



PPI data update note 24

October 2009

**Assessment of the impact of the crisis on new PPI projects – Update 4****New private infrastructure activity in developing countries recovered in the first half of 2009 thanks to the electricity sector, but the crisis continues to impact projects**

**Summary.** New private activity in infrastructure continues to take place in developing countries despite the financial and economic crisis. New projects are being tendered and brought to financial or contractual closure. Measured by amount of investment, the rate of project closure grew by 2% in the first half of 2009 compared to the first half of 2008, indicating a strong recovery from the decline of 48% experienced in the second half of 2008. This recovery, however, was driven by large projects. Measured by number of projects reaching closure, the rate of project closure continues to be slower than before the full-scale onset of the financial crisis. The number of projects reaching closure in the first half of 2009 was 20% lower than the number reported in the first half of 2008. This trend suggests greater project selectivity. Indeed, those projects that are reaching closure are characterized by strong economic and financial fundamentals, the backing of financially solid sponsors and governments.

Developing country governments' continuing commitment to their public-private partnership (PPP) programs is confirmed by the number of new projects tendered and awarded. However, current market conditions are forcing governments and investors to restructure projects to improve financial viability. Local public banks as well as bilateral and multilateral agencies continue to be active in project finance, providing a critical amount of funding. However, it is unlikely that these institutions have the capacity to fully replace other sources of financing. Not surprisingly, this means infrastructure sponsors are looking for new sources of private financing.

It is too early to assess the full impact of the crisis on new infrastructure projects with private participation (PPI). The crisis continues to make financing (both debt and equity) more difficult to secure, and hamper the ability of governments to maintain financial commitments to public-private infrastructure projects. Increasing constraints on government budgets might not only affect the government's ability to honor its commitments to PPP schemes, but also make it more difficult for projects to raise financing as the perceived credit risk of governments is increasing. New projects are facing higher cost of financing—a problem compounded by the lower demand for infrastructure services that has impacted some sectors. Commercial bank lending remains constrained and the "flight to quality" continues to affect the choices of investors and financiers. The financial conditions for projects able to raise financing are more stringent with lower debt/equity ratios, shorter tenors, and more conservative structures (e.g., banks are tightening the covenants in loans, transferring risk to borrowers). As a result some planned private infrastructure projects are being delayed, restructured, and, to a lesser extent, cancelled. Transport continues to be the worst affected sector, while Europe and Central Asia is the most affected developing region.

**Trends in new infrastructure projects with private participation.**<sup>1</sup> This review of new PPI projects covering the period up to June 2009 sheds some light on the recent activity and the short-term impact of the financial crisis.<sup>2</sup> Compared with the previous updates on the impact of the crisis,

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<sup>1</sup> The note focuses on private participation in infrastructure and therefore does not analyze the impact of stimulus packages which in most cases have been directed to public infrastructure projects.

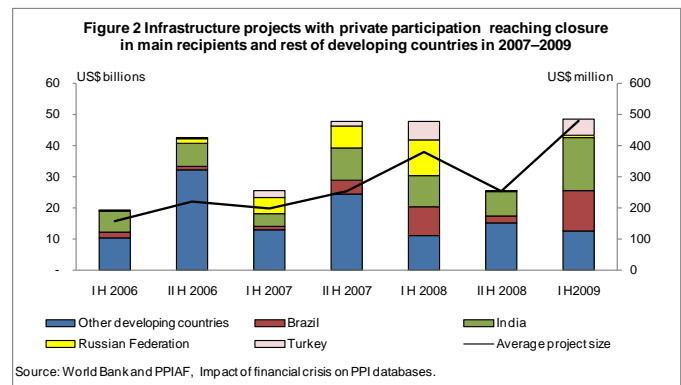
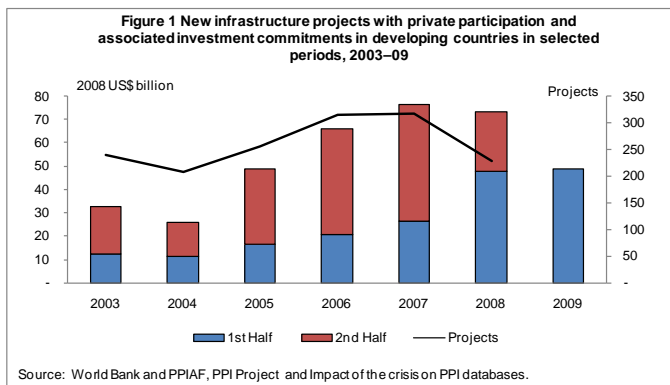
<sup>2</sup> This note relies on data compiled in the "impact of the financial crisis on PPI" database, which includes 714 infrastructure projects with private participation in developing countries that were trying to raise financing on a project finance basis or were in advanced tender stage between January 2008 and June 2009. The crisis impact database uses the same criteria for sector and type of project as the PPI Project Database. But numbers of both databases are not directly comparable. The crisis impact database includes projects before financial or contractual closure while the PPI Project Database, which is annually updated, includes only projects that have reached such closure. In addition, the crisis impact database does not include projects previously implemented whose investment programs could be affected

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this note incorporates several improvements: a larger sample size (714 projects versus 522 in the previous update) over a longer period of time (from January 2008 to June 2009 compared to the previous update, which covered January 2008 to March 2009).<sup>3</sup> The survey findings are presented in the following paragraphs:

**1. Investment to new PPI projects recovered strongly in the first half of 2009, reaching a level similar to the one in the first half of 2008.** In the first half of 2009, 101 PPI projects reached financial or contractual closure with investment commitments (hereafter “investment”) of US\$48.7 billion in 35 developing countries.<sup>4</sup> That investment level is 2% higher than the peak reported in the first half of 2008, suggesting a strong recovery in PPI investment (figure 1). Certainly, this represents a completely different picture than the one reported in the second half of 2008 when investments to new PPI projects totaled US\$25.7 billion, a 48% decline compared to the same period in 2007.

