

# Asia Pacific Project Finance: *Recent Credit Loss Experience and Lessons to Be Learned*

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Much of the press coverage of any banking business, and this is just as true of project finance, concerns itself with the good news of deals won and closed, financing raised, and purchases or investments made. Much less of it is concerned with what happens in the years afterwards, in particular when the news is not so good. Borrowers, lenders, and investors alike become quite coy. Yet this can have a far greater impact on any profit and loss account; it is also where lessons are learned, or at least where they should be. This article examines recent case history in the Asia Pacific region.

From a debt provider's point of view, it is worth recalling several strengths of project finance compared to vanilla corporate lending. Research from Standard & Poor's continues to confirm that:

1. Post-default recoveries of principal are materially greater for project finance, essentially because there is usually an asset that is needed by someone.
2. Such recoveries do take longer, however.
3. They take longer because often the best thing to do is wait for an upturn in the economic cycle of that project's output.
4. Individual projects, nonetheless, vary considerably in terms of their credit quality.

From an equity provider's point of view, the risks and returns are different, of course,

but similar considerations apply. All these observations are true of what follows below.

Recent credit loss experience in fact has been comparatively good in the region when compared to the Americas or Europe. Consider:

- In Asia at least, corporates are more likely to be managed by their owners who already know what is going on, so less reliance is placed on external financial reporting; the use of options as management incentives is less widespread; and there is less of a requirement to report on a quarterly basis—it should not be necessary to show growth every three months in an asset with a 20-year economic life. Thus, there has been less appetite for the sort of financial engineering that led to the demise of Enron and others.
- The collapse in wholesale power prices seen in the U.S. and the U.K. was, to an extent, mirrored in Australia. The main difference was that the markets were not big enough for several new merchant plants to be simultaneously predicting that each would be satisfying the same demand. The damage was consequently less, in that equity was written off and mezzanine stretched, but no provisions against senior debt were required.
- No merchant plants have been attempted in Asia, so the wholesale power markets

have been less volatile. Economic growth has revived and new capacity has been desperately needed, so off-takers have been prepared to pay. This has been the case even in countries like Indonesia, whose infamous power deals finally have been restructured with less pain than originally anticipated. Sponsors have realized some sort of return and debt providers have written *back* provisions.

- Telecoms companies pioneered 3G telephony in Europe in terms of both the technology and the business model; it was therefore in that region that they took their investment write-downs when their business projections proved to be overly optimistic. Counterparts in Asia Pacific were not faced with expensive license auctions and can benefit from lessons learned by the pioneers in Europe.
- At the same time, in developing countries, demand for 2G telephony has been growing nicely from low base penetration rates. This is particularly true of India. Even in the Philippines, Philippine Long Distance Telephone Company (PLDT) saw its results triple in 2003 as national mobile penetration rates exceeded 30% for the first time.
- Lastly, except for the petrochemical deals in China in 2003, transactions sizes have tended to be smaller. Certainly, bank underwriting appetite has been modest and sponsors usually have joint-ventured. The sums at risk in Asia Pacific simply have been less.

In the above respects, therefore, Asia Pacific's recent credit loss experience has been better than the Americas' or Europe's. Nonetheless, Asia Pacific has not been completely immune to global trends—specifically sub-sea cables. Risk structures that failed occasionally elsewhere have failed occasionally in this region too; and Asia Pacific has some sorry tales all of its own.

## ENERGY

When Australia, principally Victoria, privatized much of its energy industry in the 1990s, foreign purchasers flocked to the region's most sophisticated and familiar market. They were attracted by the well-developed regulatory regime, a proven arbitration and legal system, and no political risk. But that still left the commercial risk. Principally U.S. and British sponsors forecast unsustainable wholesale prices and overpaid handsomely. While electric distribution and transmission assets tended to be financed on a corporate basis, project finance was

more interested in the generator companies and gas pipelines.

