PUBLIC CHOICE ALTERNATIVES

Debt-Free, Few Capex Demands, Well Positioned to Soar

A VALUATION & STRATEGIC APPRAISAL OF THE SASKATOON INTERNATIONAL AIRPORT

BY IAN MADSEN

FRONTIER CENTRE
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EXECUTIVE SUMMARY

NOTE: This valuation used financial data from the fiscal year 2019 and earlier, before the Covid-19 pandemic. Resumption of air travel to pre-pandemic levels will be required to attain the valuations that were arrived at. The timing of when this may occur is uncertain.

Saskatoon Airport Authority, 'SAA', whose symbol is YXE, is the umbrella company for the airport serving metropolitan Saskatoon, Saskatchewan, domestically and internationally. Its market area is larger: all of central and northern Saskatchewan. It is an autonomously managed non-profit, untaxed entity, and ultimately owned (albeit ambiguously) by the federal government.

Using an **intrinsic value method,** with fully taxed net free cash flow, the entity's value is estimated from a minimum of $28M to a maximum of $99M, with a tighter, more plausible range of a median (midpoint of all the relevant values) of $45M to a mean (simple average of all the relevant values) of $50M.

Under the **market-based valuation system,** using seven standard valuation metrics (Trailing P/E; Forward P/E; P/Sales, EV/Rev, EV/EBITDA, P/CF, P/FCF: Trailing and Forward Price to Earnings [Net Income]; Price/Sales; Price/Book Value; Enterprise Value to Revenue; Enterprise Value to Earnings Before Interest, Taxes & Depreciation & Amortization; Price/Operating Cash Flow, Price/Free Cash Flow), the current value ranges from $102M to $497M, with a median of $163 million and a mean of $270M.

The company has negative free cash flow and positive operating and profit-based returns on assets, equity, and capital employed. Similar utility-like companies usually pay a dividend to investors. The company is showing insufficient free cash flow to pay a dividend, but its net income and zero debt level shows it could do so; a plan to provide one would make its public market flotation more successful. (Several large airports around the world are already publicly listed and traded; others are owned by other investors, so divestment is quite normal.)

Scenario experiments in this study indicate that YXE should restrain its capital expenditure plans, or, *much, if not all of the first sale proceeds of treasury shares in a partial divestiture might or should be used to fund YXE's imminent and more farther-future-oriented capital expenditures* and *not* go to government coffers.

One nonsensical and dysfunctional policy of the federal government is to charge YXE substantial rent on the land it occupies, raising the costs and lowering the margins of YXE on the debatable grounds that SAA is fully autonomous. This increases costs to airlines and their passengers. As the government *also inherently (if not indisputably) owns YXE, it is effectively charging rent to itself,* serving only to make YXE and air travel less attractive and lower the potential value of the entity. Additional scenarios are included in this report which explore what the removal of this expense would do to YXE's valuation: it increases it substantially.

Below is a summary table of the average estimated value of the airport under both the intrinsic value and the market value method, assuming: no reduction of projected capital expenditure; reduction of one quarter of projected capital expenditure; and, finally, reduction of one half of projected capital expenditure. The onerous federal land lease rental cost expense remains. NOTE: The Intrinsic, Discounted Free Cash Flow values differ from the aforementioned version, which used Net Income as a substitute for Free Cash Flow.

Table 1						
Comparison of Different Scenarios Applied to Intrinsic Value and Market Value of the Airport in 2020						
Airport Continues Paying Federal Land Lease Rental Expense	**Intrinsic Value (Average of Mean & Median)**			**Market Value (Average of Mean & Median)**		
	2020 Valuation=v	2020 Valuation=v	2020 Valuation=v	2020 Valuation=v	2020 Valuation=v	2020 Valuation=v
Figures in \$B.	**No Extinguishing of L-T Debt**	**Extinguishing of 1/4 of L-T Debt**	**Extinguishing of 1/2 of L-T Debt**	**No Extinguishing of L-T Debt**	**Extinguishing of 1/4 of L-T Debt**	**Extinguishing of 1/2 of L-T Debt**
Gross Value (Average of Mean & Median)	\$ 0.0801	\$ 0.0946	\$ 0.2572	\$ 0.2451	\$ 0.3286	\$ 0.3716

