

CHAPTER 34 *Brazil – For the Future*

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For decades the sobriquet that hung on South America's resource rich and largest nation was 'Brazil – Land of the Future ... But Not of Today.' No longer. Today Brazil's future may finally be here.

One of the world's largest countries by land mass, Brazil's infrastructure demands and plans are massive. Banco do Brasil anticipates that more than US\$85bn in financing is required by 2020. President Dilma Rousseff has renewed Brazil's commitment to its Programa de Aceleração do Crescimento or so-called 'PAC II' infrastructure development programme (proposed by her predecessor Luiz Inacio Lula da Silva when she was his chief minister). This Herculean programme earmarks over US\$500bn for infrastructure support through 2014 and some US\$350bn thereafter.

Infrastructure demands are heightened by the forthcoming 2014 World Cup to be hosted in 12 Brazilian cities and the 2016 Olympics centred in Rio de Janeiro. These events demand major investments in sport-related facilities, urban renovation and transportation and only a small part of that investment is contemplated in PAC II. Additionally, another US\$25bn of governmental support has been pledged for infrastructure by local governments and the Federal Government.

Brazil's needs stretch far off-shore. Its pre-salt deep water oil and gas reserves appear to require more than US\$300bn to facilitate commercial production of reserves that may add well beyond 50bn barrels of oil to its proven reserves.

BNDES

Much financial support for the mammoth PAC II initiative is likely to come from Brazil's development bank – Banco Nacional de Desenvolvimento Econômico e Social (BNDES). Founded in 1952 and owned entirely by Brazil's treasury, BNDES disbursed over US\$100bn in loans in 2010 alone of which infrastructure and energy accounted for almost 40 per cent. Since 2003, BNDES has backed more than 350 power projects in Latin America, accounting for over 28,000 megawatts of new electric generation capacity.

Other Project Finance Players

Although BNDES plays the lead role, other governmental entities, multilaterals and institutional investors are also active in Brazil's project finance initiatives.

Banco do Nordeste do Brasil (BNB), also controlled by the Federal Government but focussed on the northeast region, has provided loans to infrastructure and energy projects on terms often more favourable than those offered by BNDES. Recent examples are a major road system concession and the country's first hospital public private partnership (PPP), both in the northeastern State of Bahia. Many wind generation projects, for instance, have favourable interest rates and capital structures that can achieve as much as a 90 per cent debt-to-equity ratio.

The International Finance Corporation (IFC) and the International Development Bank (IDB) continue to support infrastructure efforts such as São Paulo Metro Line Four, Brazil's first (PPP), and the São Paulo ringroad segment granted under a concession to CCR, both of which were financed by the IDB, together with the Japanese Bank for International Cooperation (JBIC) and commercial lenders.

As part of the same legislation that originally approved the first PAC in 2007, Fundo de Infraestrutura do Fundo de Garantia por Tempo de Serviço (FI-FGTS), managed by Caixa Econômica Federal, was created to invest in infrastructure projects by funnelling surpluses accumulated in the general workers retirement fund accounts managed by Caixa Econômica Federal. Investments to date have exceeded Reais20bn. The FI-FGTS portfolio itself is authorized to invest in the real estate and sanitation projects.

In the private sector, commercial banks and private equity funds show growing interest in infrastructure opportunities, including project finance and mezzanine lending. The Brazilian banking system is formidable, with institutions such as Bradesco, Itaú and Banco do Brasil garnering the top positions in Latin America's bank rankings. Most international banks deal with Brazil on a cross-border basis or through local subsidiaries whose doors have been open in Brazil for many years (including Citibank, JP Morgan, HSBC and Santander).

Given that traditional financing sources such as BNDES cannot shoulder the necessary infrastructure investment, the Federal Government has sought to stimulate the participation of private banks in long-term financing. With Provisional Measure 517, published in late 2010, financing lines with tax benefits and incentives for capital-raising instruments, such as financial bills (Letras Financeiras – LFs) which are exempt from reserve requirements, have been created. As a result, markets eagerly await issuances of so-called 'project debentures', known in the international market as 'project bonds', which have linked credit support such as the backing of receivables and real estate. These

long-term debt instruments, with terms of up to 30 years, offer security *pari passu* to that project owners must grant to BNDES.

Public Private Partnerships

Federal Law 11,079 of 2004, the Public Private Partnership (PPP) Law, governs PPP projects at the federal level and provides a general framework for PPP projects sponsored by states and municipalities. It is important to point out that PPP under the Brazilian PPP law are restrictively defined as public concessions requiring partial or full public payments and Brazil already has a concessions law which sets forth basis terms and conditions for public concessions. The PPP Law provides for construction and operation of infrastructure facilities by private companies on a long-term basis (from five to 35 years) by means of a concession agreement. Execution of these concessions must be preceded by a bidding procedure. Mandatory provisions are required to be included in invitations to bidders.

The first PPP transaction, São Paulo Metro Line 4 (Via Quatro), is a 30-year partnership for operation and maintenance of a subway. This transaction won financing of approximately US\$350 million from BNDES, IDB and other banks for acquisition of rolling stock and operation and is believed to be the first project financing of a PPP in Brazil.

Soon a decade will have passed since formation of PPPs in Brazil. During the first years, few PPPs were completed, since the innovative character of the law spawned scepticism and caution. Recently, the number of PPP projects has grown. New subway lines, urban trains, highways, prisons, hospitals, administrative centres, football stadia, multi-purpose arenas, water and sewage treatment stations, urban cleaning, disposal of solid residue, data centres, public projects for the irrigation and revitalization of large urban centres, are now examples of successful PPPs.

Experience accumulated in these PPPs offers important lessons.

- Different frameworks have been allowed to meet the needs of different projects. In the Federal District Data Center Project, for example, reimbursement of 80 per cent of the cost of the work immediately after its conclusion and not in a linear manner throughout operation, was approved. In the Pontal Irrigation Project in the Semi-Arid region, public counter-performance was divided into three phases, triggered by distinct events: first, upon conclusion of the irrigation infrastructure; second, upon conclusion of the agricultural occupation; and, finally, upon availability of the irrigation service.
- Frequently, sponsors' main challenge has been to try to anticipate revenue to see if it can match financial costs so as to minimize lenders' requirements to maintain cash reserves in case revenues do not cover their periodic debt service. Many expect that legislation will evolve to allow for governmental contributions to initial project investments (currently prohibited by Section 7 of the PPP Law).
- Creative solutions could offer governmental funds without impacting Brazil's budget or future collections, such as CEPACs, securitization of overdue tax liabilities, payments in instalments, and real estate and tax incentives.
- Adequate structuring of a PPP may also reduce or eliminate impact of the project on the 3 per cent limit of current net revenue of the respective federative entity, or even

repeal the need to consolidate into the public statements of the Treasury, the assets and liabilities of the private partner (which is required pursuant to Ordinance 614 of the National Treasury).

