The DisCo hit

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Introduction

Obtaining security interests over electricity distribution assets is not practical, since such security interests are costly to implement and could be difficult to enforce. Moreover, in several cases, concession contracts and/or previous lenders often restrict the pledge of assets by corporate borrowers. In the case of companies with a strong balance sheet and financial condition, however, lenders may feel comfortable with a more limited security package that does not rely on asset pledges.

This article describes a receivables-based mechanism used as security in an IDB long-term financing for an electricity distribution company in Brazil. Under such mechanism, the IDB loan, which closed in March 2004 was secured by a portion of the borrower's revenues, which are trapped upon the occurrence of specified events through an account mechanism established for the benefit of the IDB. This receivables-based mechanism can be replicated in similar types of financing provided to Latin American companies with a concession for the provision of public services, such as gas distribution and water/sanitation services with a large and diversified pool of captive customers in their concession area.

Borrower overview²

Bandeirante has concession rights for electricity distribution over two regions of the State of São Paulo (Alto do Tietê and Vale do Paraiba), serving a total area of 9,640km2 comprising approximately 4 million people in 28 cities. The residential sector consumes 21% of the electricity sold by Bandeirante and accounts for 30% of its revenues. This is a captive customer base that provides stable revenues and low payment arrears³.

In December 2002 (four years after its privatization), Bandeirante had demonstrated significant improvements in operating results. Coverage in its concession area had increased to 97% in 2002. Technical and non-technical losses had been reduced (as a percentage of total energy purchased) from 7.5% and 3.8%, respectively, in 1999 to 4.6% and 1.8% in 2003. It strengthened its management and commercial operations. Quality of service had also improved, as measured by a decline in the following indicators: (i) the duration of interruption in electricity supply, referred to as Duração Equivalente de Interrupção ao Consumidor (DEC); and (ii) the number of interruptions, referred to as Frequencia Equivalente de Interrupção ao Consumidor (FEC). Table 1 summarizes Bandeirante's operational results for 1999-2002.

As can be seen, under the EDP group's management Bandeirante's operational performance had improved significantly. The company fared well in comparison to industry standards both in terms of DEC/FEC and technical losses (4.6% in 2002, compared to the industry median of 9%4)#. The number of employees per 100,000 customers (182 in 2002) was well below the industry median (265 in 2002). Taken together, these indicators portrayed a highly efficient distribution company.

The financial position of Bandeirante also improved considerably since its privatization. Nevertheless, its 2002 financials were affected by the general electricity rationing (in January and February 2002), and a change in consumption, which remained at the 2001 level. The company had a local rating of brA3 and a global scale local currency rating of Ba3 (Moody's financial rating scale).

The investment program

Costs and financing

Bandeirante sought financing for its 2002-2004 investment program of \$124.4 million plus \$31.3 million for financingrelated costs (the project). The investment program is aimed at expanding and modernizing Bandeirante's electrical network and business management support systems, allowing the company to: (i) provide electricity to new customers, including those in rural areas; (ii) increase productivity and reduce costs; and (iii) improve the quality and reliability of its electricity network. IDB and the arranger banks (together, the lenders) reviewed the investment program and confirmed its adequacy (cost and quality-wise) to meet its stated objectives of improving Bandeirante's performance during 2002-2004.

Funding for the investment program and other costs comprised an IDB A/B loan (the IDB loan) and cash flow from operations (Table 2). The arranger banks for the B-loan were Caixa Banco de Investimento, S.A. of Portugal, and União de Bancos Brasileiros, S.A. of Brazil. The B-loan has a final maturity of five years (with two years' grace), whereas the A-loan has a final maturity of eight years (with a similar grace period). Corporate financial analysis of Bandeirante indicated that the company would be able to: (i) generate the necessary cash flow to fund the project; and (ii) absorb the additional debt of \$100 million provided by the IDB Loan.

Financial projections

a) Base case

The key drivers and assumptions used in the 2004-2011 financial projections, which incorporated the investment program, comprised: (i) energy invoiced: projected to increase at an annual nominal rate of 3.0%; and (ii) sales price/KWh: projected to increase at an average annual growth of 6.3%, as a result of inflation and exchange rate adjustments applied to regulated tariffs. Additionally, the model assumed no new debt or higher dividend payout ratio (beyond the dividend payments required under Brazilian law), both of which were permissible subject to certain covenants. The projections yield a minimum debt service coverage ratio (DSCR) of 1.19 (in 2004), indicating that Bandeirante would be able to service all its debt obligations, including the IDB Loan.