Having been purchased for full prices, generator companies saw some thin senior debt-service coverage ratios, mezzanine debt deferrals, and restructurings, but no senior debt needed to be written off. The value destruction on the equity side, however, was considerable. It was at this point that most of the original players sold out, sometimes because of disappointment in those equity returns, but more often to raise funds for problems back home. Only the U.K.'s International Power stayed. The new faces were either domestic investors/operators or further utilities, but this time from Asia. Thus, PowerGen bought the 1,450 MW plant at Yallourn then sold it to Hong Kong's CLP International (which in turn is in the process of onselling to either ANZ Infrastructure, Malaysia's Genting International, or Singapore's Sime Darby). CMS, NRG, and Horizon Energy bought the 2,000 MW Loy Yang A station and are now in the process of selling it to a combination of local gas supplier AGL, Tokyo Electric, and domestic institutions led by Commonwealth Bank. Edison Mission Energy bought neighboring 1,000 MW Loy Yang B which is now up for sale together with the rest of its regional portfolio.

Two portfolios of peaking plants also were privatized to project-financed purchasers. AES bought the 966 MW EcoGen plant and then sold it to domestic investors led by Babcock and Brown. Infratil Australia and Contact Energy bought the 500 MW Southern Hydro then sold it to the U.S.'s Alliant Energy which in turn onsold it to New Zealand Government-owned Meridien Power. Both needed contracts for differences to insulate the lenders from the volatile loads/prices inherent to peaking plants.

When value was destroyed, any or all of the following were responsible: projected cost savings did not materialize (labor unions in Australia, particularly those in the Latrobe valley where the coal seams are, are more powerful than in the U.S. or U.K.); it was assumed that competitors would price their output rationally, which did not necessarily happen; demand did not grow as fast as expected; others' plant availabilities were up, one's own down. Target discount rates were raised when a need for funds arose back home. Crucially, some vendors could not wait for conditions to improve before selling out and were able to blame losses on previous management.

Overlaying this busy asset trading has been the volatility of the Australian dollar. This currency fell a controllable 16% against the US\$ between 1998 and 2001 then climbed a whopping 52%. Such a rise could have softened

the blow when booking losses on the sale of a project back at head office, but timing would have been crucial.

There has been equally busy trading on gas pipeline assets but the credit loss experience has been better with one exception. AGL's offshoot Australian Pipeline Trust ("APT") and Duke Energy (which has just onsold to Perth-based Alinta) assembled significant, performing portfolios. In contrast, El Paso's and Dominion Resources' Epic Energy originally purchased the Dampier-to-Bunbury gas pipeline in 1998 for A\$2,400 million. It is now about to onsell the pipeline for only A\$1,850 million, whether to APT again and U.S.-based Enbridge, or domestic rival Envestra. In between, in 2002, the pipeline was hit by a severe regulatory review of its transportation tariffs which, at one stage, threatened even the debt (originally A\$1,950 million, since partly paid down). The regulator relented but only to a degree. Now, the debt should be recovered in full but the equity will still be wiped out. Yes, there is political risk in Australia after all!

Up in Asia, Indonesia has dominated the credit loss headlines over recent years as government-owned off-taker PLN refused to pay U.S. dollar-linked tariffs for newbuild power plants when the rupiah collapsed by a factor of seven in 1997. But, after six long years of negotiations, in 2003 agreement was reached on restructuring the two biggest independent power projects, namely the 1,220 MW P.T.Java Power (debt of \$1,300 million) and the 1,230 MW P.T.Paiton Energy (debt of \$1,800 million). Since the Asian crisis, the local economy had recovered its appetite for the power, the exchange rate had relented somewhat, and interest rates had come down. From the lenders' point of view, at least, the resulting extension of tenor was modest; the export credit agencies were supportive (The Export Import Bank of the United States took out 75% of its tranche on Paiton); and project economics were once again credible. Overall, the prognosis was significantly better than had been feared and the provisions originally raised against debt now could be released. There is even still some value in the equity, as demonstrated by PowerGen having just sold its 50% stake in Jawa to Singapore's Keppel Energy and Japan's J Power for \$143 million. Siemens is looking to sell the other 50% in Jawa and Edison Mission Energy its 40% stake in Paiton. Jawa and Paiton were just the two largest cases; there were others such as Unocal's 330 MW Gunung Salak geothermal plant, whose restructuring preceded them in 2002. Any project contract is only as sound as the counterparty's willingness or ability to comply with it. PLN's position has improved in this respect and project eco-

nomics have been placed on a more sustainable basis, but both PLN and the economics remain vulnerable to, in particular, catastrophic exchange rate movements.

