrade and expand the Caticlan Airport, and the other for North Luzon Expressway Phase 2. The remaining two projects were BOT contracts for port terminals in **Indonesia** and **Vietnam**. While this activity represents a recovery from 2008, it is still significantly lower than activity in 2006–07 (figure 6).



In **Europe and Central Asia** three countries signed three PPI contracts for a road and two seaport projects in 2009. Among them, the second phase of the A2 Motorway (Swiecko-Nowy Tomysl) in **Poland** stands out as the largest road project in 2009. This project was structured as a Public Private Partnership in which the concessionaire receives availability payments and the Polish government bears the traffic risk. The project also included a senior debt repayment guarantee from the Polish Treasury and funding from the European Investment Bank (box 1). The two other projects are the concession to rehabilitate and operate a port in **Bulgaria** and a BOT contract for a port terminal in Odessa, **Ukraine**.

#### Box 1. A2 Motorway (Swiecko-Nowy Tomysl)

In early 2009 Autostrada Wielkopolska II SA (AWSA II) was created to build and operate the second phase of the A2 motorway (from Swiecko to Nowy Tomysl). The company shareholders are Kulczyk Holding SA (40%), Meridiam A2 West S a.r.l. (40%), Strabag AG (10%) and KWM Investment GmbH (10%). The first phase of the A2 motorway, which runs from Nowy Tomysl to Konin, was implemented by Autostrada Wielkopolska (AWSA) under a BOT (Build, Operate, and Transfer) contract signed in 1997. This road project reached financial closure in 2000 and became operational in 2004.

The second phase is also a BOT and involves construction and operation of a 105.9km of motorway with a closed toll collection system of five toll plazas/stations. It also includes the rehabilitation of 18.5km of N2 national road, 81 new bridges and over-bridges, two operation and maintenance centers, six full interchanges, six rest and service areas, and four petrol stations.

According to the Construction and Operation Agreement, AWSA II is responsible for the financing, construction and maintenance of the motorway, and of collecting tolls on behalf of the State Treasury. The State Treasury is responsible for leasing the land for the motorway to AWSA II, which has to complete construction phase within 2.5 years and operate the road for another 25 years. In return for making the motorway available, AWSA II will receive monthly availability payments which will be adjusted by (i) deductions for unavailability and for insufficient level of service, and (ii) increases for excess traffic of heavy vehicles. The government payments to AWSA II are designed to cover the repayment of the project loans plus a fair return on the sponsors' invested equity. Toll fees are determined based on actual distance travelled.

The second phase reached financial closure in June 2009. Project costs amounted to US\$2.2 billion (EUR1.586 billion). Funding was raised in euro denominated debt and consisted of a US\$1.4 billion, 27 year loan from the European Investment Bank (EIB), a US\$555 million, 20-year loan from 11 commercial banks, and US\$258 million of equity contribution from the sponsors. The Polish Treasury agreed to guarantee a repayment profile to all senior lenders, meaning that the total senior outstanding facilities would be repaid directly by the Treasury at any time during the loan life in the event of a default or termination of the BOT contract, triggered by the Polish state.

Latin America and the Caribbean was the most active region in 2009 and the only one that maintained a level of investment similar to that of 2008. Six countries implemented 23 projects, distributed across all subsectors. Brazil led regional activity with eight projects and 78% of regional investment. Among the Brazilian projects, five were part of the second stage of the São Paulo state toll road concession program. Those projects managed to attract significant private sector interest during the most acute phase of the global financial crisis (box 2). The sixth Brazilian project was a federal road concession for BR-324 and BR-116 highways (Via Bahia), which was the second group of the second stage of the federal highway concession program. The first phase comprised seven road concessions transferred to private concessionaires in 2008. The other two projects in Brazil were for seaports. One was a new port terminal, Super Port Açu LLX Minas-Rio, which will handle mining cargo in Super Port Açu, the largest private port under construction in Brazil. The second port project was a concession for Santos Vehicle terminal.