Most of investment in the first half of 2009 took place Brazil, India, and Turkey (figure 2), which are large economies with liquidity in their domestic financial markets and major PPP programs under implementation by their governments. Other developing countries also saw a recovery in investment. Excluding Brazil, India, Turkey and the Russian Federation (which has been hit hard by the financial crisis and had almost no new activity), developing countries saw growth of 10% in investments in the first half of 2009 compared to the same period in 2008. This is a major recovery from the level seen in the second half of 2008 when investments in these countries fell by 38% (compared to the same period in 2007).



A closer look at the data, however, reveals a more nuanced picture. First, the investment recovery was driven by larger projects. The average project size increased from US\$250 million in the second half of 2008 to US\$480 million in the first semester of 2009, driven by projects in Brazil, India, and to lesser extent Turkey. In the remaining developing countries, the average size of PPI projects remained around US\$200 million. Indeed, PPI activity by number of projects has not recovered, and was 20% lower in the first half of 2009 compared with the same period in 2008.

Second, projects that have been able to raise financing usually have the backing of largest developers with extensive banking relationships, have priority status in their respective countries (aiming at easing

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by a higher cost of financing and lower demand. Those projects account for over 50% of total investment commitments in 2004–07 as reported by the PPI project database.

<sup>3</sup> 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 because of a lack of public information.

<sup>4</sup> 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 and/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 there is a significant advancement of project construction (25%). For concession, 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, a contract authorizing the commencement of management or lease service must be signed with the private consortium assuming the operation of the services.



current infrastructure bottlenecks or prevent future ones), and are implemented in countries with more advanced regulatory frameworks.<sup>5</sup>

Finally, it is worth noting that PPI activity in the first year after the final crisis (July 2008–June 2009) remains below the pre-crisis peak reached in July 2007–June 2008. From July 2008 to June 2009, 202 projects involving investments of US\$74.5 billion reached closure. This represents a decline of 13% by investment and 36% by number of projects compared to the activity reported in July 2007–June 2008. However, the pre-crisis peaks were reached in unusually favorable financial conditions which are unlikely to come back in the foreseeable future.

**2. Projects that are reaching financial or contractual closure face significantly different financial market conditions from those prevalent before the crisis.** Most projects that raised financing in the first half of 2009 did so through club deals rather than syndications, which had been the norm until the first half of 2008. However, commercial bank underwriting shows signs of recovery, with some banks indicating an appetite for underwriting power projects depending on the sponsors<sup>6</sup>. Projects that have been able to raise financing usually have the backing of large developers, and the financing usually involves lower debt/equity ratios, shorter debt tenors, and embedded mechanisms to encourage refinancing. Ashurst LLP and Consilium recently surveyed more than 30 banks on their credit terms for power projects and concluded that debt/equity ratios have changed from 80/20 or higher in the pre-crisis period to around 70/30 in the current market. Similar trend is reported in the surveyed energy projects. Of the 17 power project reaching closure in the first half of 2009 and with information on debt/equity ratios, only 2 were able to obtain debt/equity ratios of 80/20. Ashurst LLP and Consilium's survey also found that banks expect shorten tenors with significant cash sweeps before year 10, thereby encouraging early refinancing.<sup>7</sup> Under such financial structures, sponsors may find "their returns squeezed between long term construction periods and the need to refinance relatively soon during the operational stage".<sup>8</sup> Another impact of the financial crisis on new PPI projects not yet reflected in PPI survey data is the impact of changing interest rates on project cost and financial viability. Project loans often have clauses through which banks can adjust interest rates on a regular basis to account for swings in their rate bases. Such clauses could be a risk in an environment of changing interest rates particularly for projects won through competitive tenders on a fixed tariff basis.<sup>9</sup>

Due to the limited commercial lending, infrastructure sponsors are seeking new sources of finance. For instance, Mexican ICA, a major infrastructure sponsor, is planning to list its infrastructure projects in the local stock exchange and sell shares in completed projects to raise funds for new ones.<sup>10</sup> The bond market is also becoming an attractive alternative for large infrastructure projects.<sup>11</sup>

**3. Local state-owned banks as well as multilateral and bilateral agencies continue to be key financiers.** Of the reviewed projects reaching closure, public banks provided funding to 15% of those projects, representing investment of US\$44.8 billion, and acted as lead arrangers in many cases. Multilateral, bilateral, and export credit agencies are also taking a more active role, mobilizing funding for many projects. These agencies provided direct financing to 12% of the projects reaching closure, which represented investment of US\$24.3 billion. The agencies are also working on a growing number of new projects. Of the 121 projects looking for financing, these agencies are so far evaluating funding for 18 projects, with a total investment of US\$16 billion. This growing participation is not surprising

<sup>5</sup> Project Finance Magazine, From Dhabol to Sasan May 2009 summaries regulatory improvements for private power projects in India.

<sup>6</sup> Ashurst LLP and Consilium, After the crunch: Credit terms for power projects, July 2009.

<sup>7</sup> Cash sweep clauses require the use of surplus cash to prepay debt or provide extra security for lenders, instead of paying it out to investors.

<sup>8</sup> Roumeliotis, Greg, *Governments bring it forward* in Project Finance International, June 2009.

<sup>9</sup> Project Finance, From Dhabol to Sasan, May 2009.

<sup>10</sup> Project Finance International, Investors to buy Infra, September 2009.

<sup>11</sup> Latham and Watkins, Why Project Bonds, Client Alert, August 2009.



