

Private sector cross-border investments in clean energy

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In a few decades Iceland has made a transformation from fossil fuel to clean energy. Al Gore describes this transformation in his recent book "Our Choice" as follows "Iceland responded to the oil shocks of the 1970s by converting to domestic resources, virtually every building in the entire country is heated by the hot water resources close to the surface of the tectonically active land" (Al Gore, 2009, p. 109). Given this successful transformation experience Iceland could become a role model for some other countries especially in the utilization of geothermal energy. Crossborder engagement in the energy sector could potentially become a growth area for Iceland.

Clean energy resources, including geothermal energy, are largely located in emerging market economies and most of the world's growth in energy demand, including electricity, is also likely to come from developing countries (see for example, Tooman, 2004). However, high risks in emerging markets and lack of funding and risk mitigation instruments can prevent future investments in energy infrastructure that also tend to be large, capital intensive and long-term.

If investors from a small country like Iceland enter those markets they need strong partners to help mobilize funds and to ensure proper risk mitigation. International financial institutions (IFIs) that offer funding and risk mitigation instruments could be feasible partners for Icelandic investors at least in some cases. IFIs already play a role here but given the global energy infrastructure needs, the urgency of protecting earth's environment, and IFIs financial strength, their future role could be more prominent and maybe they should do more.

The goal of this article is to analyze and assess the needs and opportunities for IFIs to increase their engagement in energy infrastructure investments in emerging markets. Special attention is given to the potential of guarantee instruments to support private sector cross-border investments and to the needs of investors from small states who may find such risk mitigation feasible, especially when investing in larger emerging market economies.

The article suggests that the World Bank Group (WBG), which is the largest of the IFIs, and operates in all emerging market regions, needs to offer more cost effective tools, including guarantees and insurances to promote private investments and with shorter processing time. Furthermore, all the IFIs with their strong balance sheets can potentially mobilize more funds for energy infrastructure projects with guarantee and insurance instruments, then through loans and equity investments.

The paper is based on review of theoretical literature, secondary data, and the author's experience of working for the World Bank Group for 12 years in three continents.

The potential for public-private partnerships (PPPs) in emerging markets and the importance of risk mitigation instruments

The World Economic Forum (WEF) is an independent international organization committed to improving the state of the world by engaging leaders in partnerships to shape global, regional and industry agendas.

In September 2005 WEF issued a report titled "Building on the Monterrey Consensus: The Growing Role of Public-Private Partnerships in Mobilizing Resources for Development" (World Economic Forum, 2005a). This report that was prepared for the United Nations concludes that PPPs can help close financing gap by adding scale, efficiency and innovation to traditional aid programs. In a press release from the WEF one can find the following statement made by Richard Samans, Managing Director of the Global Institute for Partnership and Governance at the World Economic Forum: "This report adds to the growing evidence that public-private partnerships are a promising tool that deserves to be taken more seriously by everyone who has an interest in expanding growth and opportunity in developing countries. It builds upon our own growing experience in facilitating partnerships involving our member companies in the areas of health, education, water, energy, information technology and disaster relief" (World Economic Forum, 2005b).

In the above quote the energy sector is specifically mentioned. This is not surprising. Energy projects are often in the public sector domain. They like many infrastructure projects tend to be large, capital intensive and long-term. PPPs may thus be feasible for those investments where public and private players must interact. However, those arrangements are complex especially if the investment is taking place in a country in transition where instability and uncertainty may be part of daily life that can severely affect private operations. In such situations, proper risk mitigation is important.