**Mexico** implemented four projects; one was a concession of existing roads and the three others were new road projects. The concession was Proyecto Pacifico Norte (Farac IIA), the largest Mexican project in 2009, which was tendered in September 2009 under the federal asset utilization model and used as the main bidding criterion the highest payment to the government. The project reached contractual closure three months later. Proyecto Pacifico Norte (214 km) was one of the two projects in which Farac II (850 km) was split after it was unsuccessfully tendered in March 2009, and involved fewer kilometers of new highway. Farac II's restructuring was a response of the Mexican government to the more difficult financial and market conditions as a result of the global financial crisis. The Federal government also implemented La Piedad Bypass and Access to Mexico-Gudalajara Highway, a BOT

project tendered to the private sector under the rules of the new highway concession model, which uses the lowest amount of government subsidies as bidding criterion. The other two Mexican projects that reached financial closure were state level projects. One was Viaducto Bicentenario (Phase 1), designed to relieve traffic congestion around Mexico City. Mexico state tendered this project in 2008 using lowest tariffs, technical proposals, and construction schedules as bid criteria. The other project, San Luis Potosi Colorado-Estacion Doctor Highway, was an intercity highway granted by Sonora state.

#### Box 2. Second phase of Sao Paolo road concession program

The State of Sao Paolo in Brazil concluded the second phase of its road concession program in 2009. Under this phase, five two-lane highways and one metropolitan beltway were transferred to private management under 30 year concessions. While the concession process of Rodoanel Mario Covas Western Beltway concluded in 2008, the five highway concessions (Dom Pedro I, Ayrton Senna/Carvalho Pinto, Marechal Rondon Leste, Marechal Rondon Oeste, and Raposo Tavares) were tendered in October 2008 and finalized in the first half of 2009. The tender rules set as bidding criterion the minimum tariff and established the minimum investment programs and payments to the government as indicated in the table below. A significant share of the investment programs are expected to take place in the first three to five years of the concessions. Payments to the government are also expected at the beginning of the concession with a 20% payment at the signing of the concession and the rest in 18 monthly installments. According to the concession contracts, the Agencia de Transporte do Estado do Sao Paolo authorizes the concessionaires to start charging tolls after some basic work on the highways is performed.

Altogether, the concessionaires of the five highways committed to maintain and operate 1,715 kilometers (km) of roadway. The works entailed expanding 359 km to four lanes, building 526 km of additional tracks and new shoulders, 317 bridges and viaducts, 65 new pedestrian crossing bridges, and building or expanding 917 km of access roadways. The projects will benefit 21 million inhabitants in 171 municipalities.

Rota das Bandeiras, a subsidiary of Brazilian Odebrecht, signed the concession of Dom Pedro I highway and took over its operations in April 2009. To finance its investment, Rota das Bandeiras secured an US\$500 million bridge loan from a group of Brazilian commercial banks in May 2009 and started charging tolls in December 2009.

Ecopistas, a subsidiary of Ecorodovias, was awarded Ayrton Senna-Carvalho Pinto highway concession in May 2009 after Triunfo Participações e Investimentos—the initial winner of this tender—failed to make the 20% down payment for the concession rights. Ecopistas signed the concession contract and took over the operations of this highway in June 2009. It started charging tolls in December 2009. To finance its investment, the concessionaire raised US\$75 million (BRL 150 million) in a bond issue in September 2009.

Rodovias do Tiete, a consortium led by Brazilian Grupo Equipav, took over the operation of Marechal Rondon Leste highway in April 2009 after signing the concession. The concessionaire started charging tolls in November 2009.

BR Vias SP, a consortium of Brazilian Comporte Participações and Vaud Participações, took over the operation of Marechal Rondon Oeste highway in May 2009 after signing the concession. The concessionaire started charging tolls in January 2010.

Concessionaria Auto Raposo Tavares, a consortium led by Construtora OAS, took over the operation of Raposo Tavares highway in March 2009 after signing the concession. In the same month, the concessionaire raised US\$185 million (BRL 370 million) in a bond issue to fund investments in infrastructure.