To date, the Federal Government has not succeeded in contracting out any PPP except through Banco do Brasil and Caixa Econômica Federal for the Brasília Datacenter. Nevertheless, states and municipalities have closed on more than 20 projects in critical areas such as subways, intercity trains, toll roads, hospitals, urban renovation, public buildings, prisons, sport arenas, soccer stadia, water treatment and waste management. Just like the UK precedent, many expect that these activities will grow exponentially in the near future. Much remains to be done to encourage proliferation of PPPs to allow them to make a meaningful contribution to the infrastructure 'underspend' in Brazil. Healthcare, education and waste should be leading sectors in PPP transactions of Brazilian sub-nationals.

Current Mega Projects

With injunctions now lifted on Brazil's gigantic Belo Monte hydroelectric project in Pará State on the Xingu River in the Amazon Region (to be the third largest hydroelectric project in the world after China's Three Gorges Dam and Brazil and Paraguay's Itaipu Dam), BNDES and Banco do Brasil are expected to support the approximately US\$15bn project. The concession was granted to Norte Energia SA (NESA), a consortium formed by public and private corporations, led by the public utilities Eletrobrás and CHESF. Engineering and design are being carried out by a design consortium of Brazilian engineering firms led by Intertechne and including Engevix and PCE. Construction and equipment supply contracts are being negotiated by NESA with a group of Brazilian contractors.

The Santo Antonio (3,150MW) and Jirau (3,300MW) hydroelectric plants in the Rio Madeira River in the North Amazon Region, were awarded in 2008 to consortia led by Odebrecht and Furnas for Santo Antonio and Suez and Camargo Correa, amongst others, for Jirau. Operations may commence this year. Together, these projects involve investments in excess of US\$15bn. The plants are designed to operate with state-of-the-art bulb hydro turbines demanding much smaller reservoirs and thus reducing environmental impacts.

In 2010, the Teles Pires hydroelectric plant, with a projected installed capacity of 1,920MW, in the State of Mato Grosso, was awarded to a consortium led by Neoenergia. Operations are planned for 2015 and total investments may exceed US\$3bn. This will be the largest plant on the Teles Pires River and may be supplemented by up to four additional plants.

In November 2009, Argentina and Brazil entered into an agreement to explore construction of the bi-national Garabí dam. This project, with a predicted installed capacity of 2,300MW, would be constructed on the Uruguay River. Feasibility studies are underway. Other large hydroelectric projects are being considered. On the Tapajós River in Pará State, for example, up to five separate hydroelectric plants are being studied with combined installed capacity that may exceed 10,000MW.

Other colossal projects such as the first leg of the planned high-speed rail backbone in southern Brazil to connect Rio de Janeiro and São Paulo (discussed below) are in the bidding stages. Cost of this first rail link alone is estimated at more than US\$20bn.

Natural and Economic Resources vs Obstacles

With phenomenal natural resources, hydraulic cascade and reservoir potential, off-shore oil and gas, and the largest economy in Latin America, Brazil is poised to dominate the project finance arena. But several obstacles must be surmounted.

Obstacles

Brazil's currency is relatively volatile. Foreign entrants tend to be at a disadvantage compared to indigenous sponsors when considering that most revenues and loans are Reais based. Brazil's national debt is about half of gross domestic product and BNDES's loans are accumulating losses for the Federal Government.¹ Commercial loans in Brazil command high interest rates and tenors which generally do not stretch long enough to support project financing. Few projects are financed in Brazil without the support of development banks, multilateral or export agencies or vendor financing or institutional investors (such as pension funds) as part or all of their debt capital structure.

Many projects are implemented through the PPP structure as joint ventures between governmental and private parties. Given the 'public' nature of these lending sources, the path to borrowing can be long, further straining project capital costs and investors' returns.

Nevertheless, the capital market as an alternative for raising project finance is becoming a feasible and attractive solution for both new and expansion projects (although this option is still limited to a select few of the largest sponsors in only a few sectors).

Despite current economic complications of private project financing for projects in Brazil, in general, the legal and regulatory framework is already in place to support project financing in most major infrastructure sectors.

Project Bonds

Capital markets in Brazil had traditionally been reluctant to accept the types of risk inherent in lending to a company with only one project which is yet to be constructed and could be subject to cost and schedule overruns and unknown operating costs. The remarkable initial public offering (IPO) of OGX, one of Eike Batista's companies that is part of the so-called X Group dedicated to oil and gas exploration and production

¹ Although BNDES is a profitable bank on a stand-alone basis, the Brazilian Government has been raising debt (used for general purposes including for injecting capital into BNDES) at higher interest rates (the SELIC rate) than those charged by BNDES in its loans (the TJLP rate). Considering that a relevant part of BNDES loans are made to the so-called national champions, i.e., Brazilian companies that are leaders in their segments, criticism has been levelled that taxpayers are indirectly funding these companies. Others, however, argue that the Federal Government must help Brazilian companies to compete on a global scale.

changed this perception when its offering in 2008 raised the most equity ever raised in a primary IPO in the Brazilian market at the time. OGX's IPO was completed with investors relying only on OGX's planned projects and their projections rather than an operating portfolio with a track record (since OGX only held permits to construct at the time of its IPO).

This encouraging trend has recently included project bond debt. Select sponsors such as Odebrecht and Queiroz Galvão have accessed capital market debt for infrastructure projects on a limited recourse basis. These issuances have been limited to institutional investors such as pension funds and financial institutions.

Project bonds often include local debt instruments such as debentures or international bonds issued under Regulation 144-A or Regulation S of the Securities Exchange Act of the US (or their equivalent in other jurisdictions).

Amongst project bonds successfully issued by Brazilian companies in 2010 are:

- Rota das Bandeiras SA, a toll road concessionaire controlled by Odebrecht which raised Reais1.1bn through local debentures with a 14 year tenor at a IPCA + 9.57 per cent annual interest rate;
- Odebrecht Drilling Norbe VIII/IX Ltd., a special purpose entity controlled by Odebrecht Óleo e Gás which issued 144-A/Reg S bonds of US\$1.5bn maturing in 2021 with a 6.375 per cent annual interest rate; and
- Lancer Finance Company, a special purpose entity controlled by Shahin which issued 144-A/Reg S bonds of US\$270m maturing in 2016 at a 5.85 per cent annual interest rate.