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given the lack of liquidity from commercial banks that would normally take part in loan syndications. Nevertheless, it is unlikely that local public financing institutions together with bilateral and multilateral financing institutions will have the capacity to fully replace commercial sources of financing.

**4. Projects continue to be delayed and, to a lesser extent, cancelled.** Bank lending is not only more selective, but it also now takes longer to finalize deals which usually involved higher spreads and fees. Certainly, the cost of bank loans has increased for all sectors including infrastructure. Similar to the results of previous surveys, the increased cost of financing was highlighted as a major impact of the crisis in fewer than 1% of reviewed projects by investment. Only 4% of reviewed projects by investment reported project restructuring as a major impact of the crisis. Nevertheless, these findings seem to reflect the limited publicly available information on cost of funding and project design and implementation changes rather than the actual impact of the crisis.

The updated review of the impact of the crisis database, however, confirms that projects are being postponed or cancelled due to the crisis, corroborating other evidence of a slowdown in PPI projects reaching financial closure. Projects delayed and at risk of being delayed due to the crisis totaled US\$55.9 billion. As a point of reference, investments to new PPI projects in 2007 were US\$72.5 billion. About 12% of reviewed projects by investment have been delayed (11%) or cancelled (1%). In addition, 6% of projects by investment are at risk of being delayed if financing is arranged in the coming months (tables 1 and 2).

Other projects have been impacted by the crisis but their delay or cancellation was driven by issues unrelated to the crisis (such as delays in land acquisition or obtaining government approvals). They represent 12% of reviewed projects by investment and include delays (7%), cancellations (3%), and projects at risk of delay (2%). Finally 8% of reviewed projects by investment have been delayed or are at risk of being delayed but in no part because of the financial crisis. Infrastructure developers often face implementation issues that are unrelated to the crisis. For instance, a recent report on infrastructure development in India indicates that land acquisition is the single biggest constraint to speedy execution of infrastructure projects.<sup>12</sup>

Competition to attract financing will increase as a growing backlog of projects attempt to raise financing. There are a growing number of PPI projects trying to raise funds in the next 12 months that will be affected if financial markets do not recover soon. Around 120 projects involving investment of US\$88 billion, which were not able to secure financing by June 2009, are expected to continue seeking financing. There are also 167 recently awarded projects with investment of US\$55 billion that will be trying to raise financing in the next 6 to 12 months. These projects will face a challenging environment as net private capital flows to developing countries are expected to sink to US\$363 billion in 2009 from the peak levels of 1.2 trillion in 2007 and US\$707 billion in 2008, and remain subdued for years as global deleveraging continues.<sup>13</sup>

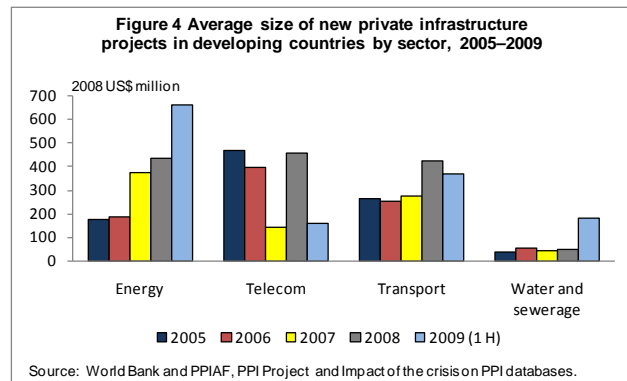
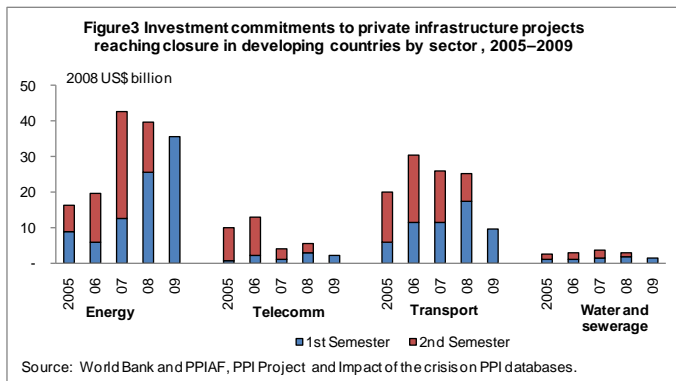
**5. The rate of project closure varies across sectors with energy reporting peak investments levels, telecom seeing stable investments, and transport and water receiving lower investments.** In the energy sector, 42 projects involving investments of US\$35.6 billion reached closure in the first half of 2009 (figure 3). This level of activity represents an increase of 39% by investment, but a drop of 14% by number of projects compared to the first half of 2008. In fact, investment in the sector in the first half of 2009 reached a peak level not seen since the late 1990s thanks to the implementation of several large projects. The average project size in the first half of 2009 amounted to US\$660 million, which is 75% larger than the average project size in 2007 (figure 4). Nevertheless, annual PPI activity in energy is still below the pre-crisis peak. Investments to new energy projects in July 2008–June 2009 were US\$49.6 billion. That is 11% lower than the peak reached in July 2007–June 2008. Similar trend was reported by activity by number of projects.

<sup>12</sup> 3iNetwork and Infrastructure Development Finance Company, India Infrastructure Report 2009 Land—A Critical Resource for Infrastructure, 2009.

<sup>13</sup> World Bank, Global Development Finance 2009 Charting a Global Recovery, May 2009.

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Preliminary data from the PPI database indicates that new and existing telecom operators invested US\$77 billion in 2008, a level close to the peak reached in 2007. Telecom—for which new projects represent just a fraction of annual investments—had eight projects with investments for US\$2 billion reaching closure in the first half of 2009, representing a 30% drop compared to the first half of 2008. Fitch Ratings expects telecom operators to be more cautious on capital expenditure in 2009 which would result in broadly stable-to-declining investments in developing regions.<sup>14</sup> That trend would represent a major slowdown from strong growth rates in investment reported in 2004-07.