Highways under second phase of the of São Paolo concessions program tendered in October 2008

Highway (concessionaire)	Length	Associated local	Investment	Payments to the	Winning tariff offer	Number of
	(km)	roads (km)	program	government	(as % of	financial bids
			(US\$ million)	(US\$ million)	maximum)	
Dom Pedro I	297	81.4	1,050	650	6% below	1
(Rota das Bandeiras)						
Ayrton Senna Carvalho Pinto	142	-	429.5	297	45% below	2
(Ecopistas)						
Marechal Rondon Leste	415	201.8	650	258.5	22% below	2
(Rodovias do Tiete)						
Marechal Rondon Oeste	417	243.8	600	205.5	47% below	7
(BR Vias SP)						
Raposo Tavares (Concessionaria	444	389.8	900	342	16% below	2
Auto Raposo Tavares)						
Total	1,715	916.8	3,630	1,753		

**Peru** implemented six transport projects; four were national road concessions and involved 954km of highway. Two road concessions (Autopista del Sol II and Red Vial IV) were awarded to the bidder offering the most additional works, while the two other road concessions (Costa Sierra: Ovalo-Chancay-Huaral-Acos Stretch and Nuevo Mocupe-Cayalti-Oyotun highway) were awarded to the bidder requesting the lowest government subsidies. The fifth project was the concession to rehabilitate, operate, and expand Paita port to 220,000 TEU. The port concession was awarded to the bidder who requested the lowest tariffs. The sixth Peruvian project was Inca Rail, a rail passenger service between Cusco and Machu Picchu that uses its own rolling stock and leases the rail infrastructure of Ferrocarril Transandino, the concessionaire of the Cusco and Machu Picchu railway.

The remaining projects were in **Argentina**, **Chile** and **Dominican Republic**. In Argentina, Trelew municipality transferred Patagonia's airport to private management through a concession. Chile signed two road concessions (Autopista Vallenar-Caldera and Coronel-Tres Pinos Highway [Ruta 160]), which have a variable contract period that ends when the concession generates the minimum revenue requested by the concessionaire at the time of the tender. The Dominican Republic implemented two intercity road concessions.

In the **Middle East and North Africa**, two countries had private activity in seaports. In **Algeria** the Port Authority of Algiers and DP World signed two concessions: one for expanding the main container terminal at the Port of Algiers and the other for developing the port of Djen Djen. In the **Syrian Arab Republic**, the government-owned port authority of Lattakia signed a ten-year lease-affermage contract with a French and Syrian joint venture company to expand and operate the container terminal at Lattakia port. The private sponsor and the port authority will share the port terminal revenues.

**South Asia** was the second most active region with 12 projects in 2009 although private activity declined by over 30% by investment and number of projects compared with 2008. **India** accounted for 11 of the 12 projects and all regional investment. Bangladesh implemented the other project in the region. Ten of the projects in India are road projects, involving more than 854 kilometers and US\$2.2 billion in investment. Nine projects were awarded to the bidder who requested the lowest government subsidy, and two to the bidder who offer the highest revenue transfer to the government. Eight of the projects are highway concessions with a mandate to widen existing roadways. The remaining two are BOT contracts for a new bridge (Rajahmundry Godavari Bridge Limited) and a new six-lane elevated highway at the border of Delhi and Haryana (Badarpur Elevated Highway Project). The remaining project in India is Dehli Airport Metro link, the second metro line to be developed as a PPP in India and the first to be granted using the maximum revenue share with the Government as the main bid criterion (box 3).<sup>4</sup> In **Bangladesh**, SAIF Powertec and Chittagong Port Authority (CPA) signed a new three-year management contract for Chittagong Container Terminal.

In **Sub-Saharan Africa**, two projects were implemented. **Guinea** signed with Getma International, a subsidiary of French NCT Neotrans, a 25-year concession for the operation and expansion of the port of Conakry. In **Senegal**, the Dakar Diamniadio Toll Road concession reached contractual closure. The concessionaire agreed to operate the 12km segment between Dakar and Pikine, and to build and operate a 20km segment between Pikine and Diamniadio.

**Potential new projects.** Besides the 50 new projects that reached financial or contractual closure in 2009, at least 44 projects were awarded but had not reached closure by the end of the year. East Asia had ten potential projects at the end of 2009: four seaports, three BOT road projects, and three railways. Europe and Central Asia had seven potential projects: five roads, an airport in Latvia and a seaport in Albania. Latin America and the Caribbean had nine potential projects: four roads, three seaports, one airport, and one railway. South Asia had fourteen potential projects, all of which were concentrated in India, including: seven road projects, four seaports, two airport projects, and a railway project. Sub-Saharan Africa had four potential projects: two BOT road projects, a potential airport in Congo Republic and a potential seaport container terminal in Benin.

