The challenge
Policy makers face a major challenge following the global financial crisis in funding the massive global demand for new energy sources and infrastructure. The Asian Development Bank has estimated that in Asia alone, the requirements for infrastructure investment will total US$8 trillion over the coming decade\(^1\).

Governments are constrained in public sector expenditure and the overall appetite of the commercial banking sector to take and hold large project loan assets is much reduced, due to liquidity constraints and post-financial crisis regulation. Despite industry lobbying efforts, Basel III is likely to affect further the cost to and willingness of many banks to allocate capital for project finance by applying a high risk weighting to long term loans (however well structured). In order to stay in the business of project financing, banks must look at novel ways to access institutional money for their project lending activities without using up balance sheet capacity.

Specialist energy and infrastructure funds, private equity firms and institutional investors are increasingly active as alternative providers of private sector capital but the amounts involved have not made a significant impact on the funding deficit. Policy banks, multi-lateral government agencies (MLAs) and export credit agencies (ECAs), primarily from Asia and the US, have stepped up to meet this challenge with increased levels of direct lending and are pushing out the boundaries of their traditional roles and products.

This cannot, however, provide an inexhaustible supply of funding for new projects or meet the growing refinancing requirements of existing projects.

**Project bonds as a solution to the funding deficit**
The international capital markets present a largely untapped pool of capital to boost the debt capacity available for project financing. Project bonds are not, of course, a new phenomenon and have been deployed extensively in infrastructure developments in the US, Europe, Middle East and Australia pre-global financial crisis, albeit commonly with the wrap of monoline insurers.

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which have largely exited the market post-2008. They have also been successfully used at investment grade pricing in the construction, refinancing or expansion financing of large LNG, pipeline and petrochemical projects. There is however a real sense that the time has come for a significantly increased use of project bonds, both for construction financing and as a method of refinancing short term bridge financing by bank lenders. This view is reinforced by a number of specific governmental initiatives (further discussed below) to stimulate the project bond market.

Capital markets funding of energy and infrastructure projects ticks a number of important boxes:

- a deep investor base which provides long maturity, fixed rate funding without the regulatory constraints imposed on banks;
- a diverse market (including an established regime to access Islamic investors) which funds into both investment grade and high yield products;
- value recognition through the rating process of project structuring and risk mitigation so that investment grade can be achieved notwithstanding construction risk or even a lower sovereign rating for the host country;
- generally a more flexible covenant package than traditional project finance debt (resulting in less intrusive oversight of project-level decision making).

Project bonds are being increasingly considered for a wide variety of projects which give rise to different considerations and attract different investment bases. Current activities include the following:

- smaller sized, bond only deals to fund domestic power (both conventional and renewable), other utility and infrastructure projects;
- a bond tranche inserted or prepacked into a multi-sourced bank/bond financing structure for major natural resource and petrochemical projects; and
- bond financings for sub investment grade corporates to fund expenditures on major assets under development.

The bond structures themselves run across the full range of private placement and international offerings and, in both the Middle East and Islamic parts of Asia, are Sharia compliant.

**Key issues with project bonds**

There are a number of well documented drawbacks with bond funding. These notably include exposure to timing and pricing uncertainty on launch due to capital markets volatility, public disclosure requirements in the offer documents, cost-of-carry on bond proceeds, lack of flexibility and active participation of bondholders in decision making and the investment philosophy of trading out if a project runs into difficulties.

A key objective when raising funds from the capital markets is often to secure a credit rating at or above investment grade from one of the internationally
recognised rating agencies in order to secure funds at commercially
competitive rates. These agencies will undertake an in-depth review of the
project and allocate a credit rating based on an evaluation of the project’s
capacity to meet its existing and planned financial commitments - investment
grade being the key benchmark below which many institutions will not invest.
Pricing and source of funds from the capital markets therefore depend on the
existence of a rating and whether that rating is investment grade or above.

It is often commented that the capital markets are unlikely to be available to
support purely greenfield projects with no track record. It is true that
historically project bonds have been focused on the refinancing of existing
indebtedness once a project is up and running (and thus generating reliable
revenues) rather than financing prior to project completion. However
institutional investors are able to take construction risk on properly structured
greenfield projects - the key is meeting the requirements laid out by the rating
agencies in their ratings criteria.

