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PUBLIC CHOICE ALTERNATIVES

A Valuation of SaskPower

BY IAN MADSEN



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EXECUTIVE SUMMARY

Keeping Sask Power and being compelled to throw in more billions of dollars to keep it viable, or having an additional 15,000 teachers, nurses, or paramedics? This is the choice Saskatchewan would have if this Crown asset were sold.

There are two generally accepted methods for valuing a company: its intrinsic value as a cash-generating enterprise, and its standard market value in comparison with similar companies. This study used both methods to value SaskPower Corp. (SPC).

In the valuation, it was not possible to use the normal intrinsic value method, and discount to the present, the Province of Saskatchewan's interest in SaskPower's projected future free cash flows, as the company has not in recent years, and is not projected to, have positive free cash flow. So, a conceptual equivalency was made for an alternative valuation, using similar techniques, treating net income as a proxy for free cash flow, which, in theory, would be correct for a typical, slow-growing company in a mature industry, where capital expenditure would generally be approximately equal to depreciation, making net income and free cash flow the same number. This alternative intrinsic value, 'as is' (not taxed at statutory rates) could range from a median of \$676M to a mean of \$755M. It would range between a median of \$497M and a mean of \$613M if the company was to become taxed in the usual, statutory way. Note to the reader the company's capex demands exceed cash flow, so the intrinsic valuation is quite optimistic.

Under the market-based valuation system, the current, 'as is' (not statutorily taxed) value ranges from \$932M to \$4,542M, with a median value of \$2,273M, and a mean (average) value of \$2,408M. Once it becomes taxable at statutory rates, the range could be between \$803M and \$4,542M, with a median value of \$1,197M and a mean value of \$2,270M.

INTRODUCTION

SaskPower was founded in 1929. It is a Crown corporation owned entirely by the citizens and taxpayers of Saskatchewan. As such, it is non-taxable. It is the monopoly electric power provider to households, companies, and institutions in Saskatchewan. In recent years, it has added renewable energy such as solar and wind power,

carbon sequestration, and energy investments outside the province to its assets. Its capital expenditures have exceeded operating cash flow for several years, and are projected to do so indefinitely, requiring ever more borrowing from the capital markets, making it vulnerable to escalating interest rates.

RATIONALE FOR DIVESTITURE OR PRIVATIZATION

While it is up to the people through their elected representatives to decide if a Crown corporation or other government agency or entity should be sold or otherwise privatized and the proceeds used for the benefit of all citizens and taxpayers, there are some established reasons to embark on such a path, some or all of which are cited for divestiture of such enterprises but may not be applicable in any single case.

1. The government has no mandate to own or run a commercial enterprise. Libertarians, 'Classical Liberals' and free-market conservatives believe that the provision of citizens' safety, security and justice is the government's primary role, and its involvement in the economy should generally not extend beyond this.
2. Regulation can usually accomplish any public policy reason for direct involvement in an industry. If regulation is not easily feasible, then a direct contract or subsidy to any affected individuals, entity or entities may be more efficient or effective and less economically disruptive or costly.
3. If a government-controlled or sponsored enterprise has a monopoly position, near-monopoly, or effective monopoly in a line or lines of business or businesses, then opportunities are lost in one or more commercial or potentially commercial sectors for entrepreneurs and investors to try to create and grow businesses to enrich and sustain themselves, employees, suppliers, and others.
4. The absence of an enterprise from the array of alternatives available to individual, institutional, or corporate investors reduces the choices they have for potentially attractive investments and to diversify their investment portfolios, which increases their risk and lowers their return-to-risk ratio.
5. There is a market for corporate control among the enterprises that are available for sale in the market; usually publicly listed corporations. The lower the number of potential enterprises available to be bought and sold, and their strategies and assets redirected or reallocated, the less efficient and less attractive this market for corporate control is, making a subnational or national economy that much less attractive to institutional or corporate investors.
6. A monopoly, near-monopoly, or effective monopoly market position by a government-owned or sponsored entity could result in far higher prices for customers, the general public, or a section of the public, than would be the case in a fully competitive marketplace for the industry involved.
7. A government-owned or -sponsored enterprise may compete directly against private sector firms, which are owned by or employ citizens, or against individual citizens, all of whom the government is supposed to serve, not disadvantage.
8. The government-owned or -sponsored enterprise may compete unfairly against its private sector rivals in that it had or has access to lower-cost government-sourced and -guaranteed capital (debt). It may have a much larger debt component in its capital versus that which would be tolerated in the private sector. Thus, it may not have to meet high standards for profit and cost control, allowing it to offer lower than true free market-based competitive pricing.
9. Government-owned firms may not need to pay provincial or federal income taxes. This can allow such firms to supply goods or services more cheaply than the private sector companies they are competing with.
10. Government-owned or -sponsored enterprises may not have any kind of profit orientation or target, may be used as public policy vehicles and may be given preference in their activities or even in their transgressions, such as labour or environmental abuses.

