PRIVATE PARTICIPATION IN INFRASTRUCTURE DATABASE

PPI data update note 38 **September 2010**

Investment in new private infrastructure projects in developing countries slowed down in the first quarter of 2010

Summary. Investment commitments to new infrastructure projects with private participation (PPI projects) reaching closure in developing countries fell by 25% in the first quarter of 2010 compared with the same quarter of 2009. The absence of unusually large projects (US$4 billion or more), such as those that reached closure in the first quarter of 2009, explains the investment decline. If those projects were excluded, investment would have grown 17% in the first quarter of 2010 compared with the same quarter in 2009. New PPI activity was concentrated in India, which accounted for more than half of investment in the first quarter of 2010. Three other large economies (Brazil, China, and Turkey) saw lower investment in this quarter than in the same quarter of 2009. The remaining developing countries saw some investment growth. By sector, energy continued to account for the bulk of new investment despite the investment drop in the first quarter of 2010. In transport, investment was stable compared with the first quarter of 2009. In water and sewerage investment grew although it remained at a very low level. Across sectors, new private activity, as measured by the number of projects, fell by 25% in the first quarter of 2010 compared with the same quarter of 2009.

While the crisis continues to affect some new PPI projects, its impact on project delays and cancellations has declined while other implementation issues (such as delays in land acquisition or government approvals) have become more prominent. Nevertheless, financial market conditions remain more stringent than before the global financial crisis. For projects that are able to raise financing, the conditions usually involve lower debt/equity ratios, shorter tenors, and more conservative structures. In many countries local public banks as well as bilateral and multilateral agencies continue to be the key financing source. Greater project selectivity is also expected to continue.

Transport continues to be the sector most affected by the crisis; Europe and Central Asia is the most affected region, and low-income countries are the most affected country income group. Despite the more difficult environment, developing country governments remain committed to their public-private partnership (PPP) programs. By the first quarter of 2010, 61 developing countries had around 440 PPI projects that were seeking financing, had been awarded and had yet to start looking for finance, or were in the final tender stage. Those projects involve investment commitments of US$174 billion.

Trends in new infrastructure projects with private participation.[1] This review sheds some light on recent PPI activity, the short-term impact of the financial crisis and its aftermath. Compared with the previous update on the impact of the crisis, this note incorporates two improvements: a larger sample size (1,080 projects, up from 965 in the previous update) over a longer period (from January 2008 to March 2010).[2] The findings of the survey follow.

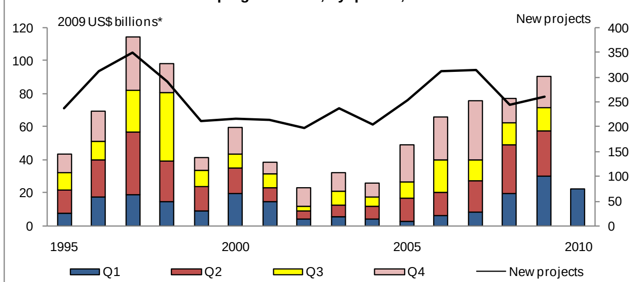
This note was produced by Ada Karina Izaguirre, infrastructure specialist in the Finance, Economics, and Urban Development Department (FEU), Sustainable Development Network, World Bank. The PPI Database team gathered project data.

[1] This note relies on data compiled in the "Impact of the financial crisis on PPI" database, which includes 1,080 infrastructure projects with private participation in developing countries that were trying to raise financing on a project finance basis or were at an advanced stage of tender between January 2008 and March 2010. The crisis impact database uses the same definitions for sectors and project types as the PPI Database. But numbers in the two databases are not directly comparable. The crisis impact database includes projects that have not yet reached financial or contractual closure, while the PPI Database, which is updated annually, includes only projects that have reached closure. In addition, the crisis impact database does not include previously implemented projects, whose investment programs could also be affected by a higher cost of financing and lower demand. As reported by the PPI Database, these projects accounted for more than 50% of total investment commitments in 2004–08.

[2] The review summarizes project data as reported by the media and other public sources and includes primarily medium-size and large projects. Small-scale projects are generally not included due to a lack of public information.

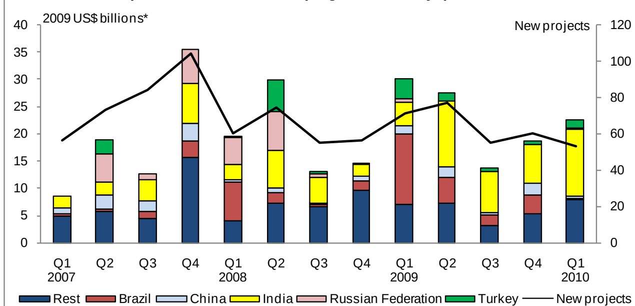
1. Investment in new PPI projects fell in the first quarter of 2010, but remained strong and selective. In the first quarter of 2010, 53 PPI projects with investment commitments (hereafter, *investment*) of US$22.6 billion reached financial or contractual closure in 21 developing countries.[3] While this investment represents a 25% drop from the level reported in the first quarter of 2009, it is the second highest of any first quarter since 1995 (figure 1). The fall in investment was driven by the absence of unusually large projects such as those that reached closure in the first quarter of 2009 (the US$6.75 billion, 3.2 GW San Antonio and US$4.17 billion, 3.2 GW Jirau hydropower plants in Brazil). If projects of US$4 billion or more were excluded, investment would have grown 17% in the first quarter of 2010 compared with the same quarter of 2009.

Figure 1 Investment commitments to PPI projects reaching closure in developing countries, by quarter, 1995–2010



Note: Includes only investment commitments at financial or contractual closure. Does not include additional investment in subsequent quarters.
* Adjusted by US CPI.
Source: World Bank and PPIAF, PPI Project and Impact of the crisis on PPI databases.