Calculations used models incorporating financial results from YXE Annual Reports, key financial statistics from peer companies.
Note: Intrinsic Values use Fully Taxed Net Income as a Proxy for Free Cash Flow; Free Cash Flow remained negative in ALL three scenarios.

In these experiments, value is maximized according to the intrinsic model capital expenditure is reduced by a quarter, or even more. The market valuation method also shows substantial improvement when debt is reduced further. Serious consideration should be given to restraining future capital spending plans of the airport, or using initial public offering, 'IPO' proceeds for projected near-term and more further-out planned capital expenditures.

Alternative Scenario: Eliminating the Federal Land Lease Rental Expense

Below is a summary table of the average estimated value of the airport under both the intrinsic value and the market value method, assuming no reduction of projected capital expenditure; reduction of one quarter of projected capital expenditure; and, finally, reduction of one half of projected capital expenditure, with the change of the *elimination of the federal land lease rental expense, and the use of one half of the savings of that expense to reduce the landing fees* to airlines and their passengers and other customers. It was assumed that the price reduction would modestly raise demand, in accordance with economic theory, and thus used figures from studies that used estimated price sensitivity; or 'price elasticity', in economic terms. The reduction in revenue from the proposed airline fee cut overwhelmed the savings from cutting projected capital expenditure.

Table 2						
Comparison of Different Scenarios Applied to Intrinsic Value and Market Value of the Airport in 2020						
No Land Lease Rental Expense	**Intrinsic Value (Average of Mean & Median)**			**Market Value (Average of Mean & Median)**		
	2020 Valuation=v	2020 Valuation=v	2020 Valuation=v	2020 Valuation=v	2020 Valuation=v	2020 Valuation=v
Figures in $B.	No Extinguishing of L-T Debt	Extinguishing of 1/4 of L-T Debt	Extinguishing of 1/2 of L-T Debt	No Extinguishing of L-T Debt	Extinguishing of 1/4 of L-T Debt	Extinguishing of 1/2 of L-T Debt
Gross Value (Average of Mean & Median)	$ 0.068	$ 0.030	$ 0.132	$ 0.329	$ 0.366	$ 0.423

Calculations used models incorporating financial results from YXE Annual Reports, key financial statistics from peer companies. Note: Intrinsic Values use Fully Taxed Net Income as a Proxy for Free Cash Flow; Free Cash Flow remained negative in ALL three scenarios.

Under these various scenarios, value is maximized according to the intrinsic model when projected capex is reduced by one half. Using the market comparison method, value also increases as capex is reduced. Serious consideration should be given to reducing any planned capital expenses for the airport. The firm's leverage is zero; it has abundant fiscal space to borrow. Also, consideration should be given to eliminating the counter-productive and self-defeating federal land lease rental expense.

Caveat: This report is nothing approaching a prospectus. Only intensive, meticulously minute appraisal of all of YXE's assets, including its physical assets, all its accounts and hidden assets and liabilities, plus all its contractual, legal and regulatory obligations, would give an accurate valuation of the company, albeit still dependent on subjective reasoning and assumptions. Even then it would not necessarily indicate what magnitude of proceeds could or would be garnered in a divestment. The estimates, projections, observations or analyses herein are neither definitive nor authoritative. Other analysts may have valid, alternative ways of scrutinizing and valuing Skyxe.

NB: Additional Advisory: Effects on air travel and airport valuation as a result of the coronavirus outbreak of 2020 were *not* entered into this valuation study.

