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Financing pit-to-port mining

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As commodity prices for coal and iron ore remain at lower levels and copper continues to steadily decline, new mining projects in lower cost jurisdictions are becoming more common. By **Jo Daniels**, partner, **Baker & McKenzie**.

A "pit-to-port" project describes a mining project that is not close to existing infrastructure and requires the project sponsor to build and fund the infrastructure necessary to get a commodity from the mine area to a port for export.

It includes below rail infrastructure including track and train control systems, above rail infrastructure including rolling-stock and maintenance yards, ports including stockpile areas, power plants, water infrastructure and sometimes ancillary assets such as mining camps, airports and roads.

Recent examples of pit-to-port infrastructure in Africa are; the North West Rail Project, which will provide approximately 640km of rail infrastructure linking Zambia's copper belt with existing rail infrastructure connecting to Angola's Lobito port; the Trans-Kalahari Railway, which will link Botswana's coal and copper resources to the Namibian coast; and Simandou, a 650km rail line linking iron ore deposits in Guinea to the coast in Matakong for export.

Other potential projects in Africa include the coal reserves in Mozambique recently purchased by Indian investment company ICVL from Rio Tinto, which link the coal mines in Benga in Mozambique through to Beira Port on the Mozambique coast line.

Funding Africa's infrastructure gap

In 2009, the World Bank estimated that more than US\$90bn annually was required to fund infrastructure in Sub-Saharan Africa¹. This figure is likely to have increased significantly since that time.

The majority of financing of African infrastructure is currently provided by development finance institutions (DFIs) and export credit agencies (ECAs).

In November 2015, a report by the Economist Corporate Network and Baker & McKenzie² found that the private sector's investment in infrastructure-related projects in Africa was US\$8.8bn, which was only 20% of that contributed by DFIs. That report also found that private-sector investment flows grew by more than 300% during the 2010–13 period, albeit from a low base.

Project financing issues

Pit-to-port projects are notoriously difficult to finance as they involve very significant capital expenditure and greenfield and construction risk. Financing packages of between US\$10bn and US\$20bn are not uncommon. Packages are often a mix of funding by governments under PPP models, DFIs, ECAs, equity investments and debt project financing.

At current commodity prices, the most likely outcome is that financing in the near future will continue to be mostly done by DFIs and ECAs. However, the role of private sector financing is increasing, particularly where the project is bankable.

A key issue in determining bankability is the offtake challenge. For mining infrastructure and some other freight networks, a certain amount of the offtake can be underpinned by contracts with users.

In privately funded pit-to-port projects, it has become more common that there are separate financings of the mine and infrastructure. For example, the Simandou project in Guinea is currently exploring a separate consortium and financing arrangements for the rail and port infrastructure. Sometimes there are three separate financings of the mine, rail and port projects.

Separate financing of the mine, rail and port raises specific challenges. In particular, the financiers at each stage will have different views as to whether a particular risk should lie with the mine, rail or port infrastructure. Negotiations of the infrastructure agreements are significantly more complex when three sets of financiers are involved.

Challenges of common user infrastructure

In the past, pit-to-port infrastructure tended to be built by one project sponsor almost solely for the use of that project sponsor. However, there are a number of ways that a pit-to-port project may be forced to provide access to the infrastructure to third parties.

Governments sometimes require the introduction of "open access" before they will grant a pit-to-port project various governmental approvals. In some countries there are laws that can force the project sponsor proponent to share infrastructure.

For example, in Australia, Part IIIA of the Competition & Consumer Act 2010 (Cth) can force third-party access if certain conditions are met. The main conditions are that access to the infrastructure will promote competition in upstream or downstream markets and the infrastructure is uneconomic for others to duplicate.

In addition, separate financing of the mine and infrastructure and the economics of railways are driving most new pit-to-port projects to consider bringing in third-party customers of the railway and/or port prior to financial close as a way of diversifying risk and also increasing volumes using the infrastructure, which will have a benefit to the project sponsor as it will decrease the unit cost of transporting one tonne of the commodity.