11. Government-owned or -sponsored enterprises, by virtue of being public sector vehicles overseen by bureaucrats and politicians, may be places where favoured individuals find employment, particularly at management levels.
12. Since profit is a secondary goal of a government-owned or -sponsored enterprise, it is difficult to evaluate the effectiveness, efficiency or productivity of the enterprise or its employees. Consequently, these employees and assets may not be very productive or effective.
13. In some cases, government-owned entities are monopolies or effective monopolies, and use their market-dominating power to charge higher prices than would be the case in a fully competitive sector with several viable companies in intense rivalry to offer customers the best product or service at the best price.
14. Government-owned or -sponsored enterprises are often creations of certain time-fixed circumstances and outlive whatever use or public policy role their creators may have conceived. Often, advances in technology; the modernization of transport, telecommunication or information technology; the evolution of the economy and available products and services and the increasing standard of living make these enterprises potentially obsolete. In the private sector, firms and individuals must adapt and evolve, or decline.
15. Government-owned or -sponsored enterprises perpetuate their possibly obsolete existences by virtue of the constituencies that build up around them: employees, managers, directors and bureaucrats, customers, suppliers and associated advocates or consultants. They can lobby to keep the enterprise going, despite dysfunction or losses. They are far more motivated to do so than are the taxpayers, whose average cost is much less per person and may be indirect, hidden or difficult to calculate.
16. Because they are not profit-oriented, government-owned or -sponsored enterprises are usually less efficient, and thus they lower the overall efficiency of the entire economy. This can make a whole nation less competitive than its global rivals are, whether nations or individual companies. The effects are worse the greater the government involvement in the economy. When taken to its most extreme, as happened in 20th-century communist nations, the countries were unable to compete against capitalist companies, despite their immense direct and indirect subsidies, government support and the lack of profit requirement.
17. Funds tied up in the capital of government-owned or -sponsored enterprises could be used to reduce government debt or lower taxes on individuals or corporations, which they could then spend or invest as they freely choose, and thus they could inject money back into the economy in more-lucrative ways.
18. The greater the number and size of government owned or government sponsored enterprises in an economy, the greater the size and power of the government, which is usually the largest single entity in society, increasing the dangers of abuse of power, including injuring individual citizens, companies, or groups. Effective capacity of opposition or recourse against this power diminishes as the proportion of the economy the government occupies increases.

INTRINSIC VALUE: VALUATION OF SPC AS A BUSINESS

For the intrinsic value, projecting future cash flow growth, and bringing it to a net present value, a relatively conservative approach was taken which could undervalue the company (see Table 1). The company's free cash flow growth rate range was a restrained 2 to 4 percent, and the required rate

of return or cost of capital range was from 5 to 8 percent. The firm has experienced higher growth rates in recent times, so higher growth in the future could be reasonable. Its cost of capital, given low expectations and high current valuations in the stock market, could well be lower than the range

Table 1

Intrinsic Value, Discounted Free Cash Flow Valuations

(Depreciation Equals Capex, thus Net Income = Free Cash Flow)

1. As is; i.e., NOT Statutorily Taxed

Net Income stands in for Free Cash Flow, 'FCF', Estimate for 'Next' Year (from above): \$23.19

Valuation Matrix, NOT Fully Taxed; Values in \$M.