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<sup>&</sup>lt;sup>4</sup> The first metro line to be developed under PPP in India was Mumbai Metro One, which reached financial closure in 2008 and was tendering using the lowest government subsidy as main bid criteria.

#### Box 3. Delhi Airport Metro Link

In March 2009 Delhi Airport Metro Link reached financial closure. The project is being developed under a 30 year, Build, Operate, and Transfer (BOT) contract and includes building and operating the 22.7 km airport metro express line connecting New Delhi Railway Station at the center of the capital city with the Delhi international airport. The airport link will have six stations, including five underground stations and one elevated one. The project sponsors are India's Reliance Infrastructure (95%) and Spain's Construcciones y Auxiliar De Ferrocarriles (5%).

Under the BOT contract, the consortium is responsible for the design, construction, finance, operation and maintenance of the Metro link. Construction includes installing all systems (e.g. rolling stock, overhead electrification, track, signaling and telecommunications, ventilation and air-conditioning, automatic fare collection, baggage check-in and handling, depot and other facilities). The trains of the Airport Express Line will have a cruising speed of 135 kilometers per hour. The state-owned Delhi Metro Rail Corporation Limited (DMRC), the public entity granting the contract, is responsible for handling the civil works (e.g. construction of viaduct, underground tunneling works and construction of stations).

Reliance Infrastructure Limited of India and Construcciones y Auxiliar De Ferrocarriles (CAF) of Spain established Delhi Airport Metro Express Private Limited (DAMEPL) to implement the project. The consortium won the project through an international competitive bidding process by quoting the maximum revenue share with the Government. DAMEPL will pay DMRC US\$ 10.53 million (INR 510 million at 48.41 rupees per US dollar) every year and also share between 1 to 5% of their gross revenue for 15 years. Reliance's consortium was one of the final three bidders for the metro project; the other two were consortialled by Larsen & Toubro and Gammon India.

Under the contract, DAMEPL will recover the capital and operating costs, including returns, through user fees during the term of concession. The revenue will mainly come from the tickets, retail activities at the stations, and advertisement and other commercial activities. Delhi Metro Rail Corporation (DMRC) will keep the train fare at a maximum of US\$3.1 to Delhi International Airport, and an extra US\$0.62 to Dwarka. Daily traffic estimates are of the order of 15,000 commuters in the initial years and eventually increasing to 45,000 commuters.

The estimated capital cost of components under the BOT contract is estimated at US\$596 million. The civil works are not included in this cost estimate and will be borne by national and state governments at a 50/50 ratio. Financing comprises US\$ 417.2 million, 17.25-year term loan and US\$ 178.8 million of equity. Axis Bank was the sole lead arranger and book-runner along with India Infrastructure Finance Co Ltd (IIFCL) and 8 other banks.

Canceled and distressed projects. In Kazakhstan, Malaysia Airports and the Kazakhstani government agreed to cancel a ten-year management contract for Astana International Airport that started in 2007. This decision was made mutually in view that the expertise, knowledge and experience garnered by working with Malaysia Airports had enabled International Airport Astana to manage and operate the airport independently. In Ecuador, Manta port concession became distressed after TIDE, a subsidiary of Hutchison Whampoa Limited, announced it was withdrawing from its concession agreement. TIDE continued to operate the port through 2009. This brought the total number of canceled or distressed transport projects to 74 (62 canceled, 12 distressed). These 74 projects represent 6% of all transport projects and 11% of transport investment in 1990–2009.

**Concluded projects.** In Bangladesh, the second five-year management contract for Jamuna Bridge with Indonesia's state-owned road operator PT Jasa Marga and Net One Ltd of Bangladesh concluded. The project returned to the management of the government of Bangladesh.

### Table 2 Transport projects with private participation reaching financial or contractual closure in 2009

Note: n.a. = not available; n.a. = not applicable. RLT = rehabilitate, lease or rent, and transfer.