The water and sewerage sector saw 40 projects involving investments for US\$1.5 billion in the first half of 2009. That activity represents a decline of 14% by investment but a recovery of 38% by number of projects compared to the activity in the first half of 2008. Since the full onset of the financial crisis between July 2008 and June 2009, new PPI activity in water and sewerage declined 22% by investment and 55% by number of projects compared to similar period in the previous year.

Transport continues to be the sector most affected by the financial crisis, with only 24 projects involving investments of US\$9.6 billion reaching closure in the first half of 2009. Such levels are the lowest for the sector since 2005 and represent a drop of 45% by investment and 30% by number of projects compared with the activity in the first half of 2008. Since the onset of the financial crisis PPI activity in transport has declined significantly with investments to new transport projects falling by 40% in July 2008–June 2009 from the peak level of US\$31.7 billion experienced in July 2007–June 2008.

Transport is also the sector with the largest share of project delays and projects at risk of delay (table 3). Around 25% of reviewed transport projects by investment have been delayed due to the crisis (17%) or are at risk of being delayed (8%). That impact is not surprising given the diminished global demand for transportation. World trade volumes are expected to shrink by 9.7% in 2009 and grow by just 3.8% in 2010 after slowing from a growth rate of 7.5% in 2007 to 3.7% in 2008, due to the sharp declines in world trade in the last months of 2008.<sup>15</sup> The decline in economic activity has not only impacted demand for ports but also roads. A recent Fitch Rating report indicates that toll roads dependent on commercial and tourist traffic in Latin America have experienced a noticeable slowdown in traffic growth in the first months of 2009.<sup>16</sup> Commuter roads have been less affected due to the limited alternative forms of transportation in the region. Similarly Airport Council International estimate single digit declines in air passenger traffic and double digit declines in freight traffic across developing regions in the first seven months of 2009 compared to the same period in 2008. The only exception is the Middle East and North Africa with passenger traffic growing by 4.7% and freight traffic falling by 0.7%.<sup>17</sup>

<sup>14</sup> Fitch Rating Global Emerging Market Telecom: Cautious on capital spending in 2009, April 2009.

<sup>15</sup> Global Development Finance Charting a Global Recovery, the World Bank, May 2009.

<sup>16</sup> Fitch, Latin America Toll Roads: Global Credit Crisis Causes Bumpy Road Ahead, June 2009.

<sup>17</sup> Airport Council International, Global air traffic sees softer contraction in July, September 2009.

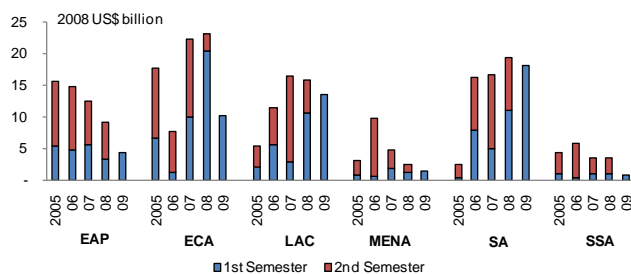
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Energy also accounts for a large share of project delays and projects at risk go being delayed. Among the reviewed energy projects, 14% of total investment has been delayed (9%) or are at risk of being delayed (5%). Such project delay may create capacity shortages because the decline in GDP and economic activity is not expected to reduce significantly the need of new generation capacity given that in the years prior to the crisis new generation capacity has barely been able to keep up with growing demand.

**6. The rate of project closure varies across regions with Latin America and South Asia attracting higher investments, Europe and Central Asia reporting lower investments, and the three other developing regions (East Asia and Pacific, Sub-Saharan Africa and Middle East and North Africa) seeing stable investments.** Latin America and the Caribbean (LAC) had investments worth US\$13.5 billion in the first half of 2009, an increase of 27% compared with the level in the first half of 2008 (figure 5). Such a level of activity contrasts substantially with that of the second half of 2008 when investments amounted to US\$5 billion. The recovery in the first half of 2009 was driven by a few larger projects, which increased the project average size from US\$350 million to US\$1 billion (figure 6). South Asia (SA) saw investments of US\$18.2 billion in the first half of 2009, a record level in the region and a strong recovery from the contraction in the second half of 2008. Similar to LAC, large projects drove the investment growth in SA. So far, Eastern Europe and Central Asia (ECA) is the developing region most affected by declining investments. After reaching a peak level of US\$20.3 billion in the first half of 2008, investments in ECA plummeted to US\$2.8 billion in the second half of 2008, and then recovered to US\$10.2 billion in the first half of 2009. Several large projects in Poland, Romania, and Turkey account for most of the new investment in the first half of 2009.

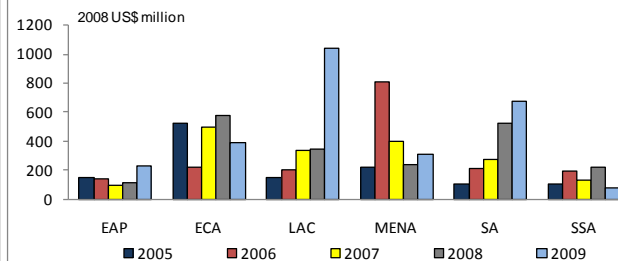
East Asia and Pacific (EAP) reported investments of US\$4.4 billion in the first half of 2009, a level which is within the range of US\$3–5 billion experienced in first semesters of the previous two years. Similarly investments in EAP in the second half of 2008 were US\$6 billion, a level just 15% lower than that reported in the second half of 2007. The Middle East and North Africa (MENA) had investments of US\$1.6 billion in the first half of 2009, a level which is within the range of US\$1–2 billion experienced in first semesters of the previous two years. MENA, however, experienced sharp decline in the second half of 2008 when investments to the region amounted to US\$1.1 billion. That was a decline of 60% compared to the same period in 2007. Sub-Saharan Africa (SSA) reported investments of US\$900 million in the first half of 2009, which within the US\$1 billion range reported in the region in similar periods in the previous two years. Similarly SSA had investments of US\$2.5 billion in the second half of 2008 which were comparable to the level reported in the second half of 2007.