Value = $FCF/(r-g)$ (r = required or expected rate of return; g = estimated or potential growth rate)

$$r = > / g = v$$

Reason for ranges chosen:

Returns are foreseen to be within the range shown, and risk-adjusted cost of capital within similar range. Growth rate of revenue, gross income, EBITDA, and operating cash flow have been high, but that of net income quite negative.

	4.00%	5.00%	6.00%	7.00%	8.00%	9.00%	10.00%
0.00%	\$ 579.6	\$ 463.7	\$ 386.4	\$ 331.2	\$ 289.8	\$ 257.6	\$ 231.9
1.00%	\$ 772.8	\$ 579.6	\$ 463.7	\$ 386.4	\$ 331.2	\$ 289.8	\$ 257.6
2.00%	\$ 1,159.3	\$ 772.8	\$ 579.6	\$ 463.7	\$ 386.4	\$ 331.2	\$ 289.8
3.00%	\$ 2,318.5	\$ 1,159.3	\$ 772.8	\$ 579.6	\$ 463.7	\$ 386.4	\$ 331.2
4.00%	\$ --	\$ 2,318.5	\$ 1,159.3	\$ 772.8	\$ 579.6	\$ 463.7	\$ 386.4
5.00%	\$ 2,318.5	\$ --	\$ 2,318.5	\$ 1,159.3	\$ 772.8	\$ 579.6	\$ 463.7
6.00%	\$ 1,159.3	\$ 2,318.5	\$ --	\$ 2,318.5	\$ 1,159.3	\$ 772.8	\$ 579.6
7.00%	\$ 772.8	\$ 1,159.3	\$ 2,318.5	\$ --	\$ 2,318.5	\$ 1,159.3	\$ 772.8

Low Value of Range	\$ 386.4
High Value of Range	\$ 2,318.5
Median (average) of Range	\$ 834.0
Median (1/2 above; 1/2 below) of Range	\$ 676.2
Mid-point of Mean and Median (above)	\$ 755.1

2. Adjusted; i.e., Statutorily Taxed

Net Income stands in for Free Cash Flow, 'FCF', Estimate for 'Next' Year (from above): \$23.19

Valuation Matrix, NOT Fully Taxed; Values in \$M.

Value = $FCF/(r-g)$ (r = required or expected rate of return; g = estimated or potential growth rate)

$$r = > / g = v$$

Reason for ranges chosen:

Returns are foreseen to be within the range shown, and risk-adjusted cost of capital within similar range. Growth rate of revenue, gross income, EBITDA, and operating cash flow have been high, but that of net income quite negative.

	4.00%	5.00%	6.00%	7.00%	8.00%	9.00%	10.00%
0.00%	\$ 426.0	\$ 340.8	\$ 284.0	\$ 243.4	\$ 213.0	\$ 189.3	\$ 170.4
1.00%	\$ 568.0	\$ 426.0	\$ 340.8	\$ 284.0	\$ 243.4	\$ 213.0	\$ 189.3
2.00%	\$ 852.1	\$ 568.0	\$ 426.0	\$ 340.8	\$ 284.0	\$ 243.4	\$ 213.0
3.00%	\$ 1,704.1	\$ 852.1	\$ 568.0	\$ 426.0	\$ 340.8	\$ 284.0	\$ 243.4
4.00%	\$ --	\$ 1,704.1	\$ 852.1	\$ 568.0	\$ 426.0	\$ 340.8	\$ 284.0
5.00%	\$ 1,704.1	\$ --	\$ 1,704.1	\$ 852.1	\$ 568.0	\$ 426.0	\$ 340.8
6.00%	\$ 852.1	\$ 1,704.1	\$ --	\$ 1,704.1	\$ 852.1	\$ 568.0	\$ 426.0
7.00%	\$ 568.0	\$ 852.1	\$ 1,704.1	\$ --	\$ 1,704.1	\$ 852.1	\$ 568.0