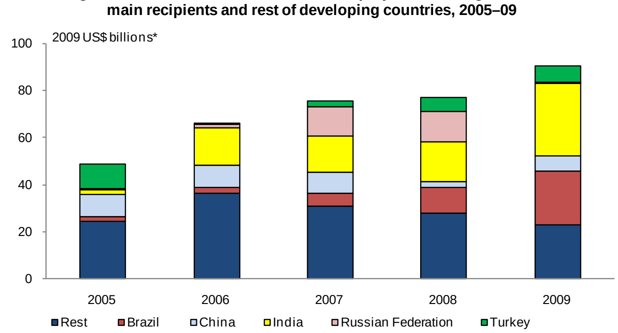
Figure 2 Investment commitments to PPI projects reaching closure in main recipients and rest of developing countries, by quarter, 2007–10



* Adjusted by US CPI.
Source: World Bank and PPIAF, PPI Project and Impact of the crisis on PPI databases.

Private activity, however, remains selective. India accounted for 54% of the investment in the first quarter of 2010, and was the only large developing economy with growing investment compared with the first quarter of 2009 (figure 2). The three other large developing economies with large shares in PPI investment in the first quarter of 2009 (Brazil, China, and Turkey) saw investment fall. The remaining developing countries saw an 11% investment growth in the first quarter of 2010 compared with the same quarter in 2009. However, it is too soon to assess if the investment growth in this group will be sustained in the coming quarters. Developing countries other than the five large economies saw a declining trend in PPI investment in the last few years, falling from US$36 billion 2006 to US$23 billion 2009 (figure 3).

Figure 3 Investment commitments to PPI projects reaching closure in main recipients and rest of developing countries, 2005–09



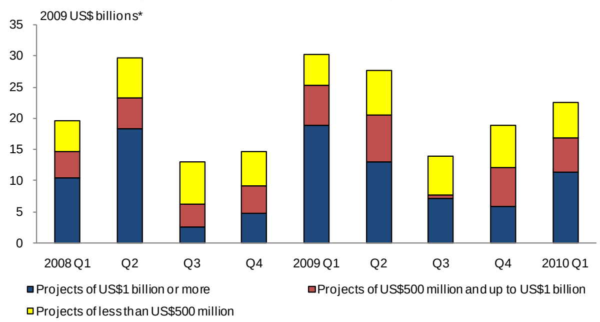
* Adjusted by US CPI.
Source: World Bank and PPIAF, PPI Project and Impact of the crisis on PPI databases.

[3] The definition of financial or contractual closure varies among contract types. For greenfield projects, financial closure is defined as the existence of a legally binding commitment of equity holders or debt financiers to provide or mobilize funding for the full cost of the project. If project construction begins with partial funding, projects are included when project construction is significantly advanced (25% complete). For concessions, contractual closure is reached when the concession agreement is signed. For divestitures, closure is reached when the equity holders have a legally binding commitment to acquire the assets. For management and lease contracts, contractual closure is reached when the contract authorizing the commencement of management or lease service is signed.

2. Large projects account for most of the investment in new PPI projects. Projects of US$1 billion or more accounted for 50% of investments in the first quarter of 2010 despite experiencing a 40% drop compared with the first quarter of 2009 (figure 4). The lack of projects sized at US$4 billion or more, such as those that reached closure in the first quarter of 2009, accounts for this drop. Investment in projects in the US$500 million–1 billion range fell by 14%, but still represented 25% of investments in the first quarter of 2010. Investment in projects sized at less than US$500 million rose by 15%, and accounted for the remaining 25% of the investment.

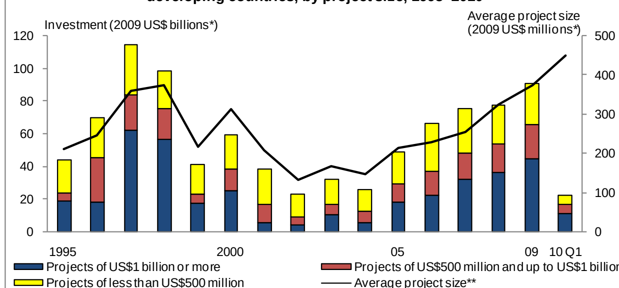
This activity maintains the concentration of PPI investment in projects of US$1 billion or more experienced in the last few years. The share of these projects in total investment rose from low 20%s in 2004 to 30%s in 2005–06 to 40%s in 2007–08 to 50% in 2009 and the first quarter of 2010. As a corollary, the average project size grew from US$146 million in 2004 to US$457 million in the first quarter of 2010 (figure 5).[4]

Figure 4 Investment commitments to PPI projects reaching closure in developing countries, by project size and quarter, 2008–2010



Source: World Bank and PPIAF, PPI Project and Impact of the crisis on PPI databases.

Figure 5 Investment commitments to PPI projects reaching closure in developing countries, by project size, 1995–2010



* Adjusted by US CPI.
**Includes only projects with investments greater than zero.
Source: World Bank and PPIAF, PPI Project and Impact of the crisis on PPI databases.

3. Liquidity and other financial market conditions have improved, but they remain more stringent than before the global financial crisis.[5] While infrastructure projects with private participation or PPP schemes are raising financing, they continue to face financial markets with reduced liquidity and tougher conditions. The overall volume of syndicated loans in most emerging markets in the first quarter of 2010 recovered from the low levels reported in the first quarter of 2009, but fell by almost 30% compared with the fourth quarter of 2009. The loan volume decline was driven by the reduced volume in Eastern Europe, Latin America and the Middle East and North Africa that offset the growth in loan volume in developing Asia. Most of the loan volume in the first quarter of 2010 went to refinancing rather than to financing new projects.

