Infrastructure is viewed as an asset class of its own and the allocation to this investment class is expected to rise considerably. Project bonds offer an opportunity for institutional investors to participate in infrastructure projects through listed, tradable securities that can provide superior risk-adjusted returns. By Jose A Moran, partner, project finance Chicago, Juan Carlos de los Heros, partner, Lima and Jose Avila, associate, project finance, Chicago, Baker & McKenzie.

Peru has developed a payment mechanism applicable to PPP infrastructure projects that has increased the bankability of such projects by reducing their construction risk essentially down to a level equivalent to the nation's sovereign risk. This model has spurred a steady increase in private infrastructure investment throughout the country.

Traditionally, private sponsors have sought means of mitigating the risks inherent in a project's construction phase, typically through sizeable advance payments or other forms of credit enhancement, such as sovereign guarantees or stand-by letters of credit. Peru's innovative answer, first introduced in 2006, has been the issuance of government-backed, milestone-linked payment certificates that themselves represent payment obligations of Peru.

Importantly, these certificates/obligations are also assignable, and therefore permit concessionaires to tap into foreign capital markets through offerings, typically in bond form, that carry a risk of default closely reflecting Peru's sovereign rating, which as of July 2014 has been upgraded to A3 by Moody's.

At bottom, Peru's model has permitted investors to consider not only the future operating revenues of a particular project but also the ongoing payment obligations borne directly by the Peruvian government. The resulting government-backed securities model has been applied by Peru, so far, in the successful financing and development of toll roads, water treatment facilities and hospitals, and promises to have future application in other project sectors as well, such as energy. Other countries in the region have taken note of the success of Peru's model, and are attempting to implement similar financing frameworks.

Specifically, the government-backed securities issued in connection with the Peruvian projects alluded to have as their base Certificados de Reconocimiento de Derechos del Pago Anual por Obras (CRPAOs) or Retribuciones por Inversiones según Certificado de Avance de Obras (RPICAOs).

Pursuant to the structure governing either financing concept, the concessionaire of the project will submit to the government entity in charge of overseeing the execution of the concession on behalf of Peru, a project schedule setting forth the various construction milestones that will together comprise the construction of the particular infrastructure project being developed.

In accordance with the schedule ultimately approved by the overseeing entity pursuant to the concession contract, the concessionaire will proceed to build out the project, on a per milestone basis. The project schedule will typically assign a value to each milestone that will represent a percentage of the total Pago Annual de Obras (PAO), or the yearly amount due pursuant to the concession contract on account of the works to be performed.

Upon the completion of each milestone, the overseeing entity will issue a Certificado de Avance de Obra (CAO) certifying that indeed the construction milestone has been completed in accordance with the terms of the underlying construction or concession contract. Each CAO constitutes a right to receive a payment in an amount equal to the agreed-upon value of the completed milestone, relative to the PAO, which right will be embodied in the subsequently issued CRPAO or reflected in RPICAO payments.

**CRPAOs**

Each CRPAO constitutes an unconditional and irrevocable payment obligation of the government of Peru, denominated in US dollars. Typically, the amounts due under a CRPAO will be paid out on a fixed schedule over the course of a pre-defined number of years.
The more innovative aspect of CRPAOs is that these instruments are freely negotiable, meaning that they can be assigned or sold by the holder to a third-party and later assigned to obtain ongoing financing for the remainder of the project.

The freely negotiable nature of the instruments opens the local project up to the involvement of foreign capital markets, thereby allowing a particular project to be developed at a typically lower financing cost given the more favourable rates available in external markets.

Given that the construction risk is virtually eliminated by virtue of the direct government payment guaranties, debt placements in connection with these projects have generally enjoyed a favorable reception by foreign investors.

A simplified structure used to securitise CRPAOs involves the creation by the concessionaire of a special purpose vehicle (SPV) to which the CRPAOs are sold by the concessionaire. The SPV will in turn issue bonds in a foreign capital market, backed by a first-priority pledge over the guaranteed payment streams represented by the CRPAOs, and use the funds obtained in the bond placement to pay the concessionaire for the SPV’s purchase of the certificates.

The money paid by the SPV is then used by the concessionaire to finance its development of the project. The government of Peru directs payments under the CRPAOs to the SPV, as the new owner of the CRPAOs, which payments the SPV, as issuer, will use to pay interest and principle under the project bonds to the bondholders.

The application of CRPAOs was first introduced in connection with the IIRSA toll road project initiative for the rehabilitation of approximately 960km of toll roads in northern Peru. In that project, over US$200m was financed through project bonds secured with CRPAOs issued by the Peruvian Ministerio de Transportes y Comunicaciones (Ministry of Transport and Communication) on account of CAOs issued by the overseeing entity, Organismo Supervisor de la Inversión en Infraestructura de Transporte de Uso Público.

RPICAOs

The CRPAO regime has given way more recently to the use of RPICAOs, first developed in 2008. RPICAOs are essentially irrevocable payment obligations also tied to completed milestones under a concession agreement.