Low Value of Range	\$ 284.0
High Value of Range	\$ 1,704.1
Median (average) of Range	\$ 613.0
Median (1/2 above; 1/2 below) of Range	\$ 497.0
Mid-point of Mean and Median (above)	\$ 555.0

Source: Author's calculations based on annual reports made available by the company.

used (and thus raise its estimated value), although there is also a chance that interest rates and the rate of return investors demand on equity (share) investment could increase. The statutory tax rate used in calculations may be lower in the future, as there is continued global pressure to lower corporate tax rates, exemplified by the recent drop in U.S. corporation income tax rates. Over its past eight-year history, capital expenditure exceeded operating cash flow, and it is anticipated that this will continue.

It is this negative free cash flow, and the prospect that it will continue, that led to the use of an alternative, which makes the assumption that capital expenditure would be equal to depreciation, which, all else being unchanged, would make, by definition, free cash flow equal to net income. Using this very optimistic alternative, intrinsic value ranges, 'as is', i.e., untaxed (as a Crown); and fully taxed, were estimated.

MARKET-BASED VALUE: VALUATION OF CPC USING STOCK MARKET AND FINANCIAL METRICS

With respect to the market-peer comparison valuation, there are a few complications. The Canadian electric utility sector includes a number of companies with depressed net income and depressed cash flow, at least at this time (see Table 2). With U.S. peers, the most similar companies have substantially negative free cash flow, meaning they require further financial inflow. Their recent net income is also depressed.

A progressive series of removal of valuation metrics from the wide array originally employed had the effect of successively raising the potential market value of the company. That was not the intention of removing those metrics. They were not useful, either because of missing values, or because of inflated or negative final results. The final estimates

of market value, shown in Table 2, seem to have some resemblance to the market value of the small-region U.S. power utilities, so that gives some confidence in the final estimates of market value for this mid-size regional utility.

As noted in the Executive Summary, the 'as is' current value of the company (making 'payments in lieu of taxes') ranges from \$932M to \$4,542M, with a median of \$2,273M and a mean (average) of \$2,408M. Were it to be taxed at statutory federal and provincial rates, the estimated value ranges from \$803M to \$4,542M, with a median of \$1,997M and a mean of \$2,270M. Please see the details of the model's results in Table 2. The 'forward P/E' used the model's estimate calculated for next year's net income.

Market Comparison Valuation							
Value of equity using valuation metrics as applied to SaskPower		Trailing P/E Market Value to Net Income	Forward P/E (Market Value to Est. Net Income)	Price to Sales	Price to Book	Enterprise Value/ EBITDA (minus debt)	Price to Operating Cash Flow
Average Canadian Electric Utilities	As Is (Not Statutorily Taxed)	\$ 2,338.7	\$ 1,464.9	\$ 3,750.1	\$ 2,196.1	\$ 445.8	\$ 2,364.1
	Statutorily Taxed	\$ 1,713.0	\$ 1,095.2	\$ 3,750.1	\$ 2,196.1	\$ 445.8	\$ 2,295.8
Average US Electric Power Dominated Utilities	As Is (Not Statutorily Taxed)	\$ 1,242.0	\$ 683.6	\$ 5,333.5	\$ 4,506.6	\$ 1,419.0	\$ 3,156.7
	Statutorily Taxed	\$ 912.9	\$ 511.1	\$ 5,333.5	\$ 4,506.6	\$ 1,419.0	\$ 3,065.4
Average of the Two Averages	As Is (Not Statutorily Taxed)	\$ 1,787.0	\$ 1,074.2	\$ 4,541.8	\$ 3,351.3	\$ 932.4	\$ 2,760.4
	Statutorily Taxed	\$ 1,313.0	\$ 803.1	\$ 4,541.8	\$ 3,351.3	\$ 932.4	\$ 2,680.6

Market Value Using ALL Comparable Companies and ALL valuation ratios.	Mean	Median	Midpoint	Minimum	Maximum
As Is (NOT Statutorily Taxed)	\$ 2,408.0	\$ 2,273.0	\$ 2,341.0	\$ 932.0	\$ 4,542.0
Statutorily Taxed	\$ 2,270.0	\$ 1,997.0	\$ 2,134.0	\$ 803.0	\$ 4,542.0

Note: The small sample size for Canadian companies make the average of all companies more reasonable and preferable to use.