Oil and Gas

The National Agency for Petroleum, Natural Gas and Biofuels (ANP) created in 1997 regulates natural gas and biofuel. The export of crude oil and liquefied natural gas is subject to obtaining prior authorization from ANP. Only companies incorporated in Brazil with their headquarters and management in Brazil may export crude oil and liquefied natural gas. One important objective of the National Energy Policy Council (CNPE) and ANP is to create a competitive environment for oil and natural gas exploitation. Amongst ANP's main responsibilities are the regulation of concession conditions for the development of the upstream industry and the granting of new concessions. Also in 1997, Petrobras's monopoly on the exploration and production of oil and gas (which began in 1953) was eliminated, giving way to private investment.

Following the major deep water pre-salt reserves discovery in Brazil, the legal framework was amended in 2010 through new laws that:

- Introduce production sharing contracts (PSCs), as opposed to the concession regime, for new pre-salt blocks and other strategic areas to be defined by the Federal Government;
- Create Pré-Sal Petróleo SA, another governmental controlled entity incorporated especially to represent the Federal Government in PSCs and commercialize its production share;

- Appoint Petrobras as sole and mandatory operator of all new pre-salt blocks; and
- Create the Social National Fund to accumulate and invest profits from PSCs.

Petrobras

In September 2010, Brazil's oil and gas giant Petroleo Brasileiro SA (Petrobras), one of the 10 largest companies in the world according to Forbes' April 2011 ranking, completed the largest capitalization in the history of the world, raising US\$70 billion in equity (most of which is allocated to pre-salt exploration and production activities).

Petrobras' 2011–2015 business plan calls for total investment of almost US\$225bn. Highlights of the plan include:

- New projects centred around Petrobras's exploration and production business, with the main projects related to the development of the pre-salt and transfer of rights;
- Attempting to double Petrobras' proven reserves; and
- Capital expenditures (financed mainly by operating cash flow and debt, without the need of equity issuances) of between US\$7.2 billion and US\$12bn per year.

Ninety seven per cent of the funds (US\$213.5bn) will go to activities in Brazil and 5 per cent (US\$11.2bn) to foreign operations, involving 688 projects in all, 57 per cent of which have already been authorized. The table below shows planned investments by business segment.

Table 34.1 Petrobras 2011–2015 business plan

Segment Investments	2011–2015 Business Plan	per cent
Exploration and Production	US\$127.5bn	57 per cent
Refining, Transportation and Marketing	US\$70.6bn	31 per cent
Gas & Power	US\$13.2bn	6 per cent
Petrochemicals	US\$3.8bn	2 per cent
Distribution	US\$3.1bn	1 per cent
Biofuels	US\$4.1bn	2 per cent

Investments in the Petrobras' refining, transportation and marketing business are estimated at US\$70.6bn employing a strategy to expand refining capacity in Brazil. Approximately US\$35.4bn will be allocated to expand refining capacity. Additional investments will continue to be made for operational improvements, fleet expansion and logistics (US\$17.6bn). Investments in oil product quality (such as lower sulphur content oil), in order to comply with the local legislation, are budgeted at US\$16.9bn.

In its petrochemical business, Petrobras expects to invest US\$3.8bn and is maintaining a strategy of expanding petrochemical and biopolymer production through shareholdings in petrochemical companies including the implementation of the Suape petrochemical complex in the State of Pernambuco.

Petrobras' gas and power segment plans to invest a total of US\$13.2bn. With its first phase gas transportation infrastructure now completed, new investment will be directed at optimizing the market for associated gas, especially from the pre-salt discoveries. Most investments in this segment (approximately US\$9bn), are designed to meet the demand for natural gas, including the development of gas-fired thermal power plants and plants for the transformation of natural gas chemicals into fertilizers. The remainder is expected to be allocated primarily to the construction of liquid natural gas (LNG) regasification and natural gas liquefaction/processing terminals.

Table 34.2 Brazilian natural gas projected supply and demand (MMm³/d)

Sources	2011	2015	2020	Demand	2011	2015	2020
Domestic natural gas	55	78	102	Thermal plants: Petrobras + other companies	38	59	76
LNG terminals	21	41	41	Distribution companies	41	53	63
Bolivia	30	30	30	Petrobras: Refineries and fertilizer plants	17	39	61
Total	106	149	173	Total	96	151	200

Petrobras' distribution business will receive US\$3.1bn, mainly focussed on logistics to keep up with domestic market growth and meet legal and/or regulatory requirements.

Petrobras' biofuels segment will invest US\$4.1bn, of which US\$2.8bn will be direct investments through the wholly-owned subsidiary Petrobras Biocombustível (PBIO) and US\$1.3bn will be invested in distribution logistics. From the total direct investments, US\$1.9bn will be directed to the ethanol production and bio-diesel.

Mining

The National Department of Mineral Production (DNPM) was established in 1934 to regulate minerals and mining.

Brazil's constitution makes all natural resources the property of the Brazilian state. States have title to natural resources related to the water and land unless such is already controlled by the Brazilian state by federal law.

Nevertheless, according to the Mining Code, the exploration and production of minerals in Brazil may be awarded under long-term mining concessions to private companies. Minerals extracted from soil through the awarded mining activities belong to

the concessionaire, subject to the payment of royalties to the Federal Government and any required compensation to the owner of the surface property.

Electricity

Brazil is the largest electricity market in South America, with total power consumption more than double that of Argentina, Bolivia, Chile and Uruguay combined.

The Brazilian electricity network consists of one main interconnected power system, comprised of four sub-systems and several smaller, isolated systems in the North. Those four sub-systems (which together account for approximately 98.0 per cent of Brazil's electricity capacity) are interconnected by a network of high voltage transmission lines (the so-called Basic Grid).

Eletrobrás, a state owned company controlled by the Brazilian government, accounts for approximately 50–60 per cent of Brazil's installed capacity and over 60 per cent of transmission lines above 230 kilowatts. Privately controlled companies hold approximately 30 per cent, 29 per cent and 63 per cent of electricity generation, transmission and distribution, respectively, in terms of total capacity.

The Brazilian power industry is comprehensively regulated by the Federal Government, acting through the Ministério de Minas e Energia (Ministry of Mines and Energy or the MME) and the National Agency for Electrical Energy (ANEEL), which have exclusive authority over the industry. An exception to this exclusive authority is the Crisis Committee – CNPE, created in response to the electricity shortage in Brazil and granted extraordinary powers over the electricity sector.

The MME is in charge of developing policy and regulations to organize and regulate the electricity sector and is responsible for coordinating other related ministries as well.

ANEEL was established in 1996. ANEEL's responsibilities include, amongst others, (i) granting and supervising concessions for electricity generation, transmission and distribution, including the approval of the concessionaires' tariffs in case of transmission and distribution concessions, (ii) establishing regulations for the electricity sector, (iii) supervising and auditing the activities of electric power concessionaires, (iv) planning, coordinating and executing water resource studies, (v) implementing and regulating the use of electricity and the use of hydroelectric power, (vi) promoting the bidding process for new concessions, and (vii) determining the criteria for the establishment of the cost of electricity transmission.