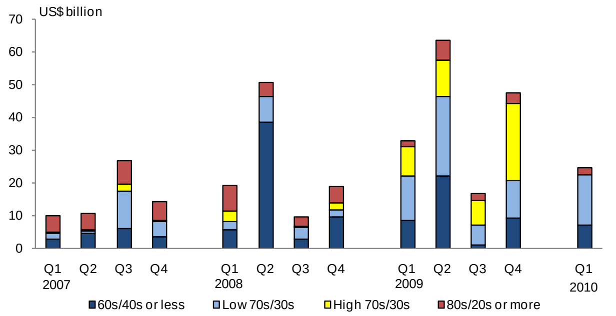
Project financing structures involve lower debt/equity ratios than in the pre-crisis period. In the first quarter of 2010 only 9% of the loan volume signed in developing countries had debt/equity ratios of 80s/20s or higher (figure 6). That is a few percentage points lower than in 2009 (13% of loan volume of have debt/equity ratios of 80s/20s or higher), but significantly lower than in 2007(34%) and 2008 (37%). Surveyed greenfield electricity projects reaching financial closure in the first quarter of 2010 reported debt/equity ratios in the low to mid 70s/30s and even in the 60s/40s, similar to the ratios reported in most of 2009 (figure 7). These ratios are well below the 80s/20s or higher that were available in the pre-crisis period. In the first quarter of 2010 only one electricity project had a debt/equity ratio in the 80s/20s: Indonesian Paiton III power plant, which reached financial closure

[4] Statistical analysis confirms the growing average project size over the last six years. The average project size in the first quarter of 2010 is statistically similar to the annual average project sizes in 2008–09, but higher than those reported in 2005–07. Likewise the average annual project size in 2005–07 is statistically higher than that reported in 2004. The statistical test used was T-test for differences between two means with unequal and unknown variance at a level of significance of 0.05.

[5] Unless otherwise indicated, Dealogic is the source of data for this section. Data downloaded on July 7, 2010.

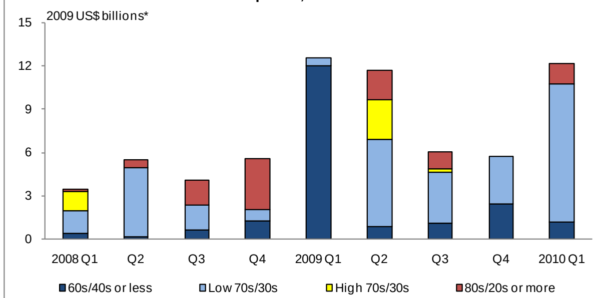
with a debt/equity ratio of 80/20 in March 2010; Japan Bank for International Cooperation (JBIC) provided 60% of the debt.[6]

Figure 6 Total project cost financed via project finance in developing countries, by debt/equity ratio and quarter, 2008-10



Source: Projectware, Dealogic.

Figure 7 Investment commitments to greenfield energy projects reaching closure in developing countries, by debt/equity ratio and quarter, 2008 –10



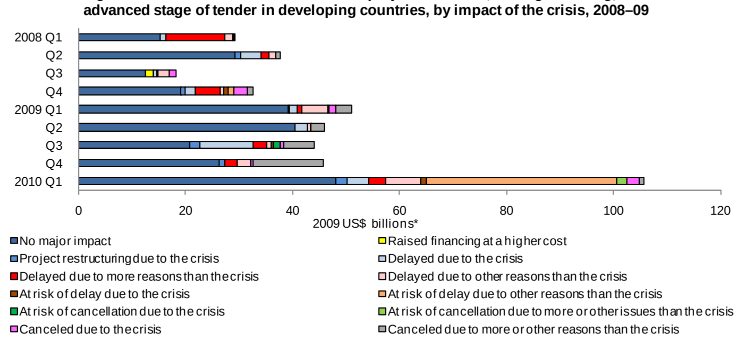
Source: World Bank and PPIAF, PPI Project and Impact of the crisis on PPI databases.

Other financial conditions such as spread and tenors have improved in the last quarter. The average pricing of all syndicated loans fell by 25% in the first quarter of 2010 compared with the fourth quarter of 2009. The share of loans with tenors of 3-9 years more than doubled in the first quarter of 2010 compared with the same quarter in 2009.

4. Local state-owned banks as well as multilateral and bilateral agencies continue to be key financiers. Local public banks continue to be one of the main sources of funding for private infrastructure projects. Of the 53 projects reaching closure in the first quarter of 2010, 14 projects, accounting for 33% of the investment committed in that quarter, had funding from local public banks. Public banks acted as lead arrangers in many cases. Multilateral and bilateral agencies also continued actively mobilize funding for projects. In the first quarter of 2010 these agencies provided funding to eight projects, which represent 17% of the total investment for the quarter.

5. The impact of the financial crisis on project delay or cancellation has diminished while the effect of other implementation issues has become more prominent. By the end of the first quarter of 2010, projects representing 9% of total investment had, due to the crisis, been delayed (6%) or canceled (2%) or were at risk of being delayed (1%) if financing was not arranged in the coming months (tables 1 and 2). This share is almost half of that reported for the end of the fourth quarter of 2009 (17%).

Figure 8 Investment commitments to PPI projects awarded, raising financing, or at advanced stage of tender in developing countries, by impact of the crisis, 2008–09



Source: World Bank and PPIAF, PPI Project and Impact of the crisis on PPI databases. * Adjusted by US CPI.