Due in part to the IMF’s determination that CRPAOs should be considered equivalent to the sovereign debt of Peru, Peru has been less willing to use CRPAOs in recent projects, opting instead to use RPICAOs. RPICAOs, unlike their predecessors, are not granted in certificate form and, while representing payment rights on account of CAOs issued in the same fashion as in CRPAO-backed projects, do not embody direct payment obligations of the government of Peru.

Instead, the government of Peru acts as a guarantor in the event that the project funds are insufficient to cover the concessionaire’s financing costs. Principally, payments under the RPICAOs are made by the government entity commissioning the particular project, through a master trust, which is in turn funded through taxes levied by the government of Peru.

In the event the amounts generated through such collections are insufficient to satisfy the payment obligations pursuant to a RPICAO, the government of Peru is obligated to step in and cover the difference. Like with CRPAOs, the unconditional and irrevocable payment rights under RPICAOs may be assigned or sold to third parties. The transferability of RPICAO rights has also thus permitted concessionaires to tap into foreign capital markets through securitisation transactions.

The RPICAO financing structure was recently utilised in connection with the Toboada water treatment facility project to raise US$337m through the issuance of project bonds. The bond issuance resulted from the securitisation of RPICAOs issued by the state-owned water utility company Servicio de Agua Potable y Alcantarillado de Lima (SEDAPAL).

Primary funding for the project was structured to come from water utility bill payments made by local users to SEDAPAL, with a contingent guarantee for payment shortfalls provided by the government of Peru through its Ministerio de Vivienda, Construcción y Saneamiento (MVCS).

The project bonds issued for the Toboada project followed a traditional securitisation structure. The rights to receive payments pursuant to the RPICAOs were sold by the concessionaire, Planta de Tratamiento de Aguas Residuales Taboada SA, to a Cayman SPV. The SPV then issued bonds backed by the RPICAOs, and in turn used the proceeds from the issuance of the bonds to pay the concessionaire for the RPICAOs.
The SPV-notes issuer, as the new holder of the RPICAOs, received payments under the RPICAOs from the master trust established for the collection on water bills by SEDAPAL. These payments were then used by the SPV to fund the periodic interest and principle payments due on the bonds.

In the event of a shortfall in the trust account relative to the amounts due under the RPICAOs, the Peruvian government would step in to make up the difference. As of February 2014, all of the construction milestones in the Toboada project had been achieved and each of the respective CAOs issued and mirrored by the corresponding RPICAOs.

The first project to incorporate RPICAOs was for the construction of a dam on Lake Huascacocha, which sits in the Andes, and a series of waterways and tunnels linking the dam to the Rimac River. The financing of the Huascacocha project consisted of Ps212m (US$76m) in inflation-indexed, fixed-rate notes and Ps109m in inflation-indexed floating-rate notes. BNP Paribas was the sole lead on the deal, rated a local-scale AAA by Apoyo y Asociados.

The project is part of a 20-year concession that will provide 48m cubic metres of additional water to Lima’s water utility SEDAPAL. The sponsor, Brazil’s OAS Group, will take an estimated two years to complete the project.

Debt payments were similarly secured by irrevocable payment obligations under RPICAOs, which were tied to completed milestones under the corresponding concession agreement. Payments under the RPICAOs were to be made through the same master-collections trust used by SEDAPAL in connection with the Toboada project that is intended to receive consumer water payments made through Peruvian banks.

SEDAPAL was also bound to cover any shortfalls in the trust account’s cashflows. Should the flows fall short of meeting the RPICAO payments, then SEDAPAL would be obligated to provide the trust with sufficient funds to satisfy the difference. The Peruvian MVCS guarantees the RPICAO obligations through the trust.

Following the success of the first wave of RPICAO financing, during which the Huascacocha and Toboada projects were executed, Peru has recently embarked on a new wave. Recently, in connection with the development of the Red Dorsal fibre-optic project in Peru, the foreign consortium developing the project, led by TV Azteca and also involving Tendai as a minority interest holder, issued a US$237.7m private placement of 16.5-year bonds carrying a coupon of 5.875%. In line with prior RPICAO-backed placements, the bonds have a delayed draw structure.

Construction of the project is organised around six major milestones. Following the completion of each milestone, as we have seen, the concessionaire will receive the corresponding RPICAOs and subsequently sell them to the note issuer, which will in turn use the RPICAO-derived funds to make payments on the notes. Fitch rated the issuance BBB. Credit Suisse and BESI are acting as joint arrangers. The fibre-optic cable to be financed through the bond issuance will be Peru’s first and will be constructed and operated by the consortium pursuant to a 20-year concession.

Available structures

The government-backed project bond model has worked well in Peru, and can be easily adapted to the local particularities of other developing countries in need of infrastructure financing. Government guarantees, through either irrevocable payment obligation certificates carrying the full faith and credit of the central government or, in more attenuated form, through central government obligations to cover payment shortfalls produced at the agency level, provide a compelling form of credit enhancement for foreign investors that mitigates the effect of, if not altogether de-links, project construction risk from investor return expectations.