In emerging markets projects, it is also worth keeping in mind that the
sovereign rating of the host country does not necessarily operate as a ceiling
and it has been possible to obtain a credit rating for a project which is higher
than that assigned to the country in which the project is located. In addition to
the requirement that the project be generally well structured, the key to
‘breaching the sovereign ceiling’ in this way is the inclusion of credit
enhancements satisfactory to the rating agencies, such as the elimination of
foreign exchange risk through offshore dollar payments and control of these
payments through secured offshore bank accounts.

Issues in multi-sourced projects
Particular challenges arise when incorporating project bonds into multi-
sourced financing structures (an increasingly common occurrence particularly
for the “mega-financings” of large scale energy projects in recent years where
the sources of funds are likely to be drawn from commercial bank debt,
ECAs, MLAs, the capital markets and possibly other sources as well). Whilst
each intercreditor arrangement needs to be carefully tailored to meet the
specific project and its own capital structure, there are some key principles of
how to fit project bonds into multi-sourced intercreditor structures. These
include:

- **Intercreditor decision-making and enforcement**

  A key issue in evaluating whether to include a capital markets tranche in
  a project financing is to understand the fundamentally different dynamics
  in decision-making between the commercial banks and ECA / MLAs on
  the one hand and the bondholders on the other. For example:

  - commercial banks, ECAs and MLAs are used to monitoring
    (and expect to monitor) operational and credit issues on a real
time basis – particularly through construction. Bond investors
generally do not and will expect only to be notified of
fundamental credit issues such as non-payment of interest
(coupon) payments under the bonds; and
- when projects are in trouble (for whatever reason), commercial banks, ECAs and MLAs will often look to find a negotiated outcome with the borrower and other stakeholders as a way of seeking to maximise the value of the project and therefore their ability to be repaid so far as is possible. While this could involve the enforcement of security and other lender protections, it is often more likely (at least in the early stages) to involve a negotiated workout which keeps the project going (albeit possibly in a modified form). The investment philosophy of bond holders is heavily centred on timely payment of coupons and any default on such payment is likely to see a willingness for bondholders to immediately seek to 'cut their losses' by quickly trading out of their positions and/or seeking to immediately enforce whatever security or other rights are available to them.

The absence of carefully crafted intercreditor mechanics which take account of these fundamental differences is likely to lead to significant tensions between the creditor groups both during negotiation and when problems arise post-financial close. An appropriate and workable intercreditor regime will of course also take account of the makeup and quantum of each debt source relative to the others and to then ensure that any entrenchment of minority rights does not lead to a ‘tail wagging the dog’ situation. Where bondholders are in the minority, our experience is that they are on the whole willing to allow majority creditors (project finance banks, MLAs and/or ECAs) to decide waivers and consents. However, they will require comfort that ultimately they are not left in a payment default scenario for an extended period of time. In this regard, the project sponsors’ concern to ensure quick and commercial decision-making should also be kept in mind.

- *Separate or common terms?*

We have seen the market move to a common terms approach in recent years. This provides all project stakeholders with the certainty of a single covenant package with the main terms of the financing documented in a common terms agreement and each individual debt tranche being documented in a separate creditor-specific facility agreement. Typically bondholders would be required to accede to these common terms (rather than, for example, replicating the covenant approach of the high yield market). Arguably this approach gives the bondholders better terms than they might otherwise expect for an investment grade issue. For simplicity and consistency of approach, other stakeholders generally accept this although the bondholders’ ability to block project lenders’ decision making is normally limited to covenants which go to the financial structure and performance of the bond itself.

- *Ranking of debt sources*

Project bonds will typically be treated as senior creditors on a pari passu basis to other senior lenders. Whilst some specialist debt funds have
examined the use of mezzanine project bonds (including structures which involve subordinated bonds or other debt designed to provide a “first loss” debt tranche for the project, thereby enhancing the credit of the senior bonds), this is not yet a market which has taken off in earnest.

- **Timing**

  The introduction of a capital markets tranche of senior debt can of course occur at various stages in the lifecycle of a project financing. It could, for example, come in at the construction stage as a means of refinancing commercial debt or perhaps to fund an expansion post-project completion. To the extent not introduced from the outset, sponsors will wish to embed the flexibility to introduce project bond issuances in the initial loan terms (as has been the case on recent large scale ECA-led financings in the LNG and petrochemicals sectors). Lenders will want to ensure that this source of non-bank funding does not disrupt the overall lender group’s effectiveness. In particular, this will involve the customisation of intercreditor terms (particularly as regards to loan administration and enforcement procedures as mentioned above), development of acceptable new/replacement debt criteria and lender approval of the specific bond structure (possibly through the incorporation of a detailed bond structure memorandum).