Income statement. Net income increases significantly during the projection period due to: (i) the 2003 ordinary tariff adjustment related to the economic-financial equilibrium provision of the Concession, as well as the 2003 annual tariff adjustment; (ii) a 3.6% annual growth in market demand; (iii) cost controls in relation to energy purchases and services provided; and (iv) productivity gains, arising from a reduction, in relative terms, of operational expenses and an increase in gross revenues resulting from to the implementation of the investment program.

Balance sheet. In nominal terms, Bandeirante's assets increase substantially during the projection period due to: (i) an increase in fixed assets (mainly as a result of the investment program); and (ii) growth in energy demand. Shareholder's equity also increases as the long-term debt is amortized#5. The current ratio remains above 1, except in 2005 (current ratio of 0.93), in which case the Company could access its revolving lines of credit to fund its working capital requirements.

Cash flow. Gross operating cash flow was projected to grow 8.55% per year, which results in higher free cash flow of \$407 million in 2011. The cash position is expected to improve in 2006 and continue on a steady growth trend thereafter as a result of productivity gains and increased sales.

b) Sensitivity analysis

A series of stress scenarios were performed to assess the impact of adverse movements in key technical and economic variables on Bandeirante's financial indicators and its ability to service debt (as measured by DSCRs). Tariffs. Tariffs charged to end users were regulated by Electricity Law No. 202/98 and approved by the Agência Nacional de Energia Elétrica (ANEEL), Brazil's electricity regulator. The concession contract contains three categories of tariff adjustments: (i) annual adjustments to cover increased costs; (ii) ordinary tariff adjustments five years after privatization and every subsequent four years; and (iii) extraordinary changes. For sensitivity purposes, for 2004 and onwards, a reduction of the adjustment of tariffs by 5% per year was assumed. Under this scenario, Bandeirante would still be able to service its debt.

Operations and maintenance. The base case projections incorporated conservative figures for operating expenses per customer and customers/employee ratios. Nevertheless, for sensitivity purposes, a scenario of maintenance and administrative expenses 25% larger than those estimated in the base case was analyzed. The results indicated that even under such circumstances Bandeirante would still be able to service its debt.

Collection. Partly because of the company's strict rules for payment#,6 virtually all Bandeirante's customers (99.5%) pay their bill on time. In addition, Bandeirante created a financial reserve for insolvencies equal to 0.85% of total revenues for 2002 that declines to 0.6% in 2004 (incorporated in the financial model). Nevertheless, for sensitivity purposes, a non-recoverability ratio of 3.0% of total revenues per year (i.e. over 6 times the existing rate) was assumed. Under this extreme scenario, DSCRs would be affected, but the company would still be able to service its debt.

Demand. Lenders' analysis concluded that demand for electricity (a key revenue driver) is unlikely to decrease below the 2002 consumption levels. A market study validated the assumptions contained in the base case with respect to demand growth (3.5% yearly during the projection period). Nevertheless, for sensitivity purposes, demand growth was assumed to be 1.5% per year throughout the life of the IDB loan. The results indicated that under such circumstances Bandeirante would still be able to service its debt.

Devaluation. Bandeirante's revenues and majority of costs are in Reais, whereas the IDB loan is in US dollars, thereby exposing Bandeirante to devaluation risk. The company agreed to hedge such exposure (through a Real/US\$ swap) for the full amount of the IDB loan. The base case projections incorporated conservative assumptions for devaluation (22% cumulative throughout the projection period, including 6.5% in the first year). Additionally, Bandeirante had foreign exchange rate swaps already contracted for the remainder of its foreign currency debt.

Under various sensitivities, the borrower was still able to service its debt, as defined by its DSCRs.

Security provisions

Bandeirante established a trust account under Brazilian law for the benefit of the IDB with a Brazilian financial institution. In addition, Bandeirante entered into legal arrangements with certain banks in Brazil, pursuant to which such banks are required to direct into the trust account all energy sales payments made by Bandeirante's residential, commercial and industrial customers at or through such banks (the pool receipts). IDB has a first priority security interest under Brazilian law in the trust account and all pool receipts deposited therein. Also, the account mechanism is structured to ensure, to the extent possible under Brazilian law, that the trust account and the Pool Receipts deposited therein are insulated from a potential bankruptcy of Bandeirante.