ANEEL also has authority to impose penalties for noncompliance with certain legal, regulatory and contractual obligations introduced in 2004.

The Wholesale Energy Chamber (CCEE) was created in August 2004 as a private body subject to ANEEL regulation and supervision. The CCEE is responsible for (i) registering all CCEARs (discussed below), as well as the power and electricity volumes covered by contracts in the free contracting market, (ii) accounting for and organizing the sales of electricity in the spot market, etc., (iii) carrying out electric power auctions in the regulated contracting market, and (iv) imposing penalties for the lack of physical or contractual performance.

Generators are required to demonstrate physical backing in order to sell electricity through bilateral electricity purchase contracts, whether it is produced by them or by third parties. Physical backing is defined by the MME as the maximum electricity and power

volume that a generator, including electricity importers, can sell to third parties. Failure to present physical backing (i.e. purchases in the spot market) subjects the generator to sanctions imposed by ANEEL.

In the regulated contracting market, distribution companies purchase power to meet their projected electricity needs for distribution to their captive consumers. Distribution companies can purchase electricity from generators in auctions coordinated by ANEEL and deployed by CCEE. Electricity purchases can only be carried out under two types of bilateral contracts: (1) electricity contracts, used by hydroelectric plants and (2) capacity contracts, used by thermoelectric plants.

Under electricity contracts, a generator agrees to provide a certain volume of electricity and assumes the risk of a possible impairment of supply due to hydrological conditions and low water levels, and other conditions that might discontinue or reduce the supply of electricity. If necessary, the generator agrees to purchase electricity from other parties to meet its supply commitments. Under capacity contracts, a generator agrees to provide a certain capacity to the regulated contracting market distribution companies. In this case, generator revenues are guaranteed by the amount of their stated commitments and possible exposure to financial short-term market risks assumed by distribution companies, thus ensuring supply to end consumers, notwithstanding the penalties to generators for the discontinuation of supply. Jointly, these contracts form CCEARs.

The MME is responsible for defining the volume of electricity to be purchased in the regulated contracting market, as well as a list of the generation projects authorized to participate in the auctions in each year.

In general, by August 1 of each year, all distribution, generation and marketing companies, and Free Consumers must report their demand or electricity generation estimates, as applicable, for the following five-year period to ANEEL. Each distribution company must report to ANEEL the volume of electricity that it intends to contract in an auction within 60 days after each electricity auction.

Electricity Auctions

Distribution companies must have contracts in force for all of their expected electricity demand for the following five years. To accomplish this, distribution companies must purchase electricity from existing or new generation projects in auctions regulated by ANEEL.

Electricity auctions for new generation projects in progress must be held five years prior to the initial delivery date (referred to as A-5 auctions), and three years prior to the initial delivery date (referred to as A-3 auctions). There are also auctions of electricity from existing generation hydroelectric plants carried out one year before the initial delivery date (referred to as A-1 auctions) and approximately four months before the initial delivery date (referred to as adjustment auctions). The auction notices are prepared by ANEEL pursuant to the guidelines set by the MME, including if the highest bid is considered the basis to determine the auction winner. The MME sets the auctions' maximum sales price.

Free Contracting Market

In the free contracting market, electricity sales are freely negotiated by generation companies, independent electricity producers, self-producers, electricity sellers, electricity importers and Free Consumers (discussed below).

Free Consumers

Free Consumers are those whose demand is equal to or above 3 megawatts, at a voltage level equal to or higher than 69 kilowatts. Free Consumers may choose to purchase electricity from the distribution companies to which they are physically connected at regulated tariffs or to purchase electricity directly from independent producers or self-producers with surplus electricity or sellers, at freely negotiated prices.

Power Project Finance

Given their large capital requirements, fairly predictable cash flows and generally well-established sponsors, power generation and transmission projects are usually good candidates for project financing. Whilst currently a net exporter of electricity, some projections indicate Brazil plans to add approximately 5,000MW of installed capacity per year through 2020.

Hydroelectric

Brazil has the largest capacity for water storage in the world and is highly dependent on hydroelectric generation.

Hydroelectric power dominates Brazil's 100,000 plus MW of installed capacity and provides approximately 80 per cent of Brazil's electric power resource.

Some hydroelectric plants under construction or in their final stages of technical studies are amongst the best illustrations of mega projects being developed in Brazil, such as the Belo Monte, Rio Madeira, Teles Pires and Tapajós projects.

Nuclear

Brazil has two nuclear power plants and Eletrobras operates both Angra 1 and Angra 2. In July 2009, Brazil's audit court approved the resumption of construction of the Angra 3 nuclear power plant. BNDES reports it is considering a loan for the project. Construction of Angra 3 is expected to cost approximately US\$4bn. It will have a capacity of around 1,400MW and is reported to be completed in 2014.

Thermal

Natural gas-fired power plants are expected to gain a larger share in the Brazilian power generation portfolio, considering the anticipated development of the natural gas market associated with massive pre-salt gas discoveries and other initiatives such as liquified natural gas (LNG) projects.

Despite the preference for environmentally cleaner natural gas, coal-fired stations and fuel oil plants are also being developed. BNDES approved a 17-year loan worth US\$585m to local utility MPX Energia for construction of the 350MW Itaquí, a coal-fired power station. Brazilian utility Energias do Brasil, a subsidiary of Energias de Portugal, announced that it had secured a loan of US\$412m from BNDES. The loan is financing construction of the Pecern coal-fired power plant located in Ceara state in northeast Brazil.

Wind

Brazil's first wind-energy turbine was installed in Fernando de Noronha Archipelago in 1992. Ten years later, the government created the Programme for Incentive of Alternative Electric Energy Sources (Proinfa) to encourage the use of other renewable sources, such as wind power, biomass and Small Hydroelectric Power Stations (PCHs). Many wind power contracts have been awarded by ANEEL for more than 50 wind park projects in an attempt to bolster Brazil's commitment to renewable energy with awards going to such players as Iberdrola of Spain, Contour Global of the US and Enel of Italy. Many of these projects are seeking project financing.

Electric Transmission and Distribution

In addition to installation of generation capacity, over 40,000km of transmission lines are expected to be built in the near future in Brazil. There are more than 60 electricity distribution companies in Brazil. The country's constitution allocates to the Federal Government the power to carry on directly or delegate distribution of electricity to captive consumers in Brazil. However, many distribution companies were delegated to the federative states many decades ago. As of the early 1990s, many of these companies were being privatized (including Light, Electropaulo and CPFL etc.), although some remain controlled by the state and some appear to be on the slate for future privatization. ANEEL has a programme to auction transmission lines as concessions, many to state-owned power companies. These concessions by their terms will require capital investments.