In 2006 the WEF issued another report titled "Building on the Monterrey Consensus: The Untapped Potential of Development Finance Institutions to Catalyze Private Investment" (World Economic Forum, 2006). In this report the WEF argued strongly for IFIs to better use guarantee and risk mitigation instruments and capabilities to attract increased commercial investment in development projects. The report specifically asserted that: "...the weight of DFI (development finance institutions) activities should shift over time from direct lending to facilitating the mobilization of resources from the world's large private savings pools - international and domestic - for development- oriented investment through: wider use of risk mitigation instruments to alleviate part of risk faced by investors; and stronger direct support for capacity building to strengthen the enabling environment for investment" (World Economic Forum, 2006, p. 9). Furthermore WEF argued that DFIs should "...adapt their services, culture and capital allocation to the imperative of "crowding in" domestic and foreign private investment by placing much more emphasis on such risk mitigation instruments as partial guarantees as transitional strategy and on capacity building" (World Economic Forum, 2006, p. 10) and that "an international consensus has emerged, embodied by the Monterrey Consensus, that a deeper partnership between the public and private sectors is needed if we are to achieve common development objectives" (World Economic Forum, 2006, p. 10). In its specific recommendations the WEF stated that "The overwhelming majority of experts participants in the project recommended a major expansion of risk mitigation activity by DFIs..." (World Economic Forum, 2006, p. 15).

The energy sector, emerging markets and public-private partnerships. Some theoretical considerations

As noted above a large part of the world's untapped energy resources as well as expected growth in energy demand is likely to be in emerging market economies. Investing in those markets involves country risks (Meldrum 2000, Delmon 2007, 2009) as well as project specific risks (Delmon 2009, International Monetary Fund, 2003, 2004; World Bank, 2008). Furthermore, investments in energy infrastructure require large amounts of funds with extended maturities to match the long pay-back periods normally associated with such projects. This long repayment periods only increase the risks since emerging markets are undergoing a transition and tend to be less stable than for example high income OECD countries.

One way for a private company to manage those risks is to form a consortium offering its skills as a construction company and an operator with a group of financial leaders/institutions that would provide equity capital, loans and/or risk mitigation instruments. A possible institutional arrangement to address this situation is to form a Public-Private Partnership (PPP) and use the Build-Operate-Transfer (BOT) scheme.

There is no single definition of what a PPP is. One definition used by the WEF is that "A PPP is a voluntary alliance between various equal actors from different sectors whereby they agree to work together to reach a common goal or fulfill a specific need that involves shared risks, responsibilities, means and competencies" (World Economic Forum, 2006, p. 23). Another definition is "any public sector service provided partially or wholly by the private sector" (Delmon 2009, p. 601). Yet another definition is a "co-operative institutional arrangements between public and private sector actors" (Hodge & Greve 2009, p. 33). And finally a definition from the World Bank that says that a PPP is "the transfer to the private sector of investment projects that traditionally have been executed or financed by the public sector" (World Bank, 2008, p. 93).

In the energy infrastructure case the PPP becomes a venue for the public and private sector to cooperate on a project that would traditionally have been in the public domain. In fact, infrastructure inevitably involves an interface between the investors/owners and the government. The BOT arrangement means that the project is transferred back to the government when the concession agreement ends.

But why would a government of an emerging market economy want to cooperate with the private sector under a PPP arrangement? Some of the reasons may be as follows. With pressure on physical infrastructure and limited resources the government may want to cooperate with the private sector to help finance, build and/or operate public assets. While doing this the government could for example: (i) utilize better skills of the private sector and better management that may lead to increased efficiency of the project from a more competitive environment, (ii) access private sector funds to undertake more projects than could be done with public funds only. This can contribute to fiscal stabilization, increase investments and growth, (iii) provide more affordable and better services to end-users, and (iv) share risks with the private sector (See for example Leruth 2009; de Palma, Leruth & Prunier 2009; Estache 2005).

Emerging market economies and high income economies may have different reasons to participate in PPPs. As Hart points out "Policy makers frequently argue that PPPs are good because the private sector is cheaper source of financing or insurance than the public sector." Furthermore, he emphasizes that "This thinking is strange for an economist since it is hard to imagine an agent that is more able to borrow or to provide insurance than the government (with its enormous powers of taxation)." (Hart 2003, p. c75). Leruth also argues that "the government is often able

to borrow at almost risk-free rate (no credit risk) which gives it an advantage." (Leruth 2009).