INTRODUCTION

History of YXE, Its Current State, and Operating Status

Saskatoon John G. Diefenbaker International Airport was first established in 1928 as an Aero Club, and moved to its present site later on. It was renamed for the 13th Prime Minister of Canada in 1993. The present Saskatoon Airport Authority took over operations from Transport Canada in 1999. Passenger levels hit one million in 2007. It now has international flights to the US, and more exotic sun destinations in the winter. YXE serves the City of Saskatoon, central and northern Saskatchewan, an area containing a population of more than 500,000 people. The airport would now like to identify as 'Skyxe'.[1]

YXE facilities house forty businesses and government agencies that employ over 1,460 people. Skyxe estimated it has an annual local economic impact of $1.5B. Skyxe has an annual passenger capability of 2 million passengers (peak in 2018: 1.52M; 2020, Jan.-Nov. inclusive: ~453 thousand).[2]

Another growth factor that contributes to air travel is population growth. Projections for the Saskatoon Census Metropolitan Area (CMA), developed by the City of Saskatoon, were used for the period of 2015 to 2035. Growth was extrapolated up to 2040; compounded growth rates of 1.6 percent (Low), 2.1 percent (Base) and 2.6 percent (High).[3]

Air traffic is projected to grow by 2.2 percent to 4.8 percent in the 2017-2027 period, and by 2.0 percent to 4.6 percent in the 2017-2040 period.[4]

A major, $53M, terminal rebuilding and expansion was completed in 2015. Any further capital expenditures are thought to be minimal and incremental in cost.[5]

The current runways are believed to be more than adequate for any foreseen expansion in the next twenty years, even if intercontinental flights begin. Some modest taxiway expansion may be needed.[6]

A de-icing apron expansion will be made, along with a taxiway widening to accommodate it. To support the expected increase in cargo operations, a cargo apron will be developed along existing Taxiway C and Apron III.[7]

Some visual aids and navigation systems improvements may be needed in the future.[8]

However, depressed oil and gas prices since 2016, and the effects of the Covid-19 pandemic have caused unemployment to rise and provincial GDP to decline in recent years. In 2020 alone, TD Economics estimated growth at a *negative* 5.4 percent for Saskatchewan, recovering to *positive* 3.6 percent in 2021 and then 3.0 percent in 2022.[9]

Central Saskatchewan, the region for which Saskatoon is the largest metropolitan area, is dependent on agriculture, mining of potash and uranium, and somewhat on farther-flung oil and gas production. Biotech, generally agriculturally related, is significant and not affected by economic conditions. While agriculture and related businesses have a positive long term prospect, oil and gas is more troubled. Although natural gas prices have rebounded, and, lately, oil prices have as well, this sector seems unlikely to be a robust growth generator.

SAA's growth plans are likely to be badly derailed by the Covid-19 pandemic, which is devastating the oil industry, airlines, airports, hotels, and travel and hospitality not just in Canada, but worldwide.

As with other airports elsewhere in Canada, federal land rental cost is an issue. It raises YXE's costs, which it must recoup from airlines, airport tenants, and the travelling public, lowering its competitiveness versus rivals which do not have to pay the same expense, and depressing potential demand for air travel.

YXE does not face much direct competition, as Regina International Airport is a considerable distance away, as are Edmonton and Calgary International Airports in Alberta, and also Winnipeg in Manitoba. Airports in small US cities

in neighbouring Montana and North Dakota are generally too far away to be potential competition.

However, if costs become too high versus alternatives, including possibly fanciful autonomous driving cars or futuristic high speed train options, revenues and growth could suffer. This is unlikely in SAA's case, as it has no debt and is profitable; or, at least, will most likely be so again, once the pandemic and its after-effects pass.

INTRINSIC VALUE: VALUATION OF YXE AS A BUSINESS, IN ITS CURRENT STATE

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 (please see Table 1). A simple capitalization perpetuity formula was used, which is appropriate for a mature entity with no obvious potential mortality date forecastable. The company's free cash flow nominal (i.e., not adjusted for inflation) growth rate range was held within a restrained 2 to 4 percent range, and the required rate of return or cost of capital range was from 6 to 9 percent.