The national transmission grid operator, Operador Nacional do Sistema Elétrico (ONS), operates the national transmission grid, which consists of two large grids (one in the north and the other in the southeast, interconnected to each other) and many small networks in isolated regions mostly in the North region of Brazil. ONS, created in 1998, is a private, non-profit organization comprised of representatives from customers and private and state-owned companies involved in the electricity generation, transmission and distribution.

ONS uses data provided by generators to order optimal system dispatch. Hydroelectric generators provide ONS with reservoir levels, rate of inflow and turbine-generator availability. The primary role of ONS is to coordinate operation of the interconnected system to (i) achieve appropriate levels of load supply that minimize operating costs, (ii) ensure and maintain adequate reliability levels, and (iii) ensure open access.

The isolated system is located mainly in the Amazon region owing to several geological and environmental reasons which increase the complexity of energy supply for the population in that part of the country. The system in terms of electric power supply is divided into two types: (i) those which supply the regional capitals, in general composed by hydroelectric and thermal power plants, and (ii) those which supply the hinterland, through thermal plants using diesel fuel. Energy production in the isolated system is mainly generated by thermoelectric plants connected directly to the local distribution grid.

The interconnected system comprises regions located in the south, southeast, westcentral and northeast of Brazil. The power rationing that occurred during 2001–2002 could have likely been avoided if transmission capacity between the south (excess supply) and the southeast (severe deficit) had been available. Brazil has an installed capacity in the interconnected power system of more than 134GW, approximately 67 per cent of which is hydroelectric. This installed capacity includes half of the installed capacity of Itaipu, which corresponds to a total of 14,000MW owned equally by Brazil and Paraguay. There are approximately 70,000km of transmission lines with voltages equal to or higher than 230 kilovolts in Brazil. Approximately 38 per cent of Brazil's installed generating capacity and 56 per cent of Brazil's high voltage transmission lines are operated by Eletrobras, a company owned by the Federal Government. Energy traded in the interconnected system is usually generated by (i) hydroelectric plants; (ii) small hydroelectric plants; (iii) thermoelectric plants; (iv) nuclear plants; (v) wind farms; (vi) biomass and cogeneration units; and (vii) solar plants.

Expansion of the Basic Grid is dictated by mandatory planning guidelines issued by the Expansion Committee – CCPE. ANEEL, as an independent regulator, is responsible for conducting the public bidding process for the construction and maintenance of newly added segments of the Basic Grid.

Transmission tariffs are calculated in accordance with a nodal method and tariffs are readjusted annually.

Bidding laws for instalment of and transmission on the Basic Grid, promoted by ANEEL, permit national and foreign companies and private equity owners to participate in the bidding.

Airports

The authority for Brazilian airports (created in 1973) is Empresa Brasileira de Infra Estrutura Aeroportuária (INFRAERO), a state controlled corporation reporting to the High Command of Aeronautics. Of Brazil's more than 3,500 airports some 67 airports are managed by INFRAERO, accounting for more than 90 per cent of air carriage activity in Brazil. In addition, INFRAERO manages some 81 air navigation stations and 32 cargo logistics terminals.

Brazil's PAC II programme envisages an investment of US\$1.4bn for the upgrade and expansion of 20 airports. Massive investments, including expansion of the Guarulhos Airport, are paramount given the rapid growth of the air travel market over the last decade and in anticipation of the upcoming FIFA World Cup in 2014 and Olympic Games in 2016. Of this amount, US\$470m will be financed by INFRAERO, which also plans to construct eight to 12 regional airports along the northeastern coastline to boost tourism in the region.

Camargo Correa and Andrade Gutierrez have also announced plans to sponsor a new airport in metropolitan São Paulo. Although experts believe there would be sufficient demand for that without putting a damper on the further expansion and renovation of the Congonhas, Guarulhos and Viracopos airports, it is still legally debatable whether a public airport could be delegated under a simple authorization to private parties, as opposed to a concession preceded by public bidding.

Brazil's Applied Economics Research Institute (IPEA) notes that a number of airports in the country are overloaded. The situation is critical at a number of the 2014 FIFA World Cup host cities' airports, many of which are already operating at capacity. The worst over-capacity appears to occur at Manaus International Airport, which reportedly operates at nearly 200 per cent of capacity on occasion. The IPEA report notes that demand for air travel is expected to triple in the next 20 years.

A second report, by consultancy company McKinsey – funded by BNDES – found that investment of US\$14–19bn is needed to meet growing demand in the airport sector over the coming 20 years. The need for investment is clear given that air passenger travel is estimated to grow at the 20 largest airports from 111m in 2009 to 312m in 2030, with passenger terminals already saturated at 13 of these airports. In 2009, INFRAERO announced plans to invest Reais5.3bn in preparation for the 2014 FIFA World Cup.

In August 2010, the Brazilian Government completed the first concession of a public airport to a private investor. A consortium led by Engevix and including an Argentine operator was awarded a 25-year contract for the São Gonçalo do Amarante Airport (AGGA), in the State of Rio Grande do Norte, through a bidding procedure where Engevix consortium offered Reais170m as the winning bid. Technical and economic feasibility studies for the potential concession of three major international airports are in advanced stage. The concession model for each airport should be customized, but general terms and conditions should follow the AGGA model.

Roads

Most freight in Brazil is hauled over roads. In 2001, the National Agency for Overland Transport (ANTT) was formed to regulate the national highways and railways.

Although Brazil's transportation is dependent on highways and not railways or waterways, many believe Brazil's highways have received much less investment in recent decades than is necessary for proper maintenance and expansion.

As a result, highways controlled by the government are often poorly maintained and have not been upgraded to handle transportation demands. In contrast, roads have been privatized by the Federal Government, and states such as São Paulo, Rio de Janeiro, Minas Gerais, Rio Grande do Sul, Paraná and Bahia and many of these roads are adequate.

Private concessions have generally been structured as common concessions. Concessionaires earn their revenue solely through tariff (toll) collection, in some cases after having paid a lump-sum amount to the granting authority for the concession award. In 2006, MG-50 in the State of Minas Gerais was the first highway awarded under a PPP concession to a private party and its concessionaire is entitled to receive periodic governmental payments in addition to its tariff collection. The PPP regime is especially well-suited for projects that are not economically self-sustainable from their own toll receipts but which offer important 'externalities' to justify their receiving governmental subsidies.

It is reported that the country's transport infrastructure department, Departamento Nacional de Infraestrutura de Transportes (DNIT), has many investments planned for the near future.

Ports

Brazil has thousands of kilometres of ocean and inland coastlines. In 2001, the National Agency for Water Transportation (ANTAQ) was set up to oversee water transport and ports. There are more than 30 main public ports in Brazil and over 130 privately-operated terminals.