**Figure 5 Investment commitments to private infrastructure projects reaching closure in developing countries by region 2005–2009**



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

**Figure 6 Average size of new private infrastructure projects in developing countries by sector, 2005–2009**



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

South Asia and ECA, the two most active developing regions in 2004–07, have the largest number of projects delayed or at risk of being delayed (table 4). In South Asia, 23% of reviewed projects by investment are delayed (17%) or at risk of being delayed (5%). In addition, 15% of reviewed projects by investment in SA are delayed by the crisis as well as other implementation issues (delays in land acquisition and obtaining government approvals). India accounts for most of the delayed activity. In ECA, 12% of reviewed projects by investment are delayed (6%) or at risk of being delayed (6%) due to the crisis. In addition, 14% of reviewed projects in ECA are delayed due to the crisis as well as other key implementation issues. Some examples delayed projects are the major transport PPP projects in Russia as well as the PPP program in Latvia. Latvia, which has five road concessions in the pipeline, will

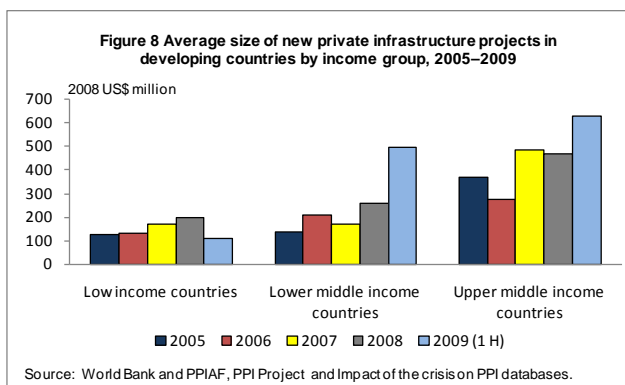
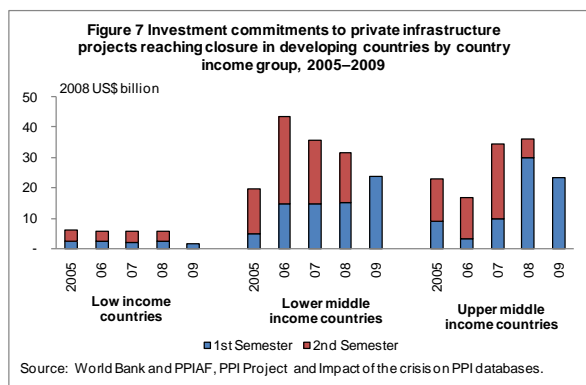
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not launch any new PPP project in 2009 because of government budget constraints and the government payments that those projects may require. Most project restructurings due to the crisis also took place in ECA. Finally EAP saw delays in 21% of reviewed projects by investment, but just five independent power producer projects in Thailand account for most of the delayed investment.

### 7. The rate of project closure varies across income groups with middle income countries attracting higher investments, and low income countries reporting lower investments.<sup>18</sup>

Upper middle income countries were the group of countries most affected by the slowdown of PPI activity in the second half of 2008. Since then the group has shown a strong recovery. After reaching a peak of US\$30 billion in the first half of 2008, investments to this group plummeted to US\$6 billion in the second half of 2008, and then recovered to US\$23 billion in the first half of 2009 (figure 7). Activity by number of projects followed a similar but less pronounced trend. The average project size in the first half of 2009 was US\$630 million which is 30% larger than the average of 2008 (figure 8). The data also reveals that upper middle countries are implementing larger PPI projects in the last few years with the average project size in the first half of 2009 being 2.5 times larger the average project size in 2003-2004.

Lower middle income countries also reported a recovery in the first half of 2009 when investments totaled US\$23.7 billion, an increase of 50% from the level reported in the first half of 2008. That growth contrasts markedly with the decline of 22% experienced in the second half of 2008 compared to similar period in the previous year. The investment recovery was also driven by large projects. The average project size in the first half of 2009 was US\$500 million, almost double the average project size in 2008. Activity by number of projects, however, continues to slow, with a drop of 20% in the first half of 2009 compared to the same period in 2008. Although India accounted for most of the investment growth, the remaining lower middle income countries also show signs of recovery. Lower middle income countries excluding India had investments of US\$6.5 billion in the first half of 2009; an increase of 20% compared with the level in the first half of 2008.



Low income countries, by contrast, continue to experience a decline in PPI activity. Investments to this income group amounted to US\$1.7 billion in the first half of 2009, representing a decline of 30% compared to the level reported in the first half of 2008. Such a rate of decline is higher than what was experienced in the second half of 2008 when investments fell by 15% compared with the level reported in the second half of 2007. PPI activity by number of projects followed a similar but less pronounced trend.

### 8. The rate of project closure varies across project types with greenfield projects reporting higher investments (and debt raised) and concessions and divestitures seeing lower investments.