**Project bonds: where to from here?**

The fundamentals of supply and demand lead us to believe that project bonds will become an increasingly important part of the funding equation for energy and infrastructure development over the coming years. Indeed, we are already seeing a high degree of innovation and new thinking to unlock the potential in this market and foresee the continuation of this trend.

Some of the more notable trends we are seeing (and that we expect to develop further together with other innovations in this area) include:

- **Increased involvement and innovation from the ECAs**

  The post global financial crisis world has seen the increased activity and importance of ECAs as a key source of liquidity to fund projects, particularly in the energy and natural resources sectors. Not only has there been a rise in the level of funding being provided by ECAs, it has also involved an increased level of innovation in terms of the products that ECAs are making available to support projects eligible for ECA funding. Such innovations have included the guaranteeing of Sharia compliant financing structures (such as on the various ECA-backed telecommunications financings involving murabaha structures to Sabafon in Yemen) as well as capital markets issuances (such as the recent SACE-wrapped bond of the Andromeda solar power project in Italy). We expect the ECAs to continue developing new ways of supporting eligible projects including through their participation in multi-sourced financed structures which include a project bond tranche.
- **Government / multi-lateral agency initiatives to support the development of project bond markets**

We are also beginning to see a variety of government credit support programmes which seek to stimulate the project bond market and establish it as an additional source of financing for energy and infrastructure projects. Such programmes notably include the EU’s Europe 2020 Project Bond initiative, the pilot phase of which was established by the European Commission in July this year, which aims to stimulate private-sector investment in key EU infrastructure projects in the transport, energy and broadband sectors. EU funds will be contributed to the European Investment Bank (EIB) which in turn will provide credit enhancement of senior secured project bonds for eligible projects.

Similar programmes are being proposed or introduced elsewhere, including the recently announced UK Guarantees scheme and the Asian Development Bank’s fund to provide partial credit guarantees for project bonds used to finance infrastructure projects in India.

- **The potential role of offshore RMB bonds**

Another potentially game changing development in recent years is the development and expansion of the RMB bond markets. This is a market which has shown exponential growth since the launch of the first RMB Eurobond in 2010. Although the predominant funding currencies in the global energy and infrastructure markets continue to be the US Dollar and the Euro, given the general importance of China in world trade and contracting and its emergence as a very significant participant in the global energy and infrastructure markets, we should expect use of RMB bonds in finance plans of major projects in the not too distant future.

*This note is based on an article which appeared on Finance Asia’s website – September 17th 2012.*
## Schedule

### Pros vs Cons of Project Bonds vs Bank Debt

<table>
<thead>
<tr>
<th><strong>Bonds</strong></th>
<th><strong>Bank debt</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Longer maturity – may be cheaper, longer certainty of funding</td>
<td>Generally shorter tenor; refinancing risk</td>
</tr>
<tr>
<td>Fixed rate funds – benefit to financial model and no swap required</td>
<td>Typically floating rate finance</td>
</tr>
<tr>
<td>Investors don’t want prepayment – focus on long-term yield</td>
<td>Generally greater prepayment flexibility (prepayment fee for certain institutions but no make whole premium)</td>
</tr>
<tr>
<td>Bondholders passive; hard to organise – less project “interference”</td>
<td>Relationship lenders</td>
</tr>
<tr>
<td>Difficult to modify terms</td>
<td>More flexibility - client driven mentality</td>
</tr>
<tr>
<td>Lighter covenants; less discretion</td>
<td>Heavily negotiated covenant package with closer monitoring</td>
</tr>
<tr>
<td>Default: trade out not work out</td>
<td>Default: typically work out</td>
</tr>
<tr>
<td>One closing; no drawdowns</td>
<td>Less market risk; committed funding &amp; drawdown when required</td>
</tr>
<tr>
<td><strong>Cheaper funds</strong> but “all in funding cost” should also consider swap costs, cost-of carry, reserving/rating requirements, financial ratios etc.</td>
<td>Limited cost of carry</td>
</tr>
<tr>
<td>Ratings are vital; may have to pierce the sovereign ceiling</td>
<td>Ratings not normally required or obtained</td>
</tr>
<tr>
<td>Public; listing, no confidentiality agreement, potential liability</td>
<td>No public disclosure required</td>
</tr>
</tbody>
</table>

*The bottom line: there just isn’t enough bank debt*
Is the bond market the way forward for project finance?