According to IPEA, only US\$4.7bn has been invested in Brazil's 37 publicly owned ports in the past 10 years. In light of this, it is no surprise that the country's ports are said to be underdeveloped.

Brazil's port infrastructure is ranked 127 out of 133 countries in the World Economic Forum's '2010 Global Competitiveness Report'. ANTAQ is forecasting total throughput at the country's ports to reach 1.2bn tons a year by 2013. To meet growing demand, private sector investments will be required in addition to government spending. According to a report by IPEA, Brazil's ports are in need of US\$23.4bn to upgrade capacity and meet significant long-term growth forecast for the sector to bring it up to standard, including upgrading existing facilities and new port projects. New ports, however, are not the main focus of investment needs, with the IPEA noting that just 9 per cent of the recommended amount should go to new projects. The remainder should be invested in upgrading infrastructure at existing ports.

Under the Ports Law passed in 1993 and supplemented by Law 10,233 of 2001, the same law that created ANTAQ, there are two main types of ports in Brazil: (i) public ports, managed by a port authority (under a concession from the Federal Government) and which may contain several terminals leased to private parties after a mandatory bidding procedure, and (ii) private terminals, developed by private investors under an authorization regime, which terminals are usually divided in private terminals for exclusive use (handling solely their own cargo) or for mixed use (handling their own cargo and providing services to third parties as well).

Until 2008, ANTAQ issued authorizations for mixed use private terminals without requiring minimum owned cargo volumes. Under this regime, key private terminals have been developed to address the growing demand for port capacity, including container terminals such as Portonave, Embraport and Itapoá.

However, ABRATEC, an association of private parties leasing public terminals in Brazil, filed in early 2008 a constitutional lawsuit against ANTAQ, arguing that it would be unconstitutional for ANTAQ to authorize private investors to handle substantial volumes of third party cargo in private terminals, especially those designed for containers, without complying with the legal regime adopted for public service concessions, including a mandatory prior bidding procedure.

Although ABRATEC's lawsuit is still pending decision on its merits by the Brazilian Supreme Court, Decree 6,620 of 2008 changed the criteria for granting new private terminal authorizations and it now requires that mixed use private terminals present major 'owned' cargo volumes, capable of justifying, by themselves, from both a technical and an economic perspective, the development and operation of the terminal. Accordingly, third party cargo may only be handled on an ancillary and sporadic basis.

Under the new regime, mixed use private terminals have been severely restricted, and no new private terminals for containers have been developed. The unresolved constitutional lawsuit adds uncertainty to the future of mixed use private terminals.

Nevertheless, Decree 6,620 has encouraged the concession of new public ports to private parties, as an alternative for the governmental controlled port authorities that manage most of the public terminals in Brazil (Codesp, Companhia Docas do Rio de Janeiro, Codeba, etc). However, to date, no concession has been accomplished as a result of the inherent difficulties experienced by the Federal Government in carrying out feasibility and modelling studies required to launch a concession bidding.

Therefore, better description of the role to be played by private investors in both private and public terminals will be crucial to creating a favourable environment for investments.

Rail

Brazil has fewer than 30,000km of railways, of which only around 1,600km are electrified. Despite on-going investment into the railways, some projects fell victim to the global downturn in 2009. Two projects that have been impacted are the US\$1.5bn tenders for the concessions of the southern stretch of the 1,500km North-South railway and the 1,504km East-West railway. The Federal Government has postponed launching these tenders.

Also in jeopardy may be the proposed high-speed bullet train between São Paulo and Rio de Janeiro. Halcrow, the UK company contracted to carry out the feasibility study, noted to the Brazilian transport ministry that the project will cost at least US\$15bn, and that in the worst case scenario costs could exceed US\$20bn. The report noted that without the government's help, the project would likely not be feasible. Accordingly, the project was planned to be executed under a concession model, subject to the mandatory equity participation of a governmental controlled entity, which would contribute pro rata to the funding of the project. Additionally, the concessionaire could count upon a huge credit line from BNDES, which has committed to finance at least 60 per cent of the project's total cost, equal to (US\$11.8bn). The loan would be repayable over a 30-year period, starting six months after the train becomes operational. However, in the latest tender round no bids were received, which has prompted the Federal Government to review its concession model. The Federal Government intends to review its concession

model for railway services focussed on both cargo and passenger transportation. Instead of concentrating infrastructure construction, operation and transportation services within the same single concessionaire, the new model contemplates two separate concessions: one for construction and operation of the infrastructure itself and another solely for investment in rolling stock and provision of transportation services. The Federal Government believes the new model will be more attractive for investors because they will be able to focus on their particular areas of expertise and assume only the risks with which they are comfortable and prepared to assume, without being forced to become part of a consortium. It also is expected to offer more transparent and effective conditions for free access by different carriers to the same railway infrastructure.

Urban Infrastructure

The Cities Ministry of Brazil announced that the Government is prepared to invest US\$ 2.4bn in over 100 sanitation projects. The projects, forming a part of PAC II, are to be carried out in 90 municipalities. Cities minister Maucio Fortes said US\$1.6bn will be used to finance sewerage projects and US\$800m will be spent on potable water projects with US\$426.67m provided by state and city governments. The remaining US\$1.97bn will be contributed by the country's federal unemployment insurance fund and the workers support fund.

A US\$4.3bn tender for a gigantic urban renovation PPP in the old port area of Rio de Janeiro (Porto Maravilha) was awarded in October 2010 under a novel structure that combines a PPP with issuance of CEPACs (a negotiable instrument granting its holder the right to construct above the general limitations set forth by local urban laws). This represents an important step towards greater private procurement of public projects in the country. As Rio de Janeiro's first PPP and Brazil's largest PPP, the successful development of the project will help encourage further private sector involvement in public projects. In March 2011, the CEPACs were successfully auctioned and raised sufficient funds to secure project completion without requiring municipal expenditures or indebtedness.

Hotels

The 2014 World Cup will require massive expansion of hotel capacity in host cities. Marriott International has announced plans to increase its number of hotels in Brazil from four to more than 50. The company reports that it will develop 50 of its Fairfield brand hotels in the country in cooperation with Rio-based developer PDG Realty SA Empreendimentos & Participacoes.

Outbound Investment

In recent years, many large Brazilian companies have focussed aggressively on international expansion through acquisitions and by developing new projects. For instance, in 2007, mining giant Vale SA initially developed a coal mining capability through acquisition of Australian mining company AMCI Holdings. It has since expanded its capabilities

through development of the Moatize coal mining project in Mozambique, which commenced operations in May 2011 and will constitute a 150 per cent increase in Vale SA's total worldwide coal production.