These arguments may well be true in countries that enjoy strong creditworthiness (e.g. via AAA credit rating status). The countries discussed in this article, however, are developing and emerging countries. They often have large unutilized energy resources and strong medium- or long-term demand for energy, but they have limited creditworthiness. Their nationals often have limited ability to pay for the services rendered to them, and the government has weak capacity to force them to do so through taxation. Such governments are risky partners for the private sector in a PPP. In this situation efficient and effective risk allocation is key to success and the international community can play a constructive role, e.g. through international financial institutions that can offer a variety of risk mitigation instruments and help make the risk acceptable to private sector payers that otherwise would not get involved.

Mainstreaming of Guarantees at the World Bank

A memorandum signed by the World Bank's president, Lewis T. Preston, titled "Mainstreaming of Guarantees as an Operational Tool of the World Bank" went to the World Bank's Executive Directors on July 14, 1994 (World Bank, 1994). This memo recognized guarantees as an important complement to World Bank loans and considered them a highly flexible instrument that could be customized to suit varying country and project circumstances. In fact, as the memorandum stated, the World Bank's Articles of Agreement had envisaged IBRD to be primarily in the guarantee business (World Bank, 1994) although they never found a widespread role in Bank operations.

Written in 1994 the memorandum recognized that recent developments in financing requirements of many of the World Bank borrowing countries indicated that guarantees should become much more significant form of Bank support. Among the reasons mentioned was that the financing needs for development of infrastructure in developing countries was estimated to be very large and well beyond the capacity of the official sources alone to support. Also many World Bank borrowers were turning to the private sector to invest in infrastructure projects through a variety of private ownership arrangements which would attract not only private sector resources but also allow a greater transfer of technical and operational assistance (World Bank, 1994).

According to the memorandum the objective of the World Bank in offering guarantees was to help mobilize private sector financing for individual projects through targeted and limited support, and to leverage Bank's participation. "Guarantees are a particularly well-suited form of Bank support for economically important private sector project finance transactions, where they can be targeted to mitigate against specific risks—generally risks of political, regulatory and governmental performance—which in particular projects the private sector may not be in position to absorb or manage" (World Bank, 1994, p. 3). The comparative advantage of guarantees was seen as most apparent in infrastructure investments that require large amounts of funds with extended maturities to match the long pay-back periods normally associated with such projects (World Bank, 1994). Furthermore the Presidents memo noted that "Even though there have been several successful private financings of infrastructure projects in developing countries in recent years, these have only amounted to a small fraction of the total needs" (World Bank, 1994, p. 3). The same situation applies today more than 15 years later.

The president's memo also considered the potential demand for guarantees and reported the results of discussions with a number of international investors and

commercial and investment banks. The memorandum states that "Their reactions have been almost uniformly positive towards the prospect of Bank guarantees, particularly to cover government performance risks in private sector infrastructure projects" (World Bank, 1994, p. 7). It was argued that many projects "would simply not materialize within a reasonable time period without Bank support" (World Bank, 1994, p. 7). The view was also expressed that "once the existence of the Bank's guarantee program became better known and understood by the investors and the financers, investors would show renewed interest in many more projects in a much wider range of countries than in the past" (World Bank, 1994, p. 7). According the presidents memorandum coordination within the WBG "would be strengthened through more structured consultations between each country department and IFC's infrastructure department and MIGA" (World Bank, 1994, p. 12). Lack of coordination among WBG institutions was thus an issue in 1994 as will be discussed further in the next section.

When it came to discussing the potential to leverage more funds through guarantee instruments vis-à-vis loans and equity contributions the memo stated as follows: "In practice, since partial risk guarantees represent a contingent obligation to disburse, the likelihood that the Bank would disburse against a guarantee would depend on the probability of occurrence of the event triggering the call, which is likely to be less than one. It should, therefore, in principle be possible to support a larger volume of partial risk guarantees than loans within the same country risk exposure" (World Bank, 1994, p. 16). This must be classified as an admirable conservative statement by the World Bank's president but confirms nevertheless the potential to leverage larger funds with guarantee instruments then via loans and equity contributions only.