The entity could theoretically have higher growth in the future, despite recent turmoil, so a modest growth rate was considered reasonable. Its cost of capital, given low expectations, the quality of its assets, and high current (at the time) valuations in the stock market, could well be lower than the range 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 drop in US corporation income tax rates, the slow decrease of rates in Quebec, new cuts in Australia and a more ambitious schedule of decreases announced by the government in Alberta.

The proprietary model used in projecting the line items that determine the various inputs into the intrinsic value employ calculations based on recent and historic trends in those line items. Then the model uses formulas to project the line item numbers for the following year. All main constituent line-item factors that determine net income, operating and free cash flow were projected on the basis of historic behaviour and mathematical analysis.

Using this method, the calculations estimate a minimum of $103M to a maximum of $618M, with a tighter, more plausible range of a median (midpoint of all relevant values) of $180M to a mean (simple average of all relevant values) of $222M. However, as projected free cash flow is actually negative, this valuation is not entirely robust.

Table 3

Intrinsic Value, 2019; Net Income as Proxy for Discounted Free Cash Flow

CASE 2: Projected Fully Taxed Net Income as a Proxy for Fully Taxed Free Cash Flow for FY2019 ($B)

Present Value of Discounted Free Cash Flow = Estimated Next Year Free Cash Flow (Required Rate of Return ['r'] = Growth Rate ['g'])

Projected Fully Taxed Free Cash Flow FY2019 ($B): $ 0.00618

Matrix Values ($B) g==v; r==>	4.00%	5.00%	6.00%	7.00%	8.00%	9.00%	10.00%
0.00%	$ 0.154	$ 0.124	$ 0.103	$ 0.088	$ 0.077	$ 0.069	$ 0.062
1.00%	$ 0.206	$ 0.154	$ 0.124	$ 0.103	$ 0.088	$ 0.077	$ 0.069
2.00%	$ 0.309	$ **0.206**	$ **0.154**	$ **0.124**	$ **0.103**	$ 0.088	$ 0.077
3.00%	$ 0.618	$ **0.309**	$ **0.206**	$ **0.154**	$ **0.124**	$ 0.103	$ 0.088
4.00%	--	$ **0.618**	$ **0.309**	$ **0.206**	$ **0.154**	$ 0.124	$ 0.103
5.00%	-$ 0.618	--	$ 0.618	$ 0.309	$ 0.206	$ 0.154	$ 0.124
6.00%	-$ 0.309	-$ 0.618	--	$ 0.618	$ 0.309	$ 0.206	$ 0.154
7.00%	-$ 0.206	-$ 0.309	-$ 0.618	--	$ 0.618	$ 0.309	$ 0.206

	Minimum	Maximum	Median	Mean (Average)
Value ($B)	$ 0.103	$ 0.618	$ 0.180	$ 0.222

Note: 'g' is Growth Rate in Free Cash Flow or Proxy, 'r' is the Required Rate of Return; Bold font figures are used in the Mean, Median, Minimum and Maximum determinations. Source: Author's calculations based on reports made available by the company.

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

With respect to the market-peer comparison valuation, there are a few complications. Some of the publicly traded airport companies around the world have either inflated or depressed financial results, and the most extreme anomalies among them had to be deleted. There were still sufficient sample data for reasonable comparative purposes. Please see the details of the models' results in Table 4. As noted in the Executive Summary, using seven standard valuation metrics (Trailing and Forward Price/Earnings; Price/Sales; Price/Book Value; Enterprise Value to Revenue; Enterprise Value to Earnings Before Interest, Taxes & Depreciation & Amortization [EV/EBITDA]; Price/Operating Cash Flow), the current value ranges from $6M to $538M, with a with a more plausible range of a median of $255M and a mean of $235M.

