

INVESTING & WEALTH

CFA SINGAPORE INSIGHTS

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The business of utilities

The utilities industry is not just about power generation, it encompasses other segments pertinent to all consumers and investors

WHEN electricity was first supplied to homes, it triggered strong emotions. People were delighted and amazed especially when there was light in the night – unbelievable just with a flick of a switch. This sense of bewilderment was also accompanied by an equally strong emotion – utter horror. The dim gas lamps and smoky candles which were previously used gave way to sharp bright lights revealing starkly how filthy their homes were. The 20th century had begun.

This parable is used to remind us of the profound effect of generated power and other utilities such as clean water supply and effective sewage treatment have had on our lives. This reminder is necessary as we the consumers and as well as investors do take modern-day utilities for granted. To this end we aim to revisit the origins of the utilities sector, which will then help us to formulate the right questions to ask when examining these businesses.

Anyone for a monopoly?

When utilities started to carve out their business model around a century ago, natural monopolies made sense. Adopted steam turbines were vastly more efficient at generating power and much more scalable than the steam engines they replaced. The emergence of alternating current (AC) meant that power stations could be located farther away from consumers. Both these developments implied that electricity generating companies could be concentrated in the hand of one producer which needed the scale to push unit costs down. Other costs savings included maintenance costs spread over a broader revenue base as well as cheaper land costs to locate generators in rural locations.

With natural monopolies in strategic industries and the ability to raise prices, regulators were invariably part of the landscape to placate the electorate. The regulators had a big hand in pricing decisions and company operations.

In summary, these are the traditional attributes of the industry:

- Efficiency driven: scale lowers unit costs significantly;
- Highly regulated: pricing decision rests in the hands of regulators;
- Massive capital expenditure: transformers, turbines and generators are complex and big-ticket items which cannot be covered over the short term which then also translate to a formidable barrier to entry;
- Natural monopolies across the utilities industry: in a similar vein, for the water and sewerage industry, the bigger the scale, the lower the cost per unit.

Power to the people (and investors)

Most view utilities as purely concerned with power generation but the industry incorporates other segments. Power generation is stage one; long-dis-

tribution power transmission follows and it culminates with intermediaries who package and sell energy units to consumers.

Power plants once built and running smoothly, the cash flow from operations tends to be stable as electricity is a non-discretionary product.

While pricing power is taken away from utilities, they are nevertheless guaranteed a minimum take-up rate in terms of volume. The latter ensures that the natural monopolies at least always break even if they are efficient. This then translates to the utilities company attracting a certain type of investor – one that demands a stable dividend yield – treating the equity investment as a perpetual bond with stable market prices.

Supply disruption

It should be noted, however, there are forces seeking to tear down monopolies and they are on the ascendant. The traditional hub-and-spoke grid model, some argue, is too rigid and unidirectional, with a cluster of central power generators feeding electricity through a complex web of transmission lines into homes. With modern-day technology, the traditional utility model might be transformed from its current concentrated format to a distributed one, where the entire network is set to be highly modular. The grid will be composed of smaller microgrids that can be segregated and can generate their own power.

Meter reading

Having identified a particular utilities company you wish to examine, look at the details of the business profile and revenue mix. Establish the different products and services on offer and the geographic spread of its operations. The regulatory and tax backdrop will differ from country to country and affect a firm's profit/dividend-paying capabilities.

Within the company's markets, you may want to identify the customer mix – households and industrial/commercial establishments. You may also want to note if customer behaviour varies across geographical locations – this could be affected by seasonal factors; for example, Singapore may see consistent domestic electricity usage given its unvarying climate, whereas Hong Kong could see spikes in summer as the air-condition usage spikes. Investors may want to determine if differential in pricing exists (who pays the lowest and highest tariffs), and how are they determined. Other pertinent features include the use of renewable or low-emission energy sources and regulations on quality and pollution control.

Efficiency

From a performance perspective, key metrics to note include track record on expenditure efficiency (Actual expenditure versus allocated expenditure), power consumption per customer for various end-user types across various geographies, and capacity utilisation.

Look ahead

It is worth drilling down to find out more about the stance on competition in each territory where the firm operates. Lines of enquiry could include finding out if there are local, regional or national monopolies in any of the services provided in key markets. In large countries, such as the US, rules and regulation can differ from state to state. It is also worth noting if regulators intend to introduce or intensify competition. Investors must take stock of the likely consequences of upcoming changes and how the company plans to manage the impact.

Environmental, social and governance metric

Another critical area that will affect performance, both in financial and reputational terms, are environmental, social and governance principles (ESG). Starting with financials, it is worthwhile to obtain a calculation of how much capital expenditure is allocated to ESG-relevant aspects of a business. In terms of incident-related costs, determine if a penalty has been levied for leakages, spills or other such incidents. Other questions to ask include the company's customer education policies including if the company encourages the use of equipment and processes improve efficiency yet generate smaller amounts of waste. For the power generation companies, determine the potential share of renewable sources over the next five, 10 or 20 years. For sewerage companies, investors may want to determine the different recyclates generated by supply and sewage treatment firms, with a focus on the quality and quantity of water recovered from a unit of sewage treated.

Long-term generators

Investors may want to evaluate the long-term drivers of the sector and how these are expected to evolve. Points to note are the outlook for population growth and urbanisation rate and the prospect of shifts in the pattern of consumption.

This column is an excerpt from the joint research by CFA Institute, Association of Chartered Certified Accountants (ACCA) and CRISIL, entitled "Sector Analysis: An Investors Framework". The excerpt is printed here with permission from the three organisations. A full version of the research will be published on CFA Institute Asia-Pacific Research Exchange at www.ARX.cfa

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