A separate set of projects was affected by the crisis and, in addition, by one or more other factors, such as delays in land acquisition or government approvals (figure 8). By the end of the first quarter of 2010, projects representing 11% of investment had been delayed or cancelled because of both the

[6] "Paiton 3 reaches financial close", *Project Finance,* March 1, 2010.

crisis and some other issue or issues. Finally, 19% of reviewed projects by investment had been delayed or were at risk of being delayed or canceled for reasons other than the crisis.

6. The pipeline of PPP projects in developing countries is strong. The review of projects shows that 14 countries awarded 43 projects totaling US$7.3 billion in the first quarter of 2010, and 44 countries awarded 176 projects with investment worth US$41.4 billion in 2008–09, that have yet to start looking for finance. In addition, 26 countries had 109 projects worth US$64.5 billion looking for finance by the end of the first quarter of 2010. Finally, at least 28 countries had 112 projects, involving investment of US$60.9 billion, in the final tender stage at the end of the first quarter of 2010 (to be awarded in the second quarter of 2010).

Similar to the recent trends in infrastructure projects reaching financial or contractual closure, the pipeline of PPP projects is characterized by the presence of large projects. Projects of US$1 billion or more account for 47% of investment in awarded projects, 59% of investment in projects looking for finance, and 83% of projects in the final tender stage.

7. New PPI activity varies across sectors, with investment in the first quarter lower in energy and telecoms and stable or growing in transport and water. In the energy sector 32 projects reached closure in the first quarter of 2010, with investment worth US$15.9 billion—down 33% compared with investment in the first quarter of 2009 (figure 9). Most of the investment decline took place in projects of US$1 billion or more (figure 10). The number of energy projects reaching financial or contractual closure dropped by 14% in the first quarter of 2010 compared with the same quarter of 2009. Similar to previous quarters, most of the private activity in energy took place in power plants.

The pipeline of energy projects is large (table 3). However, it is highly concentrated. Brazil and India account for 25% of projects in the pipeline and 47% of the associated investment. Projects of US$1 billion or more represent 62% of investment of projects in the pipeline. The two largest projects in the pipeline are the US$5 billion, 4 GW Krishnapatnam Ultra Mega power plant in India which was looking for finance by March 2010, and the US$13 billion, 11.3 GW Brazilian Belo Monte hydro power plant in Brazil which was in the final tender stage.

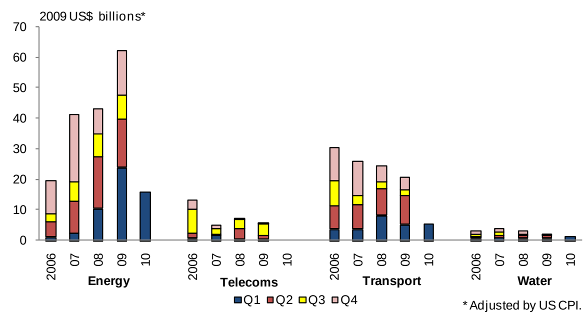
Table 3 PPI project pipeline in developing countries by sector and project status, January 2008–March 2010

Sector and status	Number of projects	Investment commitments (US$ billions)	Countries
Energy			
Looking for financing	66	40.4	22
Awarded	131	22.9	33
Final tender stage	46	20.1	13
Telecom			
Looking for financing	0	0	0
Awarded	11	0.3	10
Final tender stage	13	0.9	8
Transport			
Looking for financing	40	24.5	15
Awarded	57	24.3	21
Final tender stage	51	39.9	15
Water			
Looking for financing	4	1.0	2
Awarded	21	1.3	6
Final tender stage	2	0	1

Source: World Bank and PPIAF, Impact of the financial crisis on PPI database.

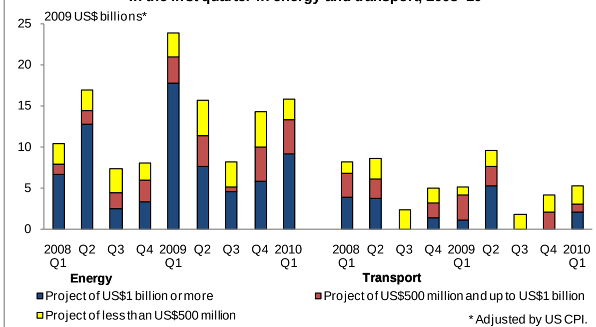
While some energy projects continue to be affected by the global financial crisis, the impact of the crisis on new energy projects has declined (table 4). Projects representing 2% of total investment in reviewed energy projects had been delayed or were at risk of being delayed because of the crisis by the end of the first quarter of 2010. This share is one fifth of the figure reported for the end of the fourth quarter of 2009 (10%). However, other factors are delaying the implementation of energy projects in the pipeline. By the end of the first quarter of 2010, 11% of energy projects by investment had been affected by the crisis but were delayed or canceled for reasons in addition to the crisis. Moreover, 16% of energy projects by investment had been delayed, were at risk of being delayed or were canceled for reasons unrelated to the crisis.

Figure 9 Investment commitments to PPI projects reaching closure in developing countries, by sector and quarter, 2006–10



Source: World Bank and PPIAF, PPI Project and Impact of the crisis on PPI databases.

Figure 10 Investment commitments to PPI projects reaching closure in the first quarter in energy and transport, 2008–10



Source: World Bank and PPIAF, PPI Project and Impact of the crisis on PPI databases.

In telecommunications no new project reached closure in the first quarter of 2010. Additional investment in existing operators, which accounts for most investment in the sector, is projected to remain flat in 2010, as it did in 2009. The pipeline of new telecommunications projects consists of 24 projects, which primarily are new licenses for mobile phone services.

In water and sewerage five projects reached closure in the first quarter of 2010, with investment worth US$1.3 billion, up 70% compared with the first quarter of 2009. Two projects, Egypt's 20 year BOT New Cairo wastewater treatment plant and the initial public offering of Chinese Chongqing Water utility, accounted for 74% of the investment. The ongoing pipeline of water projects is limited to a few projects, which are concentrated in Brazil and China.