Table 4

Market Valuation Using Financial Metrics from Comparable Companies

Method 2: Saskatoon International Airport Projections are for FY2019; Fully Taxed

Valuation metrics applied to Saskatoon Intl. Airport. Figures in $B.	Trailing P/E (Market Value to Estimated Net Income)	Forward P/E (Market Value to Estimated Net Income)	Price to Sales	Price to Book Value	Enterprise Value/Revenue (subtracting Net Debt)	Enterprise Value/EBITDA (subtracting Net Debt)	Price Operating Cash Flow
Average Eleven Airport or Airport Terminal Operating or Holding Companies	$ 0.412	$ 0.024	$ 0.836	$ 0.010	$ 0.235	$ 0.241	$ 0.132
Average Nine Port or Port Terminal Operating or Holding Companies	$ 0.165	$ 0.205	$ 0.173	$ 0.003	$ 0.280	$ 0.453	$ 0.166
Average of All Above	$ 0.316	$ 0.060	$ 0.538	$ 0.006	$ 0.255	$ 0.337	$ 0.147

Source: Capital IQ via Yahoo!Finance, additional material from BMO-Investorline, Valuation model formulae.

Market Value Using Comparable Companies and Seven Viable Valuation Ratios

	Minimum	Maximum	Median	Mean (Average)
Market Value ($B)	$ 0.006	$ 0.538	$ 0.255	$ 0.235

Source: Calculations based on YXE Annual Report financial data, comparison company data from Capital IQ via Yahoo!Finance.

FINANCIAL PERFORMANCE OF 'YXE', TRENDS IN SAME

As shown in Table 5, below, YXE's returns on assets, equity, and capital employed, have generally improved over the past eleven years, until recently, whether the numerator in the ratios is Earnings Before Interest, Taxes and Depreciation and Amortization (EBITDA); net income or operating cash flow. However, free cash flow has not improved, which may be a concern. As the following table shows, the ratios of debt to equity, total debt to EBITDA, and the growth rate of debt divided by the growth in EBITDA have generally all shown negative trends. However, its debt servicing capacity, denoted by EBITDA divided by finance charges plus capital expenditures; and by pre-tax operating cash flow divided by net finance charges, is generally improving.

Table 5

Capital Efficiency Performance Metric

1. RETURN ON ASSETS

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Return on Assets Using EBITDA (Earnings Before Interest, Taxes and Depreciation & Amortization)											
EBITDA ($M)	$ 11.093	$ 12.996	$ 12.521	$ 14.336	$ 17.746	$ 18.762	$ 18.008	$ 18.040	$ 17.950	$ 18.996	$ 17.982
Average Assets ($M)	$ 53.88	$ 62.12	$ 70.99	$ 80.72	$ 92.43	$ 105.60	$ 116.55	$ 125.82	$ 137.05	$ 147.69	$ 159.31
RoA, EBITDA	20.6%	20.9%	17.6%	17.8%	19.2%	17.8%	15.5%	14.3%	13.1%	12.9%	11.3%
Return on Assets Using Fully Taxed Net Income											
Fully Taxed Net Income ($M)	$ 5.948	$ 7.093	$ 6.484	$ 7.750	$ 9.937	$ 9.571	$ 8.140	$ 7.958	$ 7.751	$ 6.935	$ 6.180
Average Assets ($M)	$ 53.88	$ 62.12	$ 70.99	$ 80.72	$ 92.43	$ 105.60	$ 116.55	$ 125.82	$ 137.05	$ 147.69	$ 159.31
RoA, NI	11.05%	11.42%	9.13%	9.60%	10.75%	9.06%	6.98%	6.32%	5.66%	4.70%	3.88%
Return on Assets Using Fully Taxed Operating Cash Flow											
Fully Taxed Operating Cash Flow ($M)	$ 7.091	$ 9.731	$ 8.745	$ 9.964	$ 10.634	$ 12.336	$ 10.018	$ 13.680	$ 13.789	$ 14.800	$ 12.264
Average Assets ($M)	$ 53.88	$ 62.12	$ 70.99	$ 80.72	$ 92.43	$ 105.60	$ 116.55	$ 125.82	$ 137.05	$ 147.69	$ 159.31
RoA, OCF	13.17%	15.66%	12.32%	12.34%	11.56%	11.68%	8.60%	10.87%	10.06%	10.02%	7.70%
Return on Assets Using Fully Taxed Free Cash Flow											
Fully Taxed Free Cash Flow ($M)	$ 0.089	–$ 0.753	$ 5.739	–$ 0.085	–$ 13.820	–$ 1.029	$ 0.044	$ 13.688	$ 13.789	–$ 18.370	–$ 10.126
Average Assets ($M)	$ 53.88	$ 62.12	$ 70.99	$ 80.72	$ 92.43	$ 105.60	$ 116.55	$ 125.82	$ 137.05	$ 147.69	$ 159.31
RoA, FCF	0.16%	–1.21%	–8.08%	–0.04%	–14.95%	–0.97%	0.04%	10.87%	10.06%	–12.44%	–6.35%