#### **East Asia and Pacific**

	Country	Project name	Project status	Sub- sector	Type of private participation	Private equity (%)	Investment commitment (US\$ millions)	Government cash support (US\$ millions)	Type of government support	Capacity size and type	Main sponsors
1	China	Shenzhen Metro Line 4 Phases I & II	Construction	Railroads	Greenfield project (BOT)	100	858	n.a.	n.a.	198 km	MTR Corporation (100% / Hong Kong, China)
2	China	Jiafeng-Nanchenpu Railway	Construction	Railroads	Greenfield project (BOT)	49	337	n.a.	n.a.	64.9 km	n.a.
3	China	Guangxi Guigang- Wuzhou Highway	Construction	Roads	Greenfield project (BOT)	100	1,318	n.a.	n.a.	20.5 km	Logan Group (100% / China)
4	Indonesia	Samudera Palaran Terminal	Construction	Seaports	Greenfield project (BOT)	75	60	n.a.	n.a.	220 throughput (thousands)	Samudera Indonesia Group (75% / Indonesia)
5	Philippines	Caticlan Airport	Construction	Airports	Concession (BROT)	100	52	n.a.	n.a.	n.a.	Caticlan International Airport Development Corp (CIADC) (100% / Philippines)
6	Philippines	North Luzon Expressway Phase 3	Construction	Roads	Concession (ROT)	84	44	n.a.	n.a.	2.7 km	Leighton Holdings Limited (17% / Australia), Metro Pacific Investments Corporation (MPIC) (67% / Philippines)
7	Vietnam	Cai Mep International Terminal (CMIT)	Construction	Seaports	Greenfield project (BOT)	49	200	n.a.	n.a.	1150 throughput (thousands)	AP Moller - Maersk Group (49% / Denmark)

Europe			
Luiube	aliu	centra	I ASIA

C	ountry	Project name	Project status	Sub- sector	Type of private participation	Private equity (%)	Investment commitment (US\$ millions)	Government cash support (US\$ millions)	Type of government support	Capacity size and type	Main sponsors
1 Bi	ulgaria	Somovit Port Terminal	Operational	Seaports	Concession (ROT)	100	4.6	n.a.	n.a.	n.a.	Oktopod-S (100% / Bulgaria)
2 Po	oland	A2 Motorway (Swiecko-Nowy Tomysl)	Construction	Roads	Greenfield project (BOT)	100	2,203	n.a.	Debt Guarantee	105.9 km	Kulczyk Holding SA (40% / Poland), Meridiam (40% / Luxembourg)

3	Ukraine	Odessa Terminal	Construction	Seaports	Greenfield	100	130	n.a.	n.a.	250	Brooklyn-Kiev Group (% /
		Holdco Limited			project					throughput	Ukraine), CMA-CGM (% /
					(Merchant)					(thousands)	France)

### Latin America and the Caribbean

	Country	Project name	Project status	Sub-sector	Type of private participation	Private equity (%)	Investment commitment (US\$ millions)	Government cash support (US\$ millions)	Type of government support	Capacity size and type	Main sponsors
1	Argentina	Trelew Airport Expansion	Operational	Airports	Concession (BROT)	100	5.9	0	n.a.	1 runway	London Supply (100% / Argentina)
2	Brazil	Ayrton Senna - Carvalho Pinto Highway	Operational	Roads	Concession (BROT)	100	726.5	0	n.a.	134.9 km	Grupo CR Almeida (65% / Brazil), Impregilo SpA (35% / Italy)
3	Brazil	BR-324 and BR-116 Highways	Operational	Roads	Concession (BROT)	100	950	0	n.a.	680.6 km	Isolux (75% / Spain), Engevic Engenharia S.A. (20% / Brazil)
4	Brazil	Dom Pedro I Highway	Operational	Roads	Concession (BROT)	100	1700	0	n.a.	296.6 km	Odebrecht SA (100% / Brazil)
5	Brazil	Marechal Rondon Leste Highway	Operational	Roads	Concession (BROT)	100	908.5	0	n.a.	608.1 km	Grupo Equipav (50% / Brazil), Grupo Opway (30% / Portugal)
6	Brazil	Marechal Rondon Oeste Highway	Operational	Roads	Concession (BROT)	100	805.5	0	n.a.	660.4 km	Comporte Participaçoes SA (% / Brazil), Vaud Paticipaçoes SA (% / Brazil)
7	Brazil	Raposo Tavares Highway	Operational	Roads	Concession (BROT)	100	1242	0	n.a.	834 km	Construtora OAS (74% / Brazil), Previ (27% / Brazil)
8	Brazil	Santos Vehicles Terminal	Operational	Seaports	Concession (BROT)	100	124.8	0	n.a.	n.a.	Santos Brasil Participaçoes SA (100% / Brazil)
9	Brazil	Super Port Acu LLX Minas-Rio	Construction	Seaports	Greenfield project (BOT)	100	900	0	n.a.	N.a.	EBX Capital Partners (51% / Brazil), Anglo American (49% / United Kingdom)
10	Chile	Autopista Vallenar- Caldera	Construction	Roads	Concession (BROT)	100	290	100	n.a.	221 km	Sacyr Vallehermoso SA (SyV) (100% / Spain)
11	Chile	Coronel-Tres Pinos Highway (Ruta 160)	Construction	Roads	Concession (BROT)	100	191	n.a.	Fixed government payments	90 km	Acciona (100% / Spain)