The memo concludes as follows: "Guarantees potentially represent a useful and flexible instrument of Bank support for specific projects and country assistance strategies. Recent developments in the financing needs of Bank borrowers and their increasing interest in promoting private sector investments in infrastructure open the possibilities of utilizing Bank guarantees as a mainstream instrument, complementing the support provided by MIGA and IFC" (World Bank, 1994, p. 18).

Recent Experience in the World Bank Group (WBG) with Risk Mitigation Instruments

But what has been the experience of the WBG and its staff with its risk mitigation instruments since the 1994 Mainstreaming of Guarantees memorandum? In 2009 the WBG issued a report titled: "The World Bank Group Guarantee Instruments 1990-2007. An Independent Evaluation" (World Bank, 2009) (Interestingly enough this report does not refer to the "Mainstreaming of Guarantees" memorandum at all in its bibliography).

As part of the evaluation the Independent Evaluation Group (IEG) conducted a survey of WBG expert staff in 2008 to solicit views about the use and effectiveness of guarantee instruments (World Bank, 2009). The WBG represents five institutions: (i) the International Bank for Reconstruction and Development, IBRD, established in 1944, (ii) the International Development Association, IDA, established in 1960, (iii) the International Finance Corporation, IFC, established in 1956, (iv) the Multilateral Investment Guarantee Agency, MIGA, established in 1988, (v) and International Centre for Settlement of Investment Disputes, ICSID, established in 1966. Four of those institutions issue insurances or guarantees, i.e.: IBRD, IDA, IFC and MIGA. A survey questionnaire was sent to 363 WBG staff, representing these four institutions, on the basis of their current or previous experience with guarantees. 206 staff responded (World Bank, 2009).

Among the things that the survey revealed is that WBG staff are familiar with their own products but not with the guarantee products of other WBG institutions. Only one-fifth of IFC staff were familiar with IBRD/IDA products. Less than half of MIGA staff reported being familiar with IFC guarantees. IFC staff was not familiar with the products of either the Bank (IBRD and IDA) or MIGA (World Bank, 2009).

According to the survey more than 85 percent of WBG staff felt that the most critical benefits of the WBGs guarantee instruments were enhanced image of financial soundness and improved financing terms, rates and tenors. Among other benefits included WBG's role as an honest broker and IBRD/IDA assistance in securing other investors and structuring finance (World Bank, 2009).

A high proportion of staff felt that changes are needed to improve the WBG's guarantee instruments (World Bank, 2009). Interestingly enough most WBG staff felt that reducing time and cost of processing guarantees and improving marketing were important for improving WBG guarantee instruments. Investing in new product development, offering more flexible contract terms, clarifying WBG policies and guidelines to explain when guarantees are appropriate, and offering more training to staff on guarantees were also supported across WBG institutions.

Furthermore WBG staff reported that clients proceeding with the project without a guarantee and long processing time were the main reason for dropped guarantee projects. About 80 percent of IFC staff reported the droppages occurred because the cost of the guarantee was too high for the client (World Bank, 2009).

IBRD, IDA and MIGA staff reported that project sponsors/investors most frequently originated the request of guarantees. IFC staff reported that host governments and staff of another WBG institution are least likely to originate its guarantees.

On May 7, 2008 the Committee on Development Effectiveness (CODE) at the World Bank considered the IEG independent evaluation. Several speakers called for greater collaboration among WBG institutions based on their comparative advantages, and strengthening the coherence of the products offered, including their pricing. They also called for more coordinated WBG efforts for marketing, increased staff knowledge of the guarantee products, and appropriate staff incentives (World Bank, 2009, p. xxviii). Comments were also made about the need of the WBG to think about a "single Window" for guarantee products (World Bank, 2009, p. xxvi).