2. RETURN ON EQUITY

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Return on Equity Using EBITDA (Earnings Before Interest, Taxes and Depreciation & Amortization)											
EBITDA ($M)	$ 11.093	$ 12.996	$ 12.521	$ 14.336	$ 17.745	$ 18.762	$ 18.008	$ 18.040	$ 17.950	$ 18.996	$ 17.982
Average Equity ($M)	$ 43.22	$ 51.50	$ 60.14	$ 69.89	$ 82.34	$ 96.06	$ 108.30	$ 119.22	$ 130.01	$ 139.98	$ 148.77
RoE, EBITDA	5.2%	5.1%	18.0%	24.8%	23.6%	19.1%	18.0%	16.1%	14.6%	17.9%	13.4%
Return on Equity Using Fully Taxed Net Income											
Fully Taxed Net Income ($M)	$ 5.948	$ 7.093	$ 6.484	$ 7.750	$ 9.937	$ 9.571	$ 8.140	$ 7.958	$ 7.751	$ 6.935	$ 6.180
Average Equity ($M)	$ 43.22	$ 51.50	$ 60.14	$ 69.89	$ 82.34	$ 96.06	$ 108.30	$ 119.22	$ 130.01	$ 139.98	$ 148.77
RoE, NI	13.77%	13.77%	10.78%	11.09%	12.07%	9.96%	7.52%	6.68%	5.96%	4.95%	4.13%
Return on Equity Using Fully Taxed Operating Cash Flow											
Fully Taxed Operating Cash Flow ($M)	$ 7.091	$ 9.731	$ 8.745	$ 9.964	$ 10.684	$ 12.336	$ 10.018	$ 13.680	$ 13.789	$ 14.800	$ 12.264
Average Equity ($M)	$ 43.22	$ 51.50	$ 60.14	$ 69.89	$ 82.34	$ 96.06	$ 108.30	$ 119.22	$ 130.01	$ 139.98	$ 148.77
RoE, OCF	16.4%	18.9%	14.5%	14.3%	13.0%	12.8%	9.2%	11.5%	10.6%	10.6%	8.2%
Return on Equity Using Fully Taxed Free Cash Flow											
Fully Taxed Free Cash Flow ($M)	$ 0.09	–$ 0.75	$ 5.74	–$ 0.04	–$ 13.82	–$ 1.08	$ 0.04	–$ 13.68	$ 13.79	–$ 18.37	–$ 10.13
Average Equity ($M)	$ 43.22	$ 51.50	$ 60.14	$ 69.89	$ 82.34	$ 96.06	$ 108.30	$ 119.22	$ 130.01	$ 139.98	$ 148.77
RoE, FCF	0.21%	–1.46%	9.54%	–0.05%	–16.79%	–1.07%	0.04%	11.48%	10.61%	–13.12%	–6.76%