In transport 16 projects reached closure in the first quarter of 2010, with investment worth US$5.3 billion. That investment level is similar to the one reported in the first quarter of 2009. Investment in transport was more evenly distributed across all project sizes in the first quarter of 2010 than in the same quarter in 2009 (figure 10). Of the transport projects, nine were road projects that involve investment of US$4.3 billion, and four were port projects that involve investments of US$560 million. The remaining investment was directed to two airport and one railroad projects.

The pipeline of transport projects is significant, but also highly concentrated. Brazil, India, and Mexico account for half of the projects in the pipeline and half of the associated investment. Projects of US$1 billion or more represent 70% of investment of projects in the pipeline. The two largest projects are the US$5 billion, Gebze-Orhangazi-Izmir highway in Turkey which was awarded in mid–2009, and the US$19.2 billion, high speed railway between Sao Paolo and Rio de Janeiro, which was in the final tender stage by end of the first quarter of 2010.

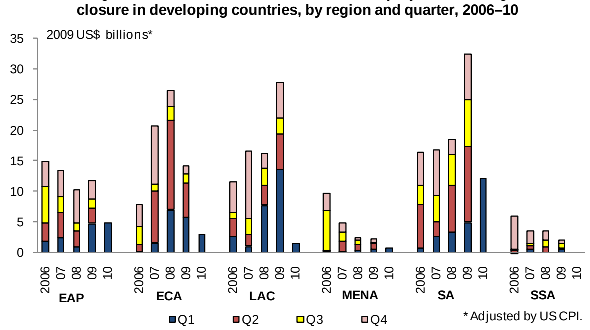
Transport continues to have the largest share of projects delayed, canceled, or at risk of delay by the end of the first quarter of 2010. However, the importance of the global financial crisis on project delays has declined while other factors (such as government permits and land acquisitions) have acquired greater relevance. Of the reviewed transport projects, about 20% by investment had been delayed, at risk of being delayed, canceled or at risk of being canceled as a result of the crisis. This share is twelve percentage points lower than the share reported for the end of the fourth quarter of 2009. Moreover, 10% of transport projects by investment had been affected by the crisis but were delayed or canceled for reasons in addition to the crisis. Finally, 22% of transport projects by investment were delayed, canceled, or at risk of being delayed for reasons unrelated to the crisis.

8. New PPI activity varies across developing regions, with investment in the first quarter of 2010 higher in South Asia and stable or lower in the other developing regions. South Asia (SA) had 17 projects reaching closure in the first quarter of 2010, with investment worth US$12.2 billion—up 148% compared with investment in the first quarter of 2009 (figure 11). All of this activity took place in just one country: India. All project sizes helped drive the investment growth in the first quarter of 2010 (figure 12). The number of projects reaching closure in the first quarter of 2010 grew by 63% compared with the same quarter in 2009.

East Asia and Pacific (EAP) had 11 projects reach closure in the first quarter of 2010, with investment worth US$4.9 billion, remaining stable compared with the investment level in the same quarter of 2009. However, regional investment was more even spread across projects than in the first quarter of 2009 when just one project (the concession of the Philippines' transmission company) accounted for 60% of investment. The number of projects reaching closure in the first quarter of 2010 fell by 50% compared with the same quarter in 2009, driven by fewer water projects implemented in China.

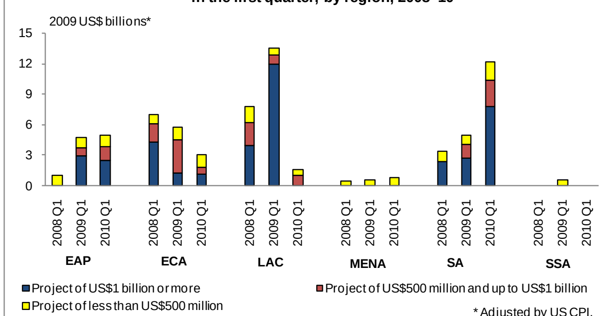
Latin America and the Caribbean (LAC) had 11 projects reaching closure in the first quarter of 2010, with investment worth US$1.6 billion, down 88% compared with investment in the same quarter of 2009. A lack of activity in Brazil accounted for the decline in regional investment. If Brazil is excluded, investment in the regions would have grown from US$550 million in the first quarter of 2009 to US$1.4 billion in the first quarter of 2010. The number of projects in the region grew by 2 to 11 in the first quarter of 2010 compared with the same quarter in 2009.

Figure 11 Investment commitments to PPI projects reaching closure in developing countries, by region and quarter, 2006–10



Source: World Bank and PPIAF, PPI Project and Impact of the crisis on PPI databases.

Figure 12 Investment commitments to PPI projects reaching closure in the first quarter, by region, 2008–10



Source: World Bank and PPIAF, PPI Project and Impact of the crisis on PPI databases.

Europe and Central Asia (ECA) had 10 projects reaching closure in the first quarter of 2010, with investment worth US$3 billion, down 48% compared with the same quarter of 2009. Projects of US$500 million–1 billion accounted for most of the decline in investment. The number of projects reaching closure in Europe and Central Asia fell by 6 in the first quarter of 2010 compared with the same quarter in 2009.

The Middle East and North Africa (MENA) had three projects with investment worth US$800 million reaching closure in the first quarter of 2010. That is similar level of activity as those reported in the first quarters of the previous two years. Sub-Saharan Africa (SSA) had no new project in the first quarter of 2010.