Each business day, all pool receipts collected by the collecting banks are transferred to the trust account and promptly thereafter to Bandeirante's revenue account. Subject to the occurrence of certain specified events (referenced below), no funds accrue in the trust account, but flow through such account to Bandeirante.

Upon the occurrence of certain events (trigger events), IDB will be entitled to trap in the trust account the funds deposited therein. The trigger events may generally be categorized as follows: (i) events of default, and (ii) other events which do not rise to the level of an event of default, such as the failure by Bandeirante to comply with certain of its financial covenants or other obligations under the financing agreements. The ability of IDB to trap funds upon the occurrence of a trigger event that is not an event of default will allow IDB to take preventive measures at a time when it is not ready to accelerate the loan but, for example, the financial condition of Bandeirante is deteriorating, thereby permitting the accumulation of funds in a segregated account that would be available to IDB in the event that Bandeirante's financial condition continues to worsen. Depending on the nature of the trigger event, IDB will be entitled to trap all or a portion of the pool receipts deposited in the trust account and to use such funds to cover all amounts due and payable in respect of the IDB loan. The funds will be released to Bandeirante only once the applicable trigger event is cured.

The creditworthiness of the pool mechanism is enhanced by two factors. First, the customer base that generates the pool receipts is comprised mainly of residential and commercial customers, who tend to provide stable revenues and result in low payment arrears as mentioned above. Second, Bandeirante is required to maintain a sufficient flow of funds through the trust account such that, in any given month, the ratio of pool receipts to current quarterly debt service on the IDB loan (the pool DSCR) is no less than a specified target ratio. If the pool DSCR in any month decreases below such target ratio, the IDB (through a trustee or security agent) will be entitled to instruct one or more of a series of reserve banks to direct their pool receipts into the trust account, thereby increasing the pool DSCR to the requisite level.

In addition to the account mechanism described above, IDB obtained a similar pledge of receivables granted by Bandeirante to BNDES, such that the IDB loan ranks pari-passu with the BNDES loan. Also, Bandeirante is subject to negative pledge covenants under the financing agreements preventing it from creating preferred obligations or liens on any of its assets other than permitted liens.

As a preventive measure against the possibility of a deterioration in Bandeirante's financial health, the financing documents required that Bandeirante demonstrate on a quarterly basis its compliance with certain financial covenants, namely: (i) Total Debt to EBITDA; (ii) Debt Service Coverage Ratio; (iii) Total Debt to Total Debt plus Equity; and (iv) Short-Term Debt to EBITDA. Finally, Bandeirante is subject to certain dividend payments restrictions (subject to the mandatory minimum dividend payments required under Brazilian law).

Footnotes:

1 Roberto Vellutini is the head of the energy group of the Private Sector Department of the Inter-American Development Bank (IDB); Leandro Alves is an investment officer in the same group. The opinions contained herein are, of the authors only, and not necessarily of the IDB. They would like to acknowledge the contributions of Rosemary Jeronimides and Nadia Scharen-Guivel, also at the IDB.

2 The capital stock of Bandeirante is held by: (i) EDP Brasil S.A. (EDP Brasil) (96.5%); and (ii) other investors (3.5%). EDP Brasil is owned by Eletricidade de Portugal, S.A. (47.50%), Balwerk (48.73%) and Electricidade de Portugal Internacional SGPS S.A. (3.77%).

3 The industrial sector is the consumer group with the highest consumption (59% of the electricity sold by Bandeirante) but accounts for 47% of Bandeirante's revenues (due to its price discounts for large volume consumers). The commercial sector (hotels and retail stores) consumes 11% of the electricity sold, accounting for 15% of Bandeirante's revenues; other customers account for 9% of the Company's revenues.

4 Such low technical losses are mainly a result of the concession area (10,000km2) being rather concentrated and the network operation/management being efficient and highly responsive in anticipating technical problems.

5 The projections take into account the minimum annual dividend distribution that is required under Brazilian law in an amount equal to no less than 25% of a company's annual net income.

6 The bill must be paid within 15 days after receipt; during the subsequent 30 days, the customer pays fines; if the bill remains unpaid after such 30-day period, the electricity service is curtailed.

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