

# BOYADJIAN & ASSOCIATES

## PROJECT FINANCE & MANAGEMENT CONSULTANTS

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# Pay-as-you-go Privatization

After the end of the civil war in 1990, the Lebanese government has overseen a significant investment program to rehabilitate the electricity sector, as part of the rehabilitation process. Despite this, demand always outstripped supply leading to an imperfect provision of electricity services. To resolve these issues, the Government of Lebanon wanted to proceed with the privatization of the electricity sector to ensure a secure continued and affordable electricity supply. But the country's risk profile and the large financial losses of the state-owned electricity utility act as investment repellent. In such cases, Boyadjian & Associates advises the PFI (Private Finance Initiative) / PPP (Private Public Partnership) investors to use the pay-as-you-go privatization strategy.

### *Lebanon's Privatization Efforts*

Since June 2002, the Government of Lebanon has enacted a privatization law to generate revenues to serve the public debt and attract international donors support. Economic sectors subject to privatization include but are not limited to telecommunications, electricity, water, gas exploration and the ports.

There hasn't been any substantial progress on privatization in the first three months of 2004. Despite the GOL's commitment to Donor countries at the Paris II conference in November 2002 to move forward on privatization and securitization, the GOL has not been able to initiate privatization as a result of domestic political bickering, regional instability, the outbreak of the Iraq war and worldwide recession.

## *Privatization of the Lebanese Electricity Sector:*

Parliament passed in September 2002, a law providing for the privatization of the electricity sector. The GOL would sell a 40 percent equity share of power production and distribution at Electricité du Liban (EDL), Lebanon's national power company. The GOL plans to retain the power transmission component and may award a management concession to the private sector. The law, however, sets no timeframe for privatization and is not clear on how the private companies will be created and how many will be established.

In this method of privatization, the investor puts up a relatively small amount of up-front cash, and allocates a portion of the post-privatization operating cash flow towards investment into the sector and the country, hence the term "pay-as-you-go" privatization.

First some words about risk, because pay-as-you-go privatization is a solution to the risk allocation problem. Recently, we attended a conference in Amsterdam sponsored by Euromoney entitled "Power Project Finance". Amongst all the participants at the conference, allocating risk was on everybody's agenda. The goal was to make risk

at the bottom of one's own agenda and to the top of somebody else's.

All the speakers at the Euromoney conference held that risk must be allocated to the party best able to manage it. For example, in the case of a power plant project, the facility needs to be designed and built, fuel will be bought, the plant must operate, electricity sold, loan payments made, and equity dividends paid. All the risks of these activities have to be borne by one party or another. For example if the project is over budget, or late, then the builder should make it up to anyone financially impaired as a result of the fault.

## *Electricity*

Lebanon has approximately 2,200 MW of nominal generating capacity, while actual production varies between 1,200 and 1,600 MW. Current demand is about 1,600 MW, and power shortages at peak times are still common. Lebanon's electricity public utility, Electricité du Liban (EDL), faces major challenges: illegal connections to the grid; meter tampering; technical (15 percent) and non-technical (32 percent) losses totaling 47 percent of production.

**Installed vs. Actual Capacity of Lebanese Power Plants**

<b>Plant</b>	<b>Installed MW</b>	<b>Available MW</b>
Zook	637	556
Jieh	348	284
Hrayche	75	47
Baalbeck	67	67
Tyr	67	67
Zahrani	440	433
Beddawi	440	433
Litani	196	86
Kadisha	78	
<b>Total</b>	<b>2348</b>	<b>1973</b>

## *Privatization Methods, Pros and Cons*

<b>Privatization Method</b>	<b>Main Benefits</b>	<b>Main Disadvantage</b>
Initial Public Offering	Raises Cash	Only for low-risk countries
Employee Ownership	Smooths labor relations, gives performance incentives	Doesn't bring new cash or expertise
Cooperatives	Pleases citizens, makes collections easier	Doesn't bring new cash or expertise
Management Buyout	Retains management, operating experience	Doesn't bring new cash or expertise
Vouchers	Pleases Citizens	Doesn't bring new cash or expertise
Municipalization	Pleases Citizens	Doesn't bring new cash or expertise
Strategic Investors	Brings expertise, cash, technology	Good for more desirable countries, riskier countries cannot attract strategic investors
Pay-as-you-Go Privatization	Brings expertise, and over time, cash and technology	Politically problematic, raises questions of sweetheart deals