In China, the late 1990s saw three large, cumbersome international financings of \$755 million at Meizhouwan in Fujian province, sponsored by InterGen and Lippo; \$616 million at Laibin in Guanxi, sponsored by EdF and Alstom; and \$1,484 million for Shandong Power, whose foreign sponsors were CLP and, again, EdF. All have been vulnerable to cheaper competition and uncertainty as to the effectiveness of their power purchase agreements amidst unclear and changing regulatory and legal regimes. No such financings have been signed since. This is despite China's booming economy, which saw power generation capacity grow 15% in 2003—its biggest annual growth yet in the current era. China can manufacture 300 MW turbines itself and only needs foreign-currency-denominated and expensive imports when there is technology to be transferred. (Recent examples of these include Alstom's supply of 4 × 600 MW supercritical steam turbine generators to China Electric Power International and Mitsubishi Heavy Industries' supply of components for 4 × 1,000 MW ultra-supercritical boilers to Huaneng Power). At the same time, local banks have plenty of funds to lend on easier and cheaper terms. Except for LNG and petrochemicals, it seems that China currently neither needs nor can support the complexities of project finance.

In India, developments are tectonic at the most notorious of all, Enron's 2,144 MW Dabhol Power Co., for which debt of \$2,060 million originally was raised. Indian lenders recently offered to buy out the foreign ones at a price of 70 cents on the dollar for phase one (740 MW). This looks like the opening offer, since the plant was operational when mothballed three years ago and enjoyed a Government of India guarantee in the event of the PPA being terminated. The price for phase two (1,444 MW) was a much lower 40 cents since it was only 90% complete and carried no GoI guarantee. Among many matters, the LNG supply from RasGas needs to be replaced at a price nearer the current market of \$3.50/btu. In 2002, it was estimated that a further \$500 million would be needed to reopen the two plants. On a more positive note, in 2003 OPIC paid out \$29 million to the other two sponsors, Bechtel and GE, on the basis that their interests indeed had been expropriated. The saga no doubt will run for a long time yet, the next milestone being the Lok Sabha elections that begin on April 20. Dabhol demonstrates why a project needs a local sponsor who understands the local counterparties, be they regulators,

offtakers, guarantors, suppliers, or workforce. It also needs to be cost competitive in the event that it cannot rely on its contracts, which Dabhol demonstrably was not. Lastly, when the market is less than perfect, it needs a credible offtaker. In India, general investor sentiment recently has picked up hugely, as evidenced by a soaring stock market (up 73% in 2003, when the currency strengthened a further 5% against the U.S. dollar) and by the success of Oil and Natural Gas Corp's recent \$2,300 million public offering. But the structure of the Indian power industry remains inherently unviable and, good macroeconomic news or not, few credible offtakers are yet in evidence.

In Thailand, two neighboring oil refineries had been completed in 1996, both joint ventures with the Petroleum Authority of Thailand (PTT) (36%) and a foreign partner (64%). Rayong Refinery Co. had a capacity of 145,000 barrels per day and major sponsor Shell; its debt was \$1,300 million. Star Petroleum Refining Co. had a capacity of 150,000 barrels per day and major sponsor ChevronTexaco's Caltex; its debt was \$550 million. Project financings of refineries are rare, not least because newbuild refineries are rare. The key variable is the cash refining margin and both were financed on the basis of aggressive assumptions in this respect. These assumptions became unsustainable in the late 1990s and early 2000s when the margin fell to \$3 per barrel. The two refineries agreed to merge operations so as to cut costs, equity holders made some contributions beyond their original commitments, debt was restructured, and in the meantime, margins have recovered somewhat. Star concluded its restructuring in 2002, but negotiations on the more vulnerable Rayong continue. Provisioning against debt to the latter may be necessary. We would have a better idea as to what value to subscribe to the equity if China's Sinochem had bought into either, as it would like to.