With rail and port infrastructure, due to the high capital costs of construction, the benefit of an addition of millions of tonnes by third parties can make a very significant impact on the final tariff that his paid by the project sponsor to use the infrastructure.

However, the introduction of third parties using the infrastructure raise a number of significant commercial issues. The project sponsor will often want priority over the capacity of the railway and port both in terms of its future needs and also when there is a temporary shortfall of capacity.

Where there are separate financings for the mine and the infrastructure there will generally be separate trust and company structures and the project sponsor (which is generally the mining company) will need to enter into agreements for the use of that infrastructure. Those agreements must be in place prior to financial close.

At the time of the execution of the agreements there are significant unknowns in terms of the actual capital costs that will be incurred during construction. Therefore, these agreements generally contain complex pricing formulas to take into account differences in circumstances between execution of the contracts, financial close and the completion of construction. It is also common to reduce volume risk by requiring users of the infrastructure to pay tariffs on a take-or-pay basis.

Expansions

When there are third-party users, one issue that needs to be considered at the time of the execution of the agreements is future expansion of the railway and/or port. The first issue is who will pay for the expansion. If the project sponsor is not likely to require any future expansion for future projects then the best pricing structure is to require the party triggering the expansion to pay for all capital costs of the expansion.

If the project sponsor is likely to require a future expansion then one option is to allow for "socialisation" of future costs of expansions. This can be done by providing for the capital costs of expansion to be incurred by the company owning the infrastructure, which then passes the cost on to all users by a tariff structure that is based on a per tonne charge.

Supply chain issues

Another major challenge is that the separation of asset ownership and use – for example, where there are separate financings and third-party users – poses significant challenges in terms of achieving the desired alignment of interests to ensure that the whole supply chain operates seamlessly to ensure maximisation of throughput.

Some coal supply chains in the world are fully integrated; see BHP Billiton and Rio Tinto in the Pilbara; others are coordinated by the below rail owner or operator, see Aurizon in the central Queensland coal network; and others are coordinated by independent third parties, see the Hunter Valley coal supply chain in Australia.

However, the project sponsor will generally be the largest user of the infrastructure and will want to ensure the efficient operation of the infrastructure. Often an operational control centre will be designed to coordinate the various elements of the supply chain and complex issues arise in respect of who controls the centre, who gains access to the centre and who is entitled to obtain information of third parties.

Issues in structuring port agreements

There has been a recent trend in structuring port agreements with multiple users at the terminal towards a less "socialised" approached to pricing. That is, previously pricing at ports was on a per tonne basis taking into account all of the costs incurred at the terminal and allowing for a return to the asset owner.

However, the behaviour of individual users of the terminal can impose a significant cost on the other users. For example, a user whose train breaks down in the port balloon loop can cause other users to incur significant costs in delaying the export of their product.

Recent greenfield port agreements have sophisticated pricing modules that are aimed at ensuring those users that impose a cost on the efficiency of the port infrastructure pay for that cost. Although this mostly does not include paying for consequential loss – for example, loss of profit on delayed product – it is aimed at ensuring that users are more careful to avoid lost efficiency at the port.

Conclusion

Whilst DFIs and ECAs are, and will remain the dominant source of funding for infrastructure in Africa, the role of the private sector is significantly increasing, partly for pit-to-port projects, which are more likely to be able to be underpinned by offtake arrangements.

There has been a recent trend towards infrastructure being common user infrastructure as this assists government to achieve general economic goals and assists financiers as it may make the project more bankable by securing higher volumes and diversifying counterparty risk.

Common user infrastructure presents specific challenges in terms of protecting the interests of foundation customers that underpin the project, however the benefits to helping to fill Africa's infrastructure gap generally outweigh the challenges.

Footnotes

- 1 World Bank, Africa's Infrastructure: A Time for Transformation, 2009.
- 2 The Economist Corporate Network, Spanning Africa's Infrastructure Gap, November 2015.