12	Dominican Republic	Boulevard Turistico Del Atlantico	Construction	Roads	Concession (BROT)	100	179.9	0	n.a.	123 km	Grodco SA (20% / Colombia), Odinsa S.A. (43% / Colombia), Consorcio Remix (38% / Dominican Republic)
13	Dominican Republic	Santo Domingo Puerto Plata Highway	Construction	Roads	Concession (BROT)	100	450	n.a.	n.a.	240 km	Ghella Sogene CA (n.a.% / Italy), Odinsa S.A. (% / Colombia), IECSA SA (% / Argentina)
14	Mexico	La Piedad Bypass and Access to Mexico- Gudalajara Highway	Construction	Roads	Greenfield project (BOT)	100	140.44	n.a.	Fixed government payments	67.5 km	ICA SA de CV (100% / Mexico)
15	Mexico	Proyecto Pacifico Norte (Farac IIA)	Operational	Roads	Concession (BROT)	100	662	0	n.a.	241.5 km	Impulsora Del Desarrollo Y El Empleo En América Latina SA de CV (IDEAL) (100% / Mexico)
16	Mexico	San Luis Potosi Colorado-Estacion Doctor Highway	Operational	Roads	Greenfield project (BOT)	100	57	Not Applicable	n.a.	48 km	Promotora y Operadora de Infraestructura, S.A.B. de C.V (Pinfra) (100% / Mexico)
17	Mexico	Viaducto Bicentenario (Phase 1)	Construction	Roads	Greenfield project (BOT)	100	361.1	0	n.a.	22 km	Obrascon Huarte Lain (OHL) (100% / Spain)
18	Peru	Autopista del Sol II	Operational	Roads	Concession (BROT)	100	365	n.a.	Revenue Guarantee	475 km	Hidalgo and Hidalgo SA (% / Ecuador), Construccion Administracion SAC (% / Peru)
19	Peru	Costa Sierra: Ovalo- Chancay-Huaral-Acos Stretch	Operational	Roads	Concession (ROT)	100	31	31	Fixed government payments, Revenue Guarantee	76.5 km	Conalvias (100% / Colombia)
20	Peru	Inca Rail	Operational	Railroads	Greenfield project (BOT)	100	0	n.a.	n.a.	n.a.	Parson & Crosland Ltd (% / United Kingdom)
21	Peru	Nuevo Mocupe- Cayalti-Oyotun Highway	Operational	Roads	Concession (BROT)	100	15.53	15.6	Fixed government payments	47 km	Obras de Ingenieria SA (Obrainsa) (100% / Peru)
22	Peru	Paita Port	Operational	Seaports	Concession (BROT)	100	133	0	n.a.	220 throughput (thousands)	Mota Engil SGPS (50% / Portugal), Translei (25% / Peru), Cosmos Agencia Maritima (25% / Peru)
23	Peru	Red Vial IV	Operational	Roads	Concession (BROT)	100	283.3	n.a.	n.a.	356 km	Obrascon Huarte Lain (OHL) (100% / Spain)

n.a.

n.a.