## SUBMARINE CABLES

The one global trend to have impacted Asia Pacific unequivocally has been submarine cables. As elsewhere, for technological and economic reasons, each new cable laid could be the equivalent of all previous capacity on that route. Growth in supply was thus truly exponential but growth in demand, and particularly in data traffic, while strong, did not match it. With a marginal cost of supply of nil, prices collapsed. Unlike most project financings, the resale value, even as a going concern, also could be nil. Without exception, sponsors saw most, if not all, of their equity wiped out and/or found themselves com-

mitted to buying capacity at rates that were out of the market. Debt was at best rescheduled; banks most likely provided against it in significant proportions.

In 2000, Telstra, Teleglobe, Japan Telecom, NTT, and MCI set up Australia Japan Cable to build a 2,000 km network from, surprisingly enough, Australia to Japan. Commercial operations began in 2002. But, because tranche B, 30% of its \$557 million facility, was exposed to market risk, Australia Japan Cable missed servicing its debt in 2003 and since then has been restructured.

In 2001, Hong Kong's PCCW and Telstra pooled their existing sub-sea cable networks into REACH, and raised \$1,500 million of debt in doing so. But by 2003, Telstra had written off all A\$965 million and PCCW all \$533 of its equity. They injected \$286 million of new funds and committed to send 90% of their international business through REACH, but still the bank debt needed to be stretched out to a 2010 bullet—surely a deferral of the problem rather than a resolution of it.

In 2001, Singapore Telecom, with a 59% shareholding, led a number of capacity offtakers, some its associates, to build the 17,000 km C2C network around Southeast Asia. Project debt was \$700 million. The associates that committed to purchase the capacity were neither subsidiaries of, nor guaranteed by, SingTel. A subordinated debt piece was, however, SingTel's direct obligation. It first unilaterally chose to cancel this tranche before changing its mind and agreeing to honor its obligations. Now, SingTel will inject \$225 million, \$110 million of which will be used to buy back \$200 million of the \$700 million bank debt at a 45% discount. The tenor of the remaining debt has been stretched to as long as 12 years.

Perhaps the most ambitious cable transaction was a terrestrial one sponsored by, *inter alia*, Leighton Holdings and MacQuarie in 2000 on a merchant basis. Nextgen Networks planned to lay an 8,400 km cable from the west to east coasts of Australia. Of the A\$819 million debt raised, 56% took the form of an equity bridge and 44% took market risk. Leightons built it, but the capacity sales that were expected to be put into place as construction progressed never materialized and the company went into receivership in 2003.

A similar fate befell Amcon Telecommunications' smaller A\$145 million IP1 cable from Perth to Melbourne.

Newcomers picked up the pieces from the bankruptcy of Global Crossing in 2002. Firstly, Asia Global Crossing's 17,700 km, \$1,200 million East Asia Crossing network was sold to Asia Netcom, a joint venture of China Netcom (H.K.), Newbridge Capital, and Softbank

Asia Infrastructure Fund. Secondly, Hutchison, having sold a 50% stake in its Hong Kong fixed line business, HGC, to AGC, then bought it back at a fraction of the price and since then has listed the company.

Not all cable deals went this wrong. SingTel Optus, Telecom NZ, and MCI originally sponsored one of the first (2000) and longest (31,000 km) such networks, Southern Cross Cables, which runs from Australia via New Zealand to the west coast of the United States. Recently, they stepped up capacity purchases from their network so as to maintain service of the banks' \$950 million of debt.

Submarine cable fever touched Asia Pacific just as it did every other region; and as elsewhere, when supply vastly outstripped demand, prices dropped with nothing to catch them.

## ELSEWHERE IN TELECOMS

The region caught other types of telecoms fever but banks, at least, did not suffer unduly.