3. RETURN ON CAPITAL EMPLOYED (Cash, Restricted Cash and Short Term Investments were subtracted from Total Liabilities + Shareholders Equity)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Return on Capital Employed Using EBITDA (Earnings Before Interest, Taxes and Depreciation & Amortization)											
EBITDA ($M)	$ 11.09	$ 13.00	$ 12.52	$ 14.34	$ 17.74	$ 18.76	$ 18.01	$ 18.04	$ 17.95	$ 19.00	$ 17.98
Average Capital Employed ($M)	$ 50.08	$ 56.21	$ 60.06	$ 64.29	$ 79.61	$ 96.55	$ 104.64	$ 103.97	$ 116.69	$ 135.10	$ 156.59
RoCE, EBITDA	22.17%	23.12%	20.35%	22.30%	22.29%	19.43%	17.21%	16.55%	15.38%	14.06%	11.48%
Return on Capital Employed Using Fully Taxed Net Income											
Fully Taxed Net Income ($M)	$ 5.95	$ 7.08	$ 6.48	$ 7.75	$ 9.94	$ 9.57	$ 8.14	$ 7.96	$ 7.75	$ 6.93	$ 6.18
Average Capital Employed ($M)	$ 50.08	$ 56.21	$ 60.06	$ 64.29	$ 79.61	$ 96.55	$ 104.64	$ 103.97	$ 116.69	$ 135.10	$ 156.59
RoCE, NI	11.39%	12.62%	10.30%	12.06%	12.48%	9.91%	7.78%	7.30%	6.64%	5.13%	3.95%
Return on Capital Employed Using Fully Taxed Operating Cash Flow											
Fully Taxed Operating Cash Flow ($M)	$ 7.09	$ 9.73	$ 8.75	$ 9.96	$ 10.68	$ 12.34	$ 10.02	$ 13.68	$ 13.79	$ 14.30	$ 12.26
Average Capital Employed ($M)	$ 50.08	$ 56.21	$ 60.06	$ 64.29	$ 79.61	$ 96.55	$ 104.64	$ 103.97	$ 116.69	$ 135.10	$ 156.59
RoCE, OCF	14.17%	17.31%	14.56%	15.50%	13.42%	12.78%	9.57%	12.55%	11.82%	10.96%	7.38%
Return on Capital Employed Using Fully Taxed Free Cash Flow											
Fully Taxed Free Cash Flow ($M)	$ 0.09	–$ 0.75	$ 5.74	–$ 0.04	–$ 13.82	–$ 1.03	$ 0.04	$ 13.68	$ 13.79	–$ 18.37	–$ 10.13
Average Capital Employed ($M)	$ 50.08	$ 56.21	$ 60.06	$ 64.29	$ 79.61	$ 96.55	$ 104.64	$ 103.97	$ 116.69	$ 135.10	$ 156.59
RoCE, FCF	0.18%	–1.34%	9.56%	–0.05%	–17.36%	–1.07%	0.04%	12.56%	11.82%	–13.60%	–6.47%

Source: Company Financial Statements. Taxes were calculated using current federal and provincial rates applied retroactively for comparability.

STRATEGIES AND ALTERNATIVES FOR COMMERCIALIZATION, DIVESTITURE, OR PRIVATIZATION

Partial Divestment

Quite often when a state-owned enterprise is divested or 'privatized', it is not done entirely at once. This is because it may not be possible to sell the whole company into the stock market and get the maximum price for the seller, especially if the firm has assets in the billions of dollars, or if there are unusual aspects to the nature of the company, or problematic circumstances in which it operates. Hence, an initial, small minority allotment of shares are sold to help establish at least a crude market valuation of the company's shares as they become openly traded.