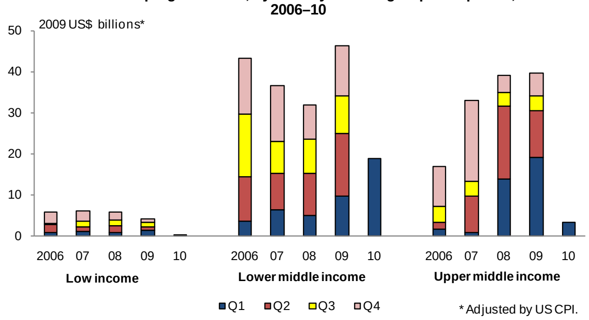
The impact of the global financial crisis on new PPI projects has either declined or remained stable across developing regions (table 5). In South Asia the share of reviewed projects by investment that had been delayed, were at risk of being delayed, or canceled because of the crisis declined from 23% by the fourth quarter of 2009 to 4% by the first quarter of 2010. In Latin America it fell from 19% to 8%. It changed from 16 to 17% in Europe and Central Asia, from 8% to 7% in East Asia and Pacific, from 11% to 13% in the Middle East and North Africa, and remained at zero in Sub-Saharan Africa. The share of projects delayed, at risk of being delayed, or canceled because of both the crisis and implementation issues (delays in land acquisition and government approvals) was highest for East Asia and Pacific (20% of investment), South Asia (15%), and Europe and Central Asia (11%). In addition, the share of projects delayed, at risk of being delayed, or canceled because of implementation issues was highest for Latin America (32%), South Asia (15%), and Europe and Central Asia (15%).

9. New PPI activity varies across country income groups, with investment in the first quarter higher in lower middle-income countries and lower in upper-middle and low-income countries.[7] In the first quarter of 2010 lower-middle-income countries had 33 projects reach closure, with investment worth US$18.9 billion, up 96% compared with the same quarter of 2009 (figure 13). India accounted for most of the investment growth. If that country were excluded, investment in lower-middle-income countries would have grown by 24%, to US$6.7 billion. All project sizes helped drive the investment growth in the first quarter of 2010 (figure 14). The number of projects reaching closure in the first quarter of 2010 fell by 6% compared with the same quarter in 2009.

Upper-middle-income countries had 17 projects reaching closure in the first quarter of 2010, with investment worth US$3.2 billion, down 83% compared with investment in the same quarter in 2009. Brazil accounted for a large share of the investment decline. The total number of projects reaching closure in this country group in 2009 was down 26% compared with the first quarter of 2009.

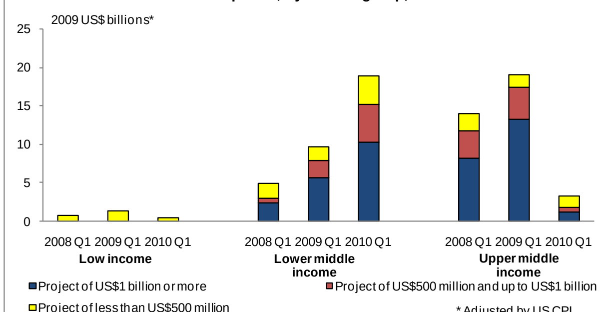
Low-income countries had 3 projects with investment worth US$388 million reaching closure in the first quarter of 2010, one third the investment in the same quarter of 2009, and the lowest number of projects implemented in low-income countries since the first quarter of 2004. All three projects were implemented in Cambodia.

Figure 13 Investment commitments to PPI projects reaching closure in developing countries, by country income group and quarter, 2006–10



Source: World Bank and PPIAF, PPI Project and Impact of the crisis on PPI databases.

Figure 14 Investment commitments to PPI projects reaching closure in the first quarter, by income group, 2008–10



Source: World Bank and PPIAF, PPI Project and Impact of the crisis on PPI databases.

10. Greenfield projects show a decline in investment, while concessions and divestitures start to show growth. In the first quarter of 2010, 32 greenfield projects (build-operate-transfer and build-operate-own projects and merchant facilities) reached financial closure, with investment worth US$16 billion—down 30% compared with investment in the same quarter of 2009 (figure 15). All project sizes contributed to investment decline in the first quarter of 2010 (figure 16). The number of greenfield projects reaching financial closure fell by 35% in the first quarter of 2010 compared with the same quarter of 2009.

Divestiture activity recovered for the second consecutive quarter. Five divestitures reached contractual closure in the first quarter of 2010, attracting investment worth US$3.4 billion, up 116% from the first quarter of 2009. Concessions, by contrast, showed a decline in investment. Sixteen concessions reached contractual closure in the first quarter of 2010, attracting investment worth US$3.1 billion, down 47% the investment reported in the first quarter of 2009. However, the number of concessions reaching financial closure was 60% higher in the first quarter of 2010 than in the same quarter of 2009, suggesting the absence of large concession accounts for the investment decline.

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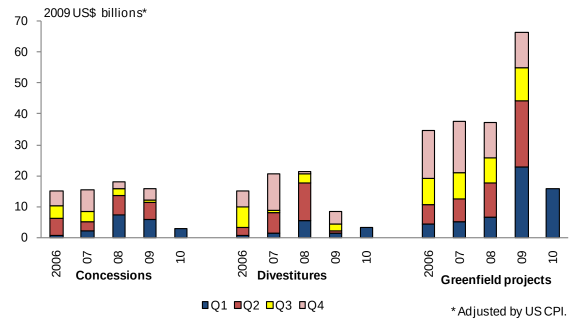
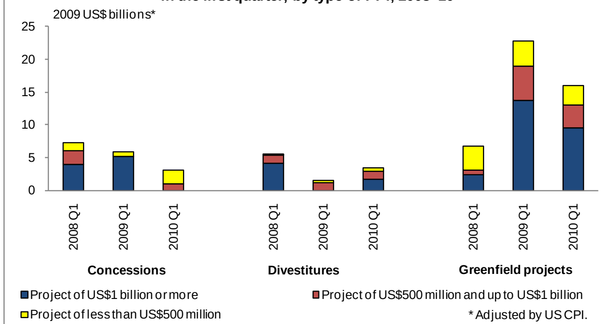
[7] Surveyed countries are classified by income group as low income (2007 GNI per capita of US$935 or less), lower middle income (US$936–3,705), or upper middle income (US$3,706–11,455).