In Australia, in 2000, One.Tel raised an A\$1,150 million project financing to build out a fourth mobile phone network. One year later, Rupert Murdoch's News Corp and Kerry Packer's Publishing & Broadcasting Limited changed their minds about underwriting a rights issue which the network needed to address mounting customer acquisition costs, customer service problems, and tighter supplier terms for its European network capacity trading. The company ran out of cash and collapsed amidst charges of fraud by the founding directors. The banks were plain fortunate in that the network had been built but its commissioning was still underway. This was a condition precedent to drawing most of the facility, so only \$50 million had been drawn, which was recouped from Lucent Technologies under a construction guarantee. Had the company survived a few more weeks, the banks would have disbursed the whole facility with nobody to pay it back. The company had a market capitalization of A\$3,400 million at one point. Lucent spent some A\$650 million building the network. In 2002, Hutchison took it over, together with obligations on site leases, for nothing.

In Thailand, in 1993, the Charoen Pokphand Group launched TelecomAsia to build a fixed-line business in Bangkok. The original financing was for \$1,900 million, much of it from the vendors. The transaction was among the first telco financings in the region and it was certainly the biggest. It won the Deal of the Year ("DoTY") award and the banks' financing vehicle was duly named Atta (as in TA for TelecomAsia) DoTY. In 1997, however, when

the Asian crisis hit Thailand, it became apparent that the project would not meet its revenue projections. Serial restructurings and a revival of the economy have since helped matters. Debt initially would have been written off entirely, but now could be written back. Damage to equity was more lasting. In 2003, Verizon sold its 10% stake for \$39 million, having paid \$350 million eleven years earlier.

At the same time, the mobile side of the business, TA Orange, has struggled to make inroads against incumbents Advance Info Systems, owned by Prime Minister Thaksin Shinawatra, and DTAC, ultimately owned by Norway's Telenor. With market share at only 7%, TA Orange was able to raise debt only on a bridging basis. 49% owner France Telecom's Orange is in the process of exiting at a loss of some \$550 million.

As elsewhere in the world, the performance of the telecoms business in the Asia Pacific region just has not matched plan.

## INFRASTRUCTURE

Infrastructure projects tend to be either quasi-government risk (of which there have been few in Asia Pacific) or difficult.

In 1997, the PIATCo consortium led by Fraport (Frankfurt airport) won a 25-year build-operate-transfer concession to build a \$580 million third passenger terminal at Manila's Ninoy Aquino International Airport ("NAIA") in the Philippines. By the time construction had been completed in 2002, however, the government still had not met key undertakings such as requiring privately-owned Philippine Airlines to move to the new terminal. Then the government canceled the concession altogether, citing corruption by the previous administration of Joseph Estrada. Because conditions precedent to the debt were never met, the sponsors—and particularly Fraport—which had financed the construction on their balance sheets, now were faced with losing their entire investments. Since then, the country's Supreme Court has, on the one hand, agreed that the contracts were invalid but, on the other hand, required the government to pay compensation before it resumes control of the terminal building. Presidential elections scheduled for May 10 add to the uncertainty.

The matter is currently in arbitration so we do not yet know whether the sponsors will be able to recover their investment, not to mention the earnings they were expecting into the future. Nor do we know whether the

terminal building, which still stands completed but empty, ever will be used. Either way, NAIA 3 stands as the region's most significant recent instance of political risk.

Still in the Philippines, in 1997 the Manila Water and Sewerage System awarded two 25-year concessions, assigned to eastern and western territories in greater Manila, to upgrade and manage the city's fresh and waste water system. In the eastern territory, Manila Water Corporation, sponsored by Ayala, United Utilities, Bechtel, and Mitsubishi, had a better experience with more affluent customers such as those in the Makati business district, more modest capital expenditure, and a less demanding tariff. In the western territory, Maynilad Water Services, sponsored by local conglomerate Benpres Holdings and France's Suez/Ondeo, struggled from the outset to make the economics of the deal work and never did raise a \$550 million project financing. Five years on, the project company decided to annul the concession on the grounds that the government had not permitted it to raise its tariffs sufficiently, but an international arbitration panel disagreed. In late 2003, Maynilad was put into corporate rehabilitation (akin to Chapter 11 in the United States) and, in January 2004, it defaulted on its \$280 million of debt, including a \$46 million bridge loan from foreign lenders. That debt was guaranteed by the sponsors, but Benpres was having its own financial difficulties. The government now intends to convert debt owed to it into a 60% equity stake in the company. Other debt similarly will be converted or rescheduled. But this arrangement is still subject to court and regulatory approval—besides which, as mentioned, the Philippines is currently in election mode.