The most repeated remark heard at the Conference was from investors, who constantly felt they were taking on too much risk comparing to their profit potential. They protested about fierce competition to win contracts, fluid specifications, tight margins, and once the project was built, legal conflicts over plant performance.

Although the conference was not targeting any particular region of the world, clearly the places of choice were Southeast Asia, Latin America, and China. Regions not attracting as much interest were Africa and the Middle East. Yet there is a need for infrastructure development and investment in privatized assets in these regions as well, and a promising technique is pay-as-you-go privatization.

Pay-as-you-go privatization is suitable for countries where the economic and political risk profile does not support a stable long-term outlook. According to Standard & Poor's, only about 40 countries in the world have an investment-grade sovereign debt rating, leaving the other 160 in the below-investment grade category. Of these 160, many are seeking to sell state-owned parts of their power

sectors, and for the most part there will be no takers. Unfortunately, Lebanon is in this below-investment grade category and the privatization will make some problems. How to privatize in these conditions of poor investment grade rating?

Boyadjian & Associates has been advising on privatization in two Former Soviet Union countries having difficulties in raising funds. In just about all of the Former Soviet Union, privatization is seen as a means of bringing in new capital for the electric power sector, improving operations, attracting new technology and management expertise, and also to provide an example of successful private sector operations.

Unfortunately for Lebanon, foreign investors have strong opinions about what countries they consider desirable. For example, finding a co-developer for a 100 MW gas-fired project in southeast Asia takes a matter of a few days after completing the necessary due diligence. Lebanon will need many years to find investors, depending on the commitment to privatization shown.

## *Changes in Project Finance for Energy*

The big decline in long-term private capital flows to developing countries since 1997 reflects a sharp change in mood—from the excessive optimism of the precrisis 1990s to the conservatism of the late 1990s. Before the crisis large amounts of financing were chasing marginal projects in the electricity sector. This frenzied approach to lending resulted in lenders downplaying the role of sponsor equity through over leveraging of projects, the loosening of project structure, and a failure to adequately assess the fundamentals of long-term country risk and to take a sufficiently long-term view of the nature and values of such assets.

In the short term international financial markets' conservative approach to developing countries has made financing scarce and expensive. According to preliminary World Bank estimates, net long-term funds from international capital markets to developing countries dropped from a peak of US\$151 billion in 1996 to around US\$40 billion in 1999. The biggest drop was in net lending from international banks, which turned negative in 1999. The cost of debt increased sharply. Secondary market spreads on Brady bonds rose from 500 basis points at the end of 1997 to more than 1,100 basis points in late 1998, declining in 1999 only in major East Asian economies and Brazil.

The table shows how pay-as-you-go privatization differs from other methods of privatization. Of course it does not solve all the problems related to privatization. Rather, it can be used in high-risk profile countries where there is a need for new technologies, management expertise and of course for foreign investment.

One of the most dramatic examples of pay-as-you-go privatization is the Ekibastuz transaction in Khazakstan. Ekibastuz is a 4,000 MW coal-fired power plant bought from the government of Khazakstan for an up-front payment of 2 million USD only. Future promised investments of up to 500 million USD will be made from generated cash flows.

The Ekibastuz transaction is one of the very few in the risky region of the Former Soviet Union. It deals successfully with many problems: lack of demand, weak creditworthiness of the utility, foreign exchange risk, etc. Really the only thing at risk for the investor is management time.

The Lebanese government must realize that investors are not comfortable to deploy cash into an illiquid long-term investment and must recognize the market's perception of the electricity sector risk profile. When nobody wants for privatized state-owned assets, then pay-as-you go privatization is a solution that can make sense.

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