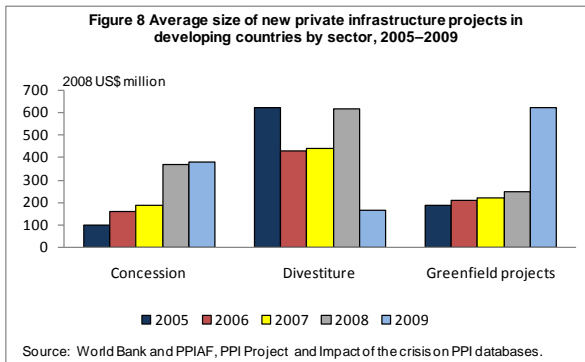
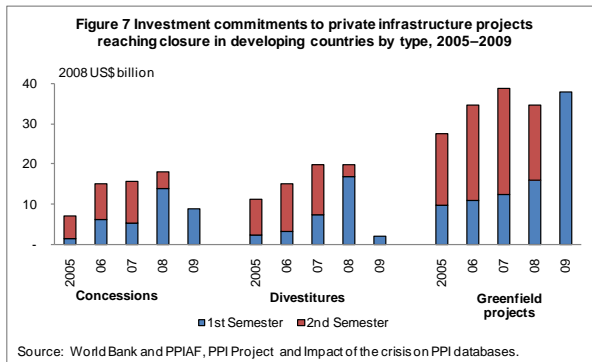
Greenfield projects (build-operate-transfer, build-own-operate, and merchant facilities) are the type of projects whose investments have shown more resilience to the crisis. These types of projects, which account for the bulk of PPI activity, attracted investments of US\$38 billion in the first half of 2009, a peak level and 140% higher the level reported in the first half of 2008 (figure 7).

<sup>18</sup> By income group, surveyed countries are classified in low income (2007 GNI per capita of US\$935 or less), lower middle income (US\$936–US\$3,705), and upper middle income (US\$3,706–US\$11,455).

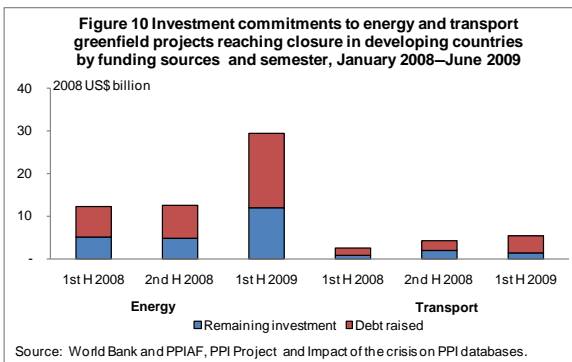
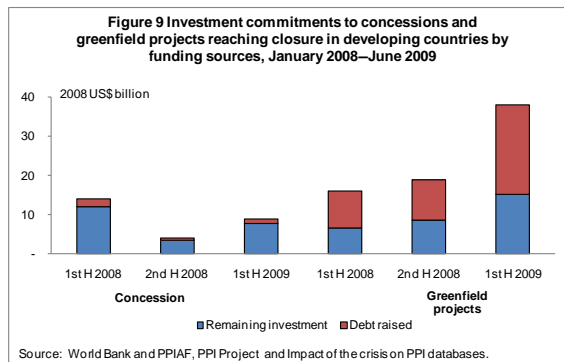
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Indeed, investment to greenfield projects have reached a peak level despite the crisis. Investments to new greenfield projects totaled US\$56.8 billion in July 2008–June 2009, an increase of 34% from the level reported in the year previous to financial crisis (July 2007–June 2008). The growth in investment was driven by large projects. Activity by number of projects has been declining since the second half of 2008, and consequently the average project size increased by 1.5 times between 2008 and the first half of 2009 (figure 8). Concessions and divestitures, by contrast, saw significant investment declines in the second half of 2008 and did not show any sign of recovery by the half of 2009.

Greenfield projects have also been the type of PPI able to raise the most debt (figure 9). Within the category of greenfield projects, energy projects, particularly power plants, are the type of projects that were able to raise the most debt since 2008 (figure 10). Concessions, in contrast, have not been able to raise much financing, but many reached contractual closure (signing concession contract and taking over the assets) with the agreement that funding would be raised later. However, at least 8 of the 12 transport concessions reaching contractual closure in the last twelve months had experienced delays in securing required financing. Such was the case of the five road concessions that Spanish OHL won in Brazil in late 2007 and involved investments of US\$4.8 billion over a 25 year period. Those road concessions reached contractual closure in February 2008 and operational control was transferred to OHL, but the sponsor was only able to raise short term financing in 2008 and was still trying to obtain long term financing from BNDES, the Brazilian development bank, by June 2009.



Greenfield projects are also impacted by delays and the risk of delays. Around 19% of reviewed greenfield projects by investment are delayed (12%) or at risk of being delayed (7%). Such a backlog is not surprising given predominance of greenfield projects in the overall project sample (73% of the 714 reviewed projects are greenfield projects). In fact, they have been the predominant type of PPI in developing countries since the early 2000s. Concessions have also been affected by project delays. Around 19% of the reviewed concessions by investment were delayed (16%) or at risk of being delayed (3%). In addition, 6% of reviewed concessions by investment were restructured (in phases) due to the crisis.



**9. Developing countries continue to tender/award new PPI projects.** The review of projects shows that 29 countries awarded 84 projects which totaled investments of US\$26 billion in the first half



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of 2009, and are still to start looking for finance. In addition, 19 countries awarded 56 projects with investments worth US\$16.5 billion in investment in the second half of 2008. Those projects were primarily in energy (46 projects worth US\$15 billion) and transport (43 projects worth US\$25 billion) but also in telecom (13 projects worth US\$1.5 billion) and water and sewerage (38 projects worth US\$1.7 billion). The projects were located in all developing regions, but mainly in ECA (16 projects for US\$11.7 billion), South Asia (17 projects worth US\$10.7 billion), and LAC (30 projects worth US\$7 billion in investments). In addition, there are at least 62 projects in final tender stage (to be awarded in the next three months), representing investments of US\$35.6 billion.