Whilst the Moatize coal project was not developed on a project-finance limited recourse basis, there is increasing interest by Vale SA and other Brazilian companies in developing international projects using limited recourse financing. For instance, the Camargo Corrêa conglomerate is pursuing development of the US\$2bn Mphanda Nkuwa hydropower project in Mozambique on a limited recourse basis.

Brazil and the Tenets of Project Finance

Although Brazil's economic stability might not yet be free from local risks and thereby necessitate higher profit return expectations for international investors and financiers, Brazil's legal infrastructure can support even the most ambitious project financings.

Inbound Capital

There are no restrictions on capital flowing into Brazil in any sector although foreign exchange transactions must be conducted only through authorized Brazilian agents. Registration of inbound investments in any currency must be registered in the foreign loan registry system of the Central Bank (SISBACEN) in the case of loans or other debt transactions in excess of six months and the foreign registry of direct investment run by SISBACEN in the case of equity investments. (The Central Bank, however, will not register credit transactions providing for interest payments that are excessive compared to market practices). Foreign currency cannot be legally used for payments in Brazil and, therefore, must be converted into Reais. Brazilian entities are usually not allowed to hold local foreign currency accounts, but they are allowed to access the foreign exchange market to make investments abroad or to pay for imports.

As an exception to the general rule, companies engaged in the development of energy projects, such as electric power infrastructure (generation, transmission) and oil and gas exploration, production and transportation, are allowed to hold foreign currency denominated bank accounts in Brazil. The funds in deposit into such accounts must be used exclusively to service cross-border foreign currency financing incurred in connection with the construction or expansion of the project, although they may be invested offshore pending maturity of the indebtedness intended to be serviced.

Hedging

Hedging of commodity prices, currencies and interest rates are all permitted and liquid local markets generally exist for all these arrangements. Long-term foreign exchange hedgings tend to be very expensive, however.

Return and Repatriation of Capital

There are no restrictions on the return of debt or equity capital (and no taxes on dividends), which may be repatriated in foreign currency or Reais. Various withholding taxes apply as noted in the chart below although Brazil has tax treaties with Argentina, Austria, Belgium, Canada, Chile, China, Czech Republic, Denmark, Ecuador, Finland, France, Hungary, India, Israel, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, Norway, the Philippines, Portugal, the Slovak Republic, South Africa, Spain, Sweden and Ukraine amongst others to reduce these taxes. Except for dividends, which are currently exempt from withholding income tax, most income paid by Brazilian sources to foreign creditors or investors (including capital gains) are subject to withholding income tax at rates that vary between 15 per cent and 25 per cent, depending on the type of income and on the jurisdiction where the payee is located.

Importing Equipment and Materials

An import licence must be obtained for certain types of goods as can be determined from the Internal Revenue Services system SISCOMEX. Various incentives and programmes exist for importation of equipment and materials regarding value added sales (the so-called ICMS, subject to the laws of each federative state) and import, excise tax 'IPI', PIS and Cofins contributions, as illustrated below.

Table 34.3 Importing equipment and materials

Type of Incentive	Nature of Incentive
<i>Ex – tarifário</i>	Reduction of Import Tax
Drawback	Suspension of all taxes
Repetro	Suspension/exemption of taxes on oil related equipment

Importing Services

Services are assessed a municipal value added tax (ISS) that may vary from 2 per cent to 5 per cent, as well as PIS and COFINS contributions. Payments are also subject to withholding income tax at a rate of 15 per cent or 25 per cent. Technical services are subject to a 15 per cent withholding income tax (to the extent that the service provider is not located in a low tax jurisdiction as defined under Brazilian laws), but an additional 10 per cent CIDE contribution is also applicable.

Visas for Skilled Workers

Visas are typically available for professionals and skilled workers on both a short and long term basis upon application to the Ministry of Labour and Employment. Expatriates living in Brazil are subject to a worldwide federal income taxation. However, taxes levied by a foreign jurisdiction on income produced in its territory are usually deductible as tax credits in Brazil so long as such other jurisdiction maintains a tax treaty with Brazil or extends reciprocal treatment to Brazilian expatriates.

Visas for Unskilled Workers

Visas for unskilled workers (especially in large numbers) may be more difficult to obtain than those for skilled workers. Generally, they only are granted on an exceptional basis and for relatively short duration. They are more likely to be granted in cases where a project sponsor or contractor requires its personnel to speak the language of its home country in order to be able to carry out proper procedures, standards or quality control to ensure safety and mechanical integrity. Sponsors are generally responsible for the welfare and exit from Brazil of visa holders.

Minimum Brazilian Content

Other than as may be mandated under a particular concession or contractual agreement (such as in the case of oil and gas exploration and production concessions, where local content requirements must be satisfied by the concessionaire), there are no requirements that products or services used or rendered in Brazil be sourced from Brazil.

Technology Transfer

Agreements involving transfer of technology into Brazil must be registered with the INPI (the Brazilian intellectual property agency) as a condition for the remittance of any payments abroad. In general, these contracts are restricted to a five-year term, under the assumption that this should allow sufficient time for the recipient of the technology to absorb it.

Intellectual Property

Intellectual property may be protected and licenced in, to, or from Brazil in a manner that generally protects its owner or originator.

Local Financing

Local financing (whilst generally expensive and of relatively short tenor) is not restricted in any way other than that it must be lent in Reais and repaid in Reais.

Taxation Depreciation of Capital Investments

Investments in fixed assets may be depreciated generally according to Table 34.4.

Table 34.4 Taxation depreciation

Asset Class	Depreciable Life/Treatment
Buildings and fixtures	25 years
Vehicles	5 years
Assets in general	10 years

Accounting

Publicly listed companies are required to keep audited books and state their financial condition according to International Financial Reporting Standards (IFRS).

Taxes

Real estate owners are subject to real estate taxes unless granted a specific federal or local governmental exemption. Individuals and companies are subject to federal income tax. Consortia and branches are not subject to income tax. All entities are subject to employment, social security, payroll and similar taxes as well as value added and sales taxes. Foreign investors may choose without restriction to conduct their business through any of the foregoing entities. There are no stamp taxes in Brazil.

Project Entities

Entities that own projects are most typically corporations given their governance and liability protections for investors but other forms can be employed as well.

Sanctity of Contractual Arrangements

Parties to contracts in Brazil are generally free to agree upon terms they desire irrespective of the place of incorporation or the domicile of the parties. Provisions typically called for

in an international financing such as New York or English governing law, international arbitration and waiver of sovereign immunity are all enforceable other than in very limited situations. For contracts governed by Brazilian law, liquidated damages for delay or performance, warranty repair provisions, waivers of consequential damages, and indemnification coverage can all be expected to be respected by Brazilian courts if properly draughted. Step-in rights for lenders to take possession of property to operate it are typically seen (but not so typically used) in project finance and are not prohibited under Brazilian law. Nevertheless, certain 'self-help' remedies are illegal: for instance, a secured party is not allowed to keep and retain its collateral for itself, in payment of its credit, unless specifically agreed by the debtor at the time of the debtor's default. In general, secured parties are expected to sell their collateral through private or judicial auctions, applying the proceeds therefrom to the satisfaction of their loans and returning to the debtor any excess.