From the above it is apparent that little seems to have changed since the Mainstreaming of Guarantees memorandum was issued fifteen years ago. Similar issues and concerns tend to appear again. It is also notable how few guarantees have been issued from an institution as large as the World Bank Group. This does not only apply to the WBG. Referring to a recent OECD study (Winpenny, 2005) the WEF states as follows: "Despite the considerable innovation that has gone into developing the products.... (i.e. Infrastructure Risks and Relevant Risk Mitigation Instruments) ...and the market acceptance of at least some of them, most obviously political risk instruments – their aggregate value has remained relatively modest compared with either official loans or overall private flows" (World Economic Forum, 2006, p. 15).

Implications for Icelandic energy sector investors in emerging markets and for the government of Iceland

In spite of the issues and constraints discussed above, and the need for improvements within the WBG, there could be opportunities for Icelandic companies who wish to engage in the energy sector in emerging markets and cooperate with IFIs.

Icelandic companies could e.g. provide consultant and advisory services to emerging market economies investing in energy infrastructure projects, especially those investing in geothermal energy. Icelandic companies could also offer their construction and operation skills. If Icelandic companies intend to be sponsors and provide funding for energy investments they should do so in partnership with others to ensure proper risk mitigation. IFIs can be feasible partners at least in some cases. IFIs are large and complicated institutions and Icelandic companies must learn to work with them.

In this article the focus has been on the World Bank Group. The Government of Iceland should make an effort to conduct the relationship with those IFIs that Iceland is member of, including WBG and the European Bank for Reconstruction and Development (EBRD) more effectively and also carefully consider the feasibility of becoming a member of the regional development banks, i.e. the Asian Development Bank, Inter-American Development Bank and the African Development Bank that also offer risk mitigation instruments. This could strengthen the bargaining situation for Icelandic companies vis-à-vis IFIs when negotiating the costs and terms of guarantee instruments. The Government of Iceland should also make more effort in educating the private sector about the IFIs by e.g. organizing conferences and workshops with IFI and with private sector participation.

Conclusions

The recent IEG WBG staff surveys, suggests that the WBG, which is the largest of the IFIs, and operates in all emerging market regions, needs to offer more cost effective instruments, including guarantees and insurances, to promote private investments and with shorter processing time. In spite of this need for improvement most staff felt that the most critical benefit of WBG guarantee instruments were enhanced image of financial soundness and improved financing terms, rates and tenors. The IEG WBG staff survey also suggests that the WBG needs to improve the coordination of risk mitigation instruments within WBG the institutions and improve the marketing of those instruments. Many of the issues that need improvement in the 2009 survey are similar to those discussed in the 1994 Mainstreaming of Guarantees memorandum.

As discussed in the article IFIs with their strong balance sheets can potentially mobilize more funds for energy infrastructure projects with guarantee instruments, than through loans and equity investments and PPPs can be a feasible institutional framework for such investments.

For the private sector, guarantee instruments can mitigate political risks that the private sector cannot control and reduce the overall risk profile of the investment. Reduced risk of private transactions in emerging markets can help make transactions possible that would otherwise not materialize. PPPs in emerging markets that are supported by risk mitigation instruments can more easily access private funds, including from commercial investment banks, and with lower financing costs. In addition to the access to private sector resources, PPPs can also allow a greater transfer of technical and operational assistance from private partners to the public sector.

For the governments of emerging market countries, guarantees can help access international debt markets that can be an addition to the country lending program. They can make risk sharing with the private sector possible. Guarantees can help make critical PPP infrastructure investments possible that would be impossible with public and IFI funds only. Guarantees can reduce government risk exposure by passing commercial risk to the private sector.

Private sector companies from a small country like Iceland can provide technical assistance and advisory services to energy infrastructure projects in emerging markets.

They could also offer their services as constructors and operators of energy power plants, especially in the geothermal sector. If they intend to be sponsors to such projects and participate in their funding they should make serious efforts to ensure proper risk mitigation. Partnership with IFIs is one possibility to achieving that goal. When it comes to funding and risk mitigation of energy investments in emerging market economies Icelandic companies are restricted by the limited membership of Iceland in key IFIs. Furthermore Icelandic companies have not yet managed to work much with those IFIs that Iceland is a member of. Future research needs to be carried out to better understand this lack of interest in cooperation with IFIs.

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