CONCLUSION

The continued heavy capital demands that exceed the company's operating cash flow make the intrinsic value based on discounted free cash flow approximated by net income an unreliable method. Net income is not likely to equal free cash flow in the near future.

Given the commanding position it has as the dominant utility – indeed, the only, monopoly one – in Saskatchewan, and its strategic geographical position between Alberta, Manitoba, and adjoining Montana and North Dakota, it could be a coveted holding for (a) corporate or institutional acquirer(s), whereupon the market-based valuation would be more pertinent than the theoretical and somewhat suspect discounted cash flow (net income) valuation.

As the capital expenditure demands on SaskPower show little sign of diminishing (due to continuing requirements to accommodate intermittent renewable energy, upgrade and expand transmission capacity, modernize equipment, improve connectivity with adjoining power jurisdictions, develop smart grid capability, stay competitive with improving economics of customer-generated power, solar and wind power and carbon sequestration, and phase out coal generation), it may be more desirable for the taxpayers of the Province to sell part or, more realistically and usefully, all of the company, rather than having to either guarantee yet more debt, or, eventually, put more equity capital into the company so that its capital structure does not become too debt-heavy, which would make it more vulnerable to interest rate increases and may require power price increases that exceed the rate of inflation.

This is already a real risk, as the company may be compelled to make an expensive transition from low-cost coal generation to more flexible and still-cheap, but more-expensive-than-coal natural gas-fired capacity. Two billion dollars in SaskPower sales proceeds could fund twenty thousand person-years of nurses, teachers, or paramedics. The risks to this utility of radical change in power production and distribution are currently being borne by Saskatchewan taxpayers. They may prefer that private investors take that risk, and the investment demands and rewards that risk entails, rather than having an open-end potential financial black hole. The 'powerball' is now served to the politicians and people of Saskatchewan.

PUBLIC CHOICE ALTERNATIVES

Perhaps the proceeds of a sale of SaskPower could be deposited into a provincial fund. The Canada Pension Plan Investment Board, for example, has had a five year 'net normal' rate of return of 11.8 percent annually, on average, and 6.7 percent over the past ten years, which included the severe financial market downturn between 2007 and 2009. If about \$2B were realized from the sale of SaskPower, and invested with similar returns, it could result in between \$120M to \$240M per year in income, which could be used for the benefit of Sask Power consumers or all citizens. If, on the outside chance, \$5B were realized, between roughly \$300M to \$600M in annual income could be used for various purposes.

That money would go a long way for, say, four hundred thousand Saskatchewan households in restraining looming escalation in power bills. Moreover, \$120M to \$240M could pay for about 1,200 to 2,400 teachers, nurses, or paramedics, and \$300M to \$600M would pay for about 3,000 to 6,000 of them. If they are not needed, each household's provincial income taxes could fall by \$300 to \$600 (SaskPower proceeds of \$2B), or \$750 to \$1,500 (proceeds of \$5B). Saskatchewan taxpayers should have the ultimate say, directly, or indirectly.

Saskatchewan has a major asset which could be better managed in the private sector, especially were competition allowed to sharpen its efficiency. Proceeds of selling off the firm could make citizens of the province better off in a lot of ways. The demands and dangers (huge capex requirements, rising interest payments, large stranded or obsolete assets) that await SaskPower are looming, and costly. Selling it off makes private investors bear those risks and raise the capital needed to meet them, rather than hard-pressed taxpayers. Unlocking and freeing SaskPower could be done along with deregulating and reviving competition in the Prairie electricity markets, benefiting consumers and producers alike. Politicians cannot ignore this issue for much longer.