570

throughput

(thousands)

CMA-CGM (51% / France),

Arab Republic)

Souria Holding (49% / Syrian

Syrian

Republic

Arab

South Asia



Lattakia container

terminal

### PRIVATE PARTICIPATION IN INFRASTRUCTURE DATABASE

Seaports

Lease

contract

Operational

#### Middle East and North Africa Type of Investment Government Type of Project cash support (US\$ millions) Capacity size Subprivate Private commitment government Project name status participation (US\$ millions) and type Country sector equity (%) support Main sponsors Algeria Port of Djen Djen Operational Seaports Concession 50 n.a. n.a. DP World (50% / United Arab n.a. (BROT) Emirates) 2 Algeria Ports of Algiers Operational Seaports Concession 50 108 500 DP World (50% / United Arab n.a. n.a. (BROT) throughput Emirates) (thousands)

45

100

, O.	Julii Asia										
	Country	Project name	Project status	Sub- sector	Type of private participation	Private equity (%)	Investment commitment (US\$ millions)	Government cash support (US\$ millions)	Type of government support	Capacity size and type	Main sponsors
1	Bangladesh	Chittagong Container Terminal (second contract)	Operational	Seaports	Management contract	100	n.a.	n.a.	n.a.	500 throughput (thousands)	SAIF Powertec Limited (100% / Bangladesh)
2	India	Badarpur Elevated Highway Project	Construction	Roads	Greenfield project (BOT)	100	118.1	n.a.	n.a.	4.4 km	Hindustan Construction Company Ltd (HCC) (100% / India)
3	India	Delhi Airport Metro Link	Construction	Railroads	Greenfield project (BOT)	100	596	n.a.	n.a.	22.7 km	Reliance ADA Group (95% / India)
4	India	Dhule Palesner Tollway Lmited	Operational	Roads	Concession (BROT)	100	293.3	n.a.	n.a.	96.5 km	Hindustan Construction Company Ltd (HCC) (37% / India), Sadbhav Engineering Ltd (27% / India), John Laing Infrastructure Ltd (36% / United Kingdom)
5	India	Gujarat Maharashtra Border NH Road	Operational	Roads	Concession (BROT)	100	311.7	114.8	Fixed government payments	133 km	Soma Enterprise Ltd (% / India), Isolux (% / Spain)
6	India	Gurgaon Faridabad State Highway	Operational	Roads	Concession (BROT)	100	191.9	n.a.	n.a.	66.2 km	Reliance ADA Group (100% / India)

7	India	IRB Talegaon Amravati Toll Road Pvt. Ltd	Operational	Roads	Concession (BROT)	100	154.1	44.6	Fixed government payments	102 km	IRB Infrastructure Developers Ltd (% / India)
8	India	Jaipur Deoli NH Road	Operational	Roads	Concession (BROT)	100	303.6	63.2	Fixed government payments	146.3 km	IRB Infrastructure Developers Ltd (% / India)
9	India	Kishangarh Beawar NH8 Road	Operational	Roads	Concession (BROT)	100	164.2	n.a.	n.a.	93 km	Soma Enterprise Ltd (% / India), Isolux (% / Spain)
10	India	Pathankot Amritsar NH Road	Operational	Roads	Concession (BROT)	100	246	26.2	Fixed government payments	102 km	IRB Infrastructure Developers Ltd (% / India)
11	India	Pune Solapur Expressway Limited	Operational	Roads	Concession (BROT)	100	283.2	61.8	Fixed government payments	110.5 km	Tata Enterprises (50% / India), Atlanta Limited (50% / India)
12	India	Rajahmundry Godavari Bridge Limited	Construction	Roads	Greenfield project (BOT)	100	177.85	42.9	Fixed government payments	n.a.	Gammon India Ltd (100% / India)

Su	b-Saharan A	Africa									
					Type of private participation	Private equity (%)	Investment commitment (US\$ millions)	Government cash support (US\$ millions)	Type of government support	Capacity size and type	Main sponsors
1	Guinea	Port of Conakry	Operational	Seaports	Concession (BROT)	100	159	n.a.	n.a.	110 throughput (thousands)	NCT Neotrans (100% / France)
2	Senegal	Dakar Diamniadio Toll Road	Construction	Roads	Concession (BROT)	100	264	71.8	n.a.	32 km	Eiffage Group (100% / France)