Arbitration and Brazilian Law

Brazil is not party to any bilateral or regional investment treaties, and is not a signatory to the 1966 Convention on the Settlement of Investment Disputes between States and Nationals of Other States (the ICSID Convention). Foreign investors, therefore, do not have the protection accorded by such international investment treaties and may not submit investment related disputes to arbitration before an ICSID arbitral tribunal.

Commercial disputes between private parties or between private parties and the State may be resolved through arbitration. Whilst there has been some controversy within the legal community regarding the use of arbitration to resolve disputes involving public contracts, recent court decisions by the Brazilian Superior Court of Justice (STJ) notably, *CEEE v AES Uruguiana Emp Ltd* and *TMC Terminal Multimodal de Coroa Grande v Ministry of Science and Technology* have held that public bodies must comply with arbitration clauses.

Brazil is a member of the 1958 Convention on the Recognition and Enforcement of Foreign Arbitral Awards (the New York Convention) and of the 1975 Inter American Convention on International Commercial Arbitration (the Panama Convention). These treaties generally obligate Brazil to recognize and enforce foreign arbitration agreements and foreign arbitration awards, subject to certain limited exceptions.

In keeping with its international obligations, Brazilian courts typically will enforce foreign arbitral awards, provided they comply with the conditions set forth in the Brazilian Arbitration Law and they do not offend the Brazilian public order, sovereignty or morals. In addition, foreign arbitration awards must be homologated by the STJ, a process by which the court approves and confirms the award. Once the foreign arbitration award is confirmed by the STJ, the judgment creditor is entitled to enforce the award in Brazil through Brazilian courts. Generally speaking, Brazilian courts appear to have a good track record for enforcing arbitration awards. However, Brazil's current arbitration law is relatively new and Brazilian courts have not yet addressed a number of important issues affecting the interpretation of arbitration agreements and enforcement of arbitration awards.

Brazil has adopted a commonly held view that arbitration is an alternative form of dispute resolution and that parties may not be subjected or required to arbitrate without

their consent. Nevertheless, once parties have agreed to resolve their dispute through arbitration, that agreement is considered binding and irrevocable.

Under Brazilian law, parties are free generally to choose the rules that will govern an arbitration and may use an international arbitral institution (e.g., the International Chamber of Commerce) as an administering body. The rules of arbitration may not violate Brazil's public policy, including its general principles of law, custom and usage and international commercial rules. In fact, STJ has suggested that it may refuse to enforce an award if that arbitral tribunal does not articulate the reasons for its decision in the award.

Outside the context of the commercial arbitration, Brazilian courts will uphold the choice of a foreign law and/or courts unless it contravenes Brazilian governmental or public policy interests or fails to meet the perfunctory requirements of Brazilian law.

Real Estate and Title Insurance

Title to real estate and related rights must be recorded to be valid. Title insurance for real estate rights is not available in Brazil.

Mortgages

Mortgages over real property and easements can be obtained by lenders upon compliance with registration procedures of the applicable real estate registry. Mortgages generally can be foreclosed upon in a public sale without undue delay if properly documented and registered (with the payment of filing fees based upon the amount secured).

Pledges

Financiers can obtain liens on their borrowers' personal and intangible property in a manner that should be acceptable to most project finance lenders without undue burden by means of executing a security agreement (and making proper filings with the registry of titles and deeds, real estate registry and/or corporate books of the borrower in the case of stock) to secure their priority. In addition to the pledge itself (*penhor*), recent Brazilian laws have permitted a broader use of fiduciary securities (*alienação fiduciária* or *cessão fiduciária*) for real estate assets and rights. These fiduciary securities offer a more favourable treatment for the secured party in case of bankruptcy, because, unlike the pledge, they are not subject to any mandatorily preferred obligations (nor is their collateral incorporated into the bankruptcy estate of the debtor).

Priority in Collateral

A lender's priority in its collateral is established by its time of filing in the case of mortgages and pledges or can be established by contractual arrangements agreed between the secured party and all the creditors who have a secured interest in the collateral. Priority is not difficult to determine by searching with the applicable real estate registry. The Real

Estate Registry and Registry of Title and Deeds with jurisdiction over the place where the property is located or where the owner thereof is headquartered (or both) are able to issue, upon request, certificates as to any liens on particular property after a search they perform.

Trustees

Trustees, as such, are not contemplated under Brazilian law. The convention of a “security trustee” which acts for secured parties in order to hold collateral had developed, but its powers have to be specifically delineated.

Bankruptcy

Once a court has ordered a bankruptcy proceeding, no party is able to continue any claim against the debtor outside of the bankruptcy case. Unfortunately, claims in foreign currency are converted into Reais at the exchange rate on the date the court orders the bankruptcy proceeding commenced. In the case of a reorganization (as opposed to a liquidation) once the court has approved a plan, it is binding on all creditors although the collateral of any secured party cannot be sold or affected without its approval.

Governmental entities are not covered under bankruptcy laws.

Insurance

Construction, liability and property insurance are all available in Brazil but must be purchased from local insurers unless they do not offer the coverage in question. ‘Cut through’ provisions for insureds directly to off-shore re-insurers’ proceeds are usually not permitted.

Political Risk Insurance

There are no restrictions on the right for investors or lenders to obtain political risk insurance for their activities in Brazil.

Lender Liability

There are no known precedents of environmental liability being imposed on project finance lenders in Brazil, but there is a growing trend, already supported by decision of the SCJ, holding that project finance lenders may be held liable for environmental damages caused by the projects financed by them, especially if such lenders fail to carry out proper due diligence and to require environmental compliance by their borrowers. Aware of such trends, most Brazilian banks active in the project finance industry have adopted and apply the Equator Principles to their lending practices. Rules have been introduced

by the National Environmental Policy which provide that governmental financing must condition their approval of projects on environmental licensing and fulfilment of the rules, criteria and standards of CONAMA (the Conselho Nacional de Meio Ambiente, Brazil's environmental agency).

Conclusion

Some still may claim that Brazil continues to be the country of the future and not today. However, given Brazil's staggering infrastructure need, the apparent availability of capital for prudently structured projects and the attractive returns which may need to be offered to bear what may be somewhat heightened economic risk compared to other jurisdictions, project finance may finally be the discipline that can refute that ominous placard and deliver Brazil across the threshold.