Figure 15 Investment commitments to PPI projects reaching closure in developing countries, by type of PPI and quarter, 2006–10



Source: World Bank and PPIAF, PPI Project and Impact of the crisis on PPI databases.

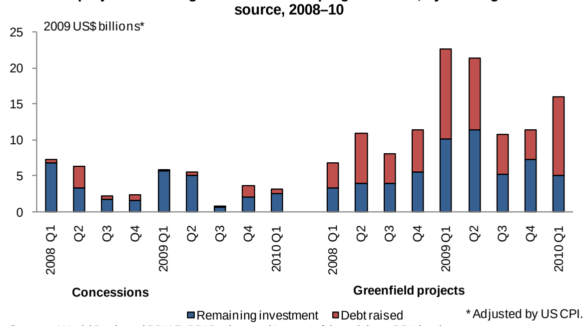
Figure 16 Investment commitments to PPI projects reaching closure in the first quarter, by type of PPI, 2008–10



Source: World Bank and PPIAF, PPI Project and Impact of the crisis on PPI databases.

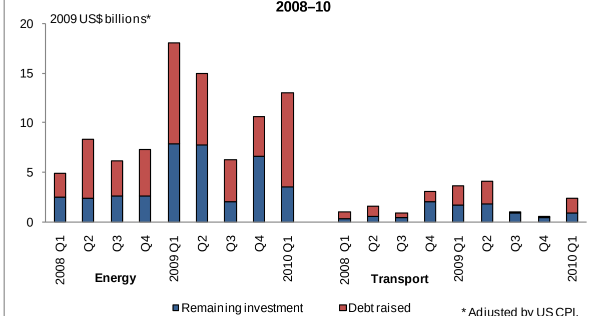
Greenfield projects continue to be best able to raise debt (figure 17). On average, greenfield projects rose debt equivalent to 69% of the total project cost in the first quarter of 2010. Within the greenfield category, power plants have raised the most debt since 2008 (figure 18). Concessions, by contrast, have been able to raise little financing. Many reached contractual closure (with the concession contract being signed and the private operator taking over the assets) with the agreement that funding would be raised later. Of the 16 concessions that reached contractual closure in the first quarter of 2010 (31 of which were for transport projects), only 6 had publicly available information on financial closure.

Figure 17 Investment commitments to concessions and greenfield projects reaching closure in developing countries, by funding source, 2008–10



Source: World Bank and PPIAF, PPI Project and Impact of the crisis on PPI databases.

Figure 18 Investment commitments to greenfield projects reaching closure in developing countries, by sector and funding source, 2008–10



Source: World Bank and PPIAF, PPI Project and Impact of the crisis on PPI databases.

The impact of the global financial crisis on new concessions and greenfield projects fell considerably. By the end of the first quarter of 2010 around 10% of the reviewed concessions by investment had been delayed, restructured, at risk of being canceled, or canceled because of the crisis. That share is one third of that reported by the end of the four quarter of 2009. Similarly, by the end of the first quarter of 2010 around 12% of reviewed greenfield projects by investment had been delayed, at risk of being delayed, restructured, or canceled as a result of the crisis. That is nine percentage points lower than the share by the end of the fourth quarter of 2009.

Conclusion. Investment growth in PPI projects continues to be concentrated in the largest developing economies, particularly India. The remaining developing countries saw some investment recovery in the first quarter of 2010. However, it is too soon to assess whether this recovery will continue and reverse the trend of declining investment in these countries. Although still concentrated in large projects (US$1 billion or more), investment in the first quarter of 2010 was more evenly distributed across all project sizes than in 2009. Among sectors, energy continues to account for the bulk of new investment, thanks to the activity in new power plants. While some new projects continue to be postponed and canceled because of the financial crisis, implementation issues are becoming more prominent factors in project delay and cancellation.

Developing country governments remain committed to their PPP programs as reflected in the growing pipeline of PPP projects. In addition, local public funds as well as multilateral and bilateral agencies continue to provide critical funding to private infrastructure projects.

While liquidity and financial market conditions have improved, projects that are able to raise funding can do so only with more stringent conditions (lower debt/equity ratios, shorter tenors, and more conservative structures). The selectivity in investment growth indicates that the "flight to quality" continues.

Table 1 Infrastructure projects with private participation awarded, raising financing, or at advanced stage of tender in developing countries, by project status and impact of the financial crisis, January 2008–March 2010

Type of impact	Awarded	Closed financing[a]	Looking for finance	Tender in progress	Tender delayed	Tender canceled	Canceled	Total
No major impact reported	187	531	50	92	0	0	1	861
Raised financing but at a higher cost	0	2	1	0	0	0	0	3
Project restructuring								
Because of the crisis	0	4	3	0	2	0	0	9
Because of more than the crisis	0	0	1	0	0	0	1	2
Delayed								
Because of the crisis	3	3	14	1	8	0	0	29
Because of more than the crisis	8	10	13	2	4	2	0	39
For reasons other than the crisis	16	5	23	5	12	1	0	62
At risk of delay								
Because of the crisis	0	2	1	0	0	0	0	3
Because of more than the crisis	1	0	0	0	0	0	0	1
For reasons other than the crisis	1	2	3	3	0	0	0	9
At risk of cancellation								
Because of the crisis	0	0	1	0	0	0	0	1
Because of more than the crisis	2	0	0	6	0	0	0	8
For reasons other than the crisis	2	0	0	3	0	1	0	6
Canceled								
Because of the crisis	0	1	0	0	0	7	6	14
Because of more than the crisis	0	0	0	0	0	13	1	14
For reasons other than the crisis	0	0	0	0	0	12	7	19
Total	220	560	110	112	26	36	16	1,080

a. See footnote 4 for definition of financial or contractual closure by type of project.
Source: World Bank and PPIAF, Impact of the financial crisis on PPI database.