Developing country governments are also actively trying to facilitate implementation of new projects by restructuring them so they are financially viable under the post-crisis market conditions. For instance, Mexican Farac II and Colombian Ruta del Sol have been divided in two and three projects respectively to reduce required investments. New road concessions in Eastern Europe are based largely or purely on availability payments to improve project bankability. The National Highways Authority of India is downsizing investments in at least 48 projects whose calls for bids were unsuccessful between September 2008 and February 2009.<sup>19</sup>

**Conclusion.** The financial crisis significantly affected the rate of project closure rate of new PPI projects in the second half of 2008. Since then investment to new PPI projects have recovered substantially, driven by large greenfield power projects in selected markets. However, there is also evidence of projects being postponed and canceled, mainly in transport. These postponements and cancellations indicate that the “flight to quality” continues to take place. This survey confirms the finding of the previous update, which concluded that three characteristics make projects more likely to reach closure: strong economic and financial fundamentals, the backing of financially solid sponsors, and government support. In addition, projects raising funding are able to do so, but at higher cost and with more stringent conditions (lower debt/equity ratios, shorter tenors, and more conservative structures). The impact of the crisis varies across developing regions with ECA being the most affected region so far. Developing country governments continue committed to their PPP programs and are trying to facilitate implementation of new projects by restructuring them and facilitating financing. In addition, multilateral and bilateral agencies are also taking a bigger role in the funding of private infrastructure projects. This analysis will be refined in the coming quarters to assess the extent to which these trends continue.

**Table 1: Infrastructure projects with private participation awarded, raising financing or in advance stage of tender by project status and impact of the financial crisis in January 2008–June 2009**

| Project status                               | Impact of crisis |                   |                     |                    |                |                 |          | Total      |
|--|------------------|-------------------|---------------------|--------------------|----------------|-----------------|----------|------------|
|  | Awarded          | Closed financing* | Looking for finance | Tender in progress | Tender delayed | Tender canceled | Canceled |            |
| No major impact reported                     | 131              | 307               | 59                  | 40                 | 2              | 1               | 1        | 541        |
| Raised financing but at a higher cost        | -                | 3                 | 1                   | -                  | -              | -               | -        | 4          |
| Project restructuring due to the crisis      | 2                | 2                 | -                   | 4                  | -              | -               | -        | 8          |
| Project restructuring (more than the crisis) | -                | -                 | 2                   | -                  | -              | -               | 1        | 3          |
| Delayed (due to the crisis)                  | 4                | 11                | 14                  | 3                  | 6              | 1               | 1        | 40         |
| Delayed (more than the crisis)               | 1                | -                 | 9                   | 1                  | 7              | -               | -        | 18         |
| Delayed (other issues than the crisis)       | 12               | 2                 | 7                   | 6                  | 1              | -               | -        | 28         |
| Delayed potentially (due to the crisis)      | 10               | 2                 | 16                  | 3                  | -              | -               | -        | 31         |
| Delayed potentially (more than the crisis)   | 1                | 1                 | 8                   | 2                  | -              | -               | -        | 12         |
| Delayed potentially (other than the crisis)  | 1                | -                 | 2                   | 3                  | -              | -               | 1        | 7          |
| Cancelled potentially (more than the crisis) | 1                | -                 | 1                   | -                  | -              | -               | -        | 2          |
| Cancelled (due to the crisis)                | 1                | -                 | 2                   | -                  | -              | 2               | 1        | 6          |
| Cancelled (more than the crisis)             | 3                | -                 | -                   | -                  | -              | 7               | 1        | 11         |
| Cancelled (other than the crisis)            | -                | -                 | -                   | -                  | -              | -               | 3        | 3          |
| <b>Total</b>                                 | <b>167</b>       | <b>328</b>        | <b>121</b>          | <b>62</b>          | <b>16</b>      | <b>11</b>       | <b>9</b> | <b>714</b> |

\* See footnote 3 for definition of financial or contractual closure by type of project.  
Source: World Bank and PPIAF, Impact of the financial crisis on PPI database.

<sup>19</sup> Interview with Didar Singh in India Infrastructure, June 2009.

# PRIVATE PARTICIPATION IN INFRASTRUCTURE DATABASE

**Table 2: Investment commitments to infrastructure projects with private participation awarded, raising financing or in advance stage of tender by project status and impact of the crisis in January 2008–June 2009**  
(US\$ million)

| Project status                               | Impact of crisis |                   |                     |                    |                |                 |              | Total          |
|--|------------------|-------------------|---------------------|--------------------|----------------|-----------------|--------------|----------------|
|  | Awarded          | Closed financing* | Looking for finance | Tender in progress | Tender delayed | Tender canceled | Canceled     |                |
| No major impact reported                     | 30,123           | 107,369           | 25,137              | 15,187             | -              | 140             | 100          | 178,055        |
| Raised financing but at a higher cost        |                  | 2,221             | 230                 |                    | -              | -               | -            | 2,451          |
| Project restructuring due to the crisis      | 5,190            | 759               |                     | 3,954              | -              | -               | -            | 9,904          |
| Project restructuring (more than the crisis) |                  | -                 | 4,100               |                    | -              | -               | 627          | 4,727          |
| Delayed (due to the crisis)                  | 4,584            | 10,397            | 10,053              | 1,848              | 8,384          | 1,200           | 333          | 36,798         |
| Delayed (more than the crisis)               | 154              | -                 | 17,504              | 5,000              | 695            | -               | -            | 23,353         |
| Delayed (other issues than the crisis)       | 2,495            | 263               | 3,307               | 7,951              | 150            | -               | -            | 14,165         |
| Delayed potentially (due to the crisis)      | 4,084            | 831               | 12,925              | 1,300              | -              | -               | -            | 19,140         |
| Delayed potentially (more than the crisis)   | 148              | 295               | 5,744               | 234                | -              | -               | -            | 6,421          |
| Delayed potentially (other than the crisis)  | 138              | -                 | 5,972               | 101                | -              | -               | 1,288        | 7,499          |
| Cancelled potentially (more than the crisis) | 470              | -                 | 800                 | -                  | -              | -               | -            | 1,270          |
| Cancelled (due to the crisis)                | 9                | -                 | 2,200               | -                  | -              | 1,300           | 12           | 3,521          |
| Cancelled (more than the crisis)             | 7,215            | -                 | -                   | -                  | -              | 1,937           | 450          | 9,602          |
| Cancelled (other than the crisis)            | -                | -                 | -                   | -                  | -              | -               | 4,808        | 4,808          |
| <b>Total</b>                                 | <b>54,611</b>    | <b>122,135</b>    | <b>87,971</b>       | <b>35,574</b>      | <b>9,228</b>   | <b>4,577</b>    | <b>7,617</b> | <b>321,715</b> |