Water projects are difficult to finance in the best of times. There are no large pieces of capital equipment to import and therefore no opportunities to attract export credit agencies or access foreign currency borrowings. Water easily leaks, hence "wet losses," and gets stolen, hence "dry losses." In the case of Maynilad, these combined losses resulted in an astonishing 60% "non-revenue water," the aggressive pursuit of which drove the project economics. Off-takers are, at best, poor-credit-risk local utilities or the consuming public. Finally and crucially, tariffs are subject to regulatory agreement and vulnerable to political sensitivities, and nowhere more so than in the Philippines. Images of foreigners sending debt collectors into the slums of Manila always did look fanciful. Few other fresh or waste water projects have been attempted—in the Philippines or elsewhere.

Another asset class that has struggled in this region, as elsewhere, is rail links. The social benefits they create

are beyond a private operator's control and they rely on government policy to change the public's travel habits. As such, patronage volumes have been notoriously unpredictable. One recent example was the A\$600 million New Southern Line, the link to Sydney airport, which was sponsored by Bouygues and Transfield. The route was too short to deter even taxis, it terminated away from the central business district, it was run by another party (the State Rail Authority) too infrequently, there was no space allowed for the extra baggage carried by air passengers, and the list goes on. The New Southern Line was placed in receiver-ship almost from opening in 2000, where it remains.

Few other rail links have been financed recently, although up the road from Sydney, as it were, Brisbane's \$233 million Airtrain City Link has managed to service an innovative inflation-indexed bond issue and a mezzanine tranche, having been based on more modest forecasts.

## METALS AND MINING

Australia is not just the region's single busiest market, it is also its most innovative.

Australian Magnesium Corporation's plan to build a A\$1,700 million/97,000 tons per annum plant to process magnesium from an adjacent deposit of magnesite ore at Stanwell in Queensland certainly qualified as a one-off project. The metal offers motor vehicle manufacturers components that are lighter, stronger, and easier to machine. Ford was committed to take and pay for 50% of the output for the first 10 years. But the project was handicapped with some technology and scaling-up risk, an unfamiliar market with little price transparency, and no deep-pocket sponsor. While Normandy Mining was in the process of selling its equity stake in the project to the public through an IPO, intending to use the proceeds to recoup its development costs, Normandy itself was taken over by Newmont Mining. The project was unable to raise the financing required despite tapping Ford and the state and federal governments. When the project was mothballed in 2003, the project company still had not met its conditions precedent on the \$675 million senior debt because it had not raised sufficient funds, and some A\$800 million of equity had been written off.

In the meantime, there have been further technological advances with resulting cost efficiencies. More significantly, the price of magnesium, which fell from \$2,500 per ton in 1999 to \$1,825 per ton in 2001 when negotiations on Australian Magnesium Corporation were in progress, now (March 2004) stands at \$2,200 per ton.

Evaluating a reliable, long-term price had been perhaps the most intransigent issue. The supply side always has been illiquid; some European and North American production has closed recently. On the demand side, China, which has many of the smaller producers, is consuming more of its own production, just as it is with practically every other commodity. With creditworthy offtakers willing to take a longer-term price view, the project once again could be viable!

## CONCLUSION

Asia Pacific, with its huge variety of markets and appetite for project finance, has reflected a wide range of credit loss experiences recently, each with lessons to be learned. As usual, equity has borne the brunt. As a result, some sponsors have left the scene but other, new ones have stepped in. Meanwhile, from a debt provider's point of view, only in the submarine cable asset class has material provisioning been necessary. There is thus reason for some confidence when structuring new project finance business in the region going forwards.

### ***Editor's Note***

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