Table 2 Investment commitments to infrastructure projects with private participation awarded, raising financing, or at advanced stage of tender in developing countries, by project status and impact of the crisis, January 2008–March 2010
(US$ millions)

Type of impact	Awarded	Closed financing[a]	Looking for finance	Tender in progress	Tender delayed	Tender canceled	Canceled	Total
No major impact reported	35,144	166,518	24,131	24,547	0	0	227	250,567
Raised financing but at a higher cost	0	1,530	230	0	0	0	0	1,760
Project restructuring								
Because of the crisis	0	2,388	3,469	0	426	0	0	6,283
Because of more than the crisis	0	0	100	0	0	0	553	653
Delayed								
Because of the crisis	8,679	1,489	5,908	469	8,872	0	0	25,416
Because of more than the crisis	2,079	10,429	17,639	0	1,521	1,329	0	32,996
For reasons other than the crisis	2,451	2,539	10,875	2,743	5,000	485	0	24,093
At risk of delay								
Because of the crisis	0	1,450	889	0	0	0	0	2,339
Because of more than the crisis	148	0	0	0	0	0	0	148
For reasons other than the crisis	36	3,272	1,465	32,222	0	0	0	36,995
At risk of cancellation								
Because of the crisis	0	0	1,275	0	0	0	0	1,275
Because of more than the crisis	102	0	0	818	0	0	0	920
For reasons other than the crisis	47	0	0	69	0	1,020	0	1,136
Canceled								
Because of the crisis	0	9	0	0	0	2,814	5,351	8,174
Because of more than the crisis	0	0	0	0	0	10,436	450	10,886
For reasons other than the crisis	0	0	0	0	0	14,479	2,209	16,688
Total	48,685	189,624	65,981	60,868	15,819	30,563	8,789	420,330

a. See footnote 4 for definition of financial or contractual closure by type of project.
Source: World Bank and PPIAF, Impact of the financial crisis on PPI database.

Table 3 Investment commitments to infrastructure projects with private participation awarded, raising financing, or at advanced stage of tender in developing countries, by sector and impact of the crisis, January 2008–March 2010
(US$ millions)

Type of impact	Energy	Telecommunications	Transport	Water and sewerage	Total
No major impact reported	157,628	11,393	73,779	7,768	250,567
Raised financing but at a higher cost	1,760	0	0	0	1,760
Project restructuring					
Because of the crisis	1,538	0	4,745	0	6,283
Because of more than the crisis	100	0	553	0	653
Delayed					
Because of the crisis	2,008	0	23,397	12	25,416
Because of more than the crisis	16,316	2,479	14,201	0	32,996
For reasons other than the crisis	7,335	3,601	12,375	782	24,093
At risk of delay					
Because of the crisis	1,450	0	889	0	2,339
Because of more than the crisis	148	0	0	0	148
For reasons other than the crisis	15,322	0	21,673	0	36,995
At risk of cancellation					
Because of the crisis	0	0	1,275	0	1,275
Because of more than the crisis	920	0	0	0	920
For reasons other than the crisis	47	0	69	1,020	1,136
Canceled					
Because of the crisis	10	73	7,966	124	8,174
Because of more than the crisis	8,449	0	2,437	0	10,886
For reasons other than the crisis	14,200	400	2,081	6	16,688
Total	227,230	17,946	165,441	9,713	420,330

Source: World Bank and PPIAF, Impact of the financial crisis on PPI database.

Table 4 Investment commitments to infrastructure projects with private participation awarded, raising financing, or at advanced stage of tender in developing countries, by region and impact of the crisis, January 2008–March 2010
(US$ millions)

Type of impact	EAP	ECA	LAC	MENA	SA	SSA	Total
No major impact reported	34,397	66,252	59,881	7,243	71,780	11,015	250,567
Raised financing but at a higher cost	0	0	0	0	1,375	385	1,760
Project restructuring							
Because of the crisis	21	3,478	2,784	0	0	0	6,283
Because of more than the crisis	0	0	100	0	553	0	653
Delayed							
Because of the crisis	2,045	12,385	6,902	312	3,773	0	25,416
Because of more than the crisis	8,802	4,310	8,994	300	10,590	0	32,996
For reasons other than the crisis	3,106	3,615	5,903	120	10,549	800	24,093
At risk of delay							
Because of the crisis	1,450	889	0	0	0	0	2,339
Because of more than the crisis	0	148	0	0	0	0	148
For reasons other than the crisis	1,150	0	32,222	0	3,622	0	36,995
At risk of cancellation							
Because of the crisis	0	1,275	0	0	0	0	1,275
Because of more than the crisis	0	0	0	0	920	0	920
For reasons other than the crisis	1,020	0	0	0	116	0	1,136
Canceled							
Because of the crisis	224	4,907	2,284	748	10	0	8,174
Because of more than the crisis	0	9,268	363	500	305	450	10,886
For reasons other than the crisis	6	14,339	140	400	1,802	0	16,688
Total	52,222	120,866	119,573	9,623	105,396	12,650	420,330

Source: World Bank and PPIAF, Impact of the financial crisis on PPI database.