\* See footnote 3 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 in advance stage of tender by sector and impact of the crisis in January 2008– June 2009**  
(US\$ million)

| Project status                               | Impact of crisis |                    |                |                    | Total          |
|--|------------------|--------------------|----------------|--------------------|----------------|
|  | Energy           | Telecommunications | Transport      | Water and sewerage |                |
| No major impact reported                     | 108,768          | 11,713             | 50,484         | 7,090              | 178,055        |
| Raised financing but at a higher cost        | 2,451            | -                  | -              | -                  | 2,451          |
| Project restructuring due to the crisis      | 1,638            | -                  | 8,266          | -                  | 9,904          |
| Project restructuring (more than the crisis) | 100              | -                  | 4,627          | -                  | 4,727          |
| Delayed (due to the crisis)                  | 14,471           | -                  | 22,316         | 12                 | 36,798         |
| Delayed (more than the crisis)               | 13,509           | 45                 | 9,800          | -                  | 23,353         |
| Delayed (other issues than the crisis)       | 8,627            | 787                | 4,356          | 396                | 14,165         |
| Delayed potentially (due to the crisis)      | 9,076            | -                  | 9,993          | 70                 | 19,140         |
| Delayed potentially (more than the crisis)   | 3,905            | -                  | 2,516          | -                  | 6,421          |
| Delayed potentially (other than the crisis)  | 1,506            | -                  | 5,993          | -                  | 7,499          |
| Cancelled potentially (more than the crisis) | 1,270            | -                  | -              | -                  | 1,270          |
| Cancelled (due to the crisis)                | 12               | -                  | 3,500          | 9                  | 3,521          |
| Cancelled (more than the crisis)             | 7,665            | -                  | 1,937          | -                  | 9,602          |
| Cancelled (other than the crisis)            | -                | -                  | 4,808          | -                  | 4,808          |
| <b>Total</b>                                 | <b>172,996</b>   | <b>12,545</b>      | <b>128,596</b> | <b>7,577</b>       | <b>321,715</b> |

\* See footnote 3 for definition of financial or contractual closure by type of project.

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




# PRIVATE PARTICIPATION IN INFRASTRUCTURE DATABASE

**Table 4; Investment commitments to infrastructure projects with private participation awarded, raising financing or in advance stage of tender by region and impact of the crisis in January 2008–June 2009**  
(US\$ million)

| Project status                               | Impact of crisis* |                |               |              |               |              | Total          |
|--|-------------------|----------------|---------------|--------------|---------------|--------------|----------------|
|  | EAP               | ECA            | LAC           | MENA         | SA            | SSA          |                |
| No major impact reported                     | 27,739            | 51,456         | 44,974        | 6,691        | 39,552        | 7,643        | 178,055        |
| Raised financing but at a higher cost        | 665               | -              | -             | -            | 1,401         | 385          | 2,451          |
| Project restructuring due to the crisis      | 921               | 5,928          | 3,054         | -            | -             | -            | 9,904          |
| Project restructuring (more than the crisis) | -                 | 4,000          | 100           | -            | 627           | -            | 4,727          |
| Delayed (due to the crisis)                  | 6,092             | 6,000          | 8,372         | 645          | 15,690        | -            | 36,798         |
| Delayed (more than the crisis)               | 1,190             | 14,245         | 200           | -            | 7,719         | -            | 23,353         |
| Delayed (other issues than the crisis)       | 2,306             | 7,629          | 1,597         | 400          | 1,435         | 800          | 14,165         |
| Delayed potentially (due to the crisis)      | 3,063             | 6,408          | 4,373         | 560          | 4,736         | -            | 19,140         |
| Delayed potentially (more than the crisis)   | -                 | 443            | -             | -            | 5,978         | -            | 6,421          |
| Delayed potentially (other than the crisis)  | -                 | -              | -             | -            | 7,499         | -            | 7,499          |
| Cancelled potentially (more than the crisis) | 800               | -              | -             | -            | 470           | -            | 1,270          |
| Cancelled (due to the crisis)                | 9                 | 1,300          | 1,900         | 300          | 12            | -            | 3,521          |
| Cancelled (more than the crisis)             | -                 | 8,484          | 363           | -            | 305           | 450          | 9,602          |
| Cancelled (other than the crisis)            | -                 | -              | -             | -            | 4,808         | -            | 4,808          |
| <b>Total</b>                                 | <b>42,786</b>     | <b>105,893</b> | <b>64,931</b> | <b>8,596</b> | <b>90,231</b> | <b>9,278</b> | <b>321,715</b> |

\* See footnote 3 for definition of financial or contractual closure by type of project.  
Source: World Bank and PPIAF, Impact of the financial crisis on PPI database.