However, having a majority stake retained by a government introduces some doubt about the true independence and commercial status of the partially divested firm. There could be fear on the part of investors that politicians may interfere with the strategy or operations of the firm. This could result in there being a discount that the firm's shares suffer in the market. While there are no current signs of government meddling or public controversies, various 'stakeholders' may intervene, which potentially or theoretically can complicate partial or total sale of the operation.

Selling part or all of YXE, with much of the proceeds used to finance capital expenditures, would make it healthier, and allow it to fetch a higher price upon its sale; all after a recovery when the pandemic has subsided and air travel resumes strong growth. Two different scenarios were explored. For reference, the three scenarios are laid out in the simple table below.

Table 6
3 Cases: Capital Expenditure, 'Capex', As Is; One Quarter of Capex Cut; Half Capex Cut

Reduction of Capex Scenarios Assumed to Occur in Fiscal Year 2020.
Note: The assumption was made that no other Net Debt Addition or Redemption would occur in 2020.

All Figures $B	Projected: No Capex Reduction	Case 1 Reduction of One Quarter to Projected Capex	Case 2 Reduction of Half to Projected Capex
Total Liabilities	$ 0.0110	$ 0.0110	$ 0.0110
Total Assets	$ 0.1661	$ 0.1661	$ 0.1661
Shareholders Equity	$ 0.1551	$ 0.1551	$ 0.1551
Total Interest-Bearing Debt	$ 0.0000	$ 0.0000	$ 0.0000
Total Interest Expenses	$ 0.0000	$ 0.0000	$ 0.0000
EBITDA	$ 0.0183	$ 0.0183	$ 0.0183
DD&A	$ 0.0106	$ 0.0106	$ 0.0106
EBIT	$ 0.0077	$ 0.0077	$ 0.0077
Interest Income	$ 0.0000	$ 0.0000	$ 0.0000
Interest Expense	$ 0.0000	$ 0.0000	$ 0.0000
Pre-Tax Income	$ 0.0077	$ 0.0077	$ 0.0077
Income Tax (Combined 27%)	$ 0.0021	$ 0.0021	$ 0.0021
Net Income	$ 0.0057	$ 0.0057	$ 0.0057
Capital Expenditures	–$ 0.0200	–$ 0.0100	–$ 0.0100
Free Cash Flow	–$ 0.0021	$ 0.0029	$ 0.0079

Table 7

Intrinsic Value, One Quarter of Projected Capital Expenditure Cut

CASE 2: Projected Fully Taxed Free Cash Flow for Company FY2020 ($B), One Quarter of Capex Cut

Present Value of Discounted Free Cash Flow = Estimated Next Year Free Cash Flow (Required Rate of Return ['r'] = Growth Rate ['g'])

Projected Fully Taxed Net Income as a Proxy for Fully Taxed Free Cash Flow for FY2019 ($B): $ 0.0029

Matrix Values ($B) g==v; r==>	4.00%	5.00%	6.00%	7.00%	8.00%	9.00%	10.00%
0.00%	$ 0.0726	$ 0.0581	$ 0.0484	$ 0.0415	$ 0.0363	$ 0.0323	$ 0.0290
1.00%	$ 0.0968	$ 0.0726	$ 0.0581	$ 0.0484	$ 0.0415	$ 0.0363	$ 0.0323
2.00%	$ 0.1452	$ **0.0968**	$ **0.0726**	$ **0.0581**	$ **0.0484**	$ 0.0415	$ 0.0363
3.00%	$ 0.2905	$ **0.1452**	$ **0.0968**	$ **0.0726**	$ **0.0581**	$ 0.0484	$ 0.0415
4.00%	--	$ **0.2905**	$ **0.1452**	$ **0.0968**	$ **0.0726**	$ 0.0581	$ 0.0484
5.00%	-$ 0.2905	--	$ 0.2905	$ 0.1452	$ 0.0968	$ 0.0726	$ 0.0581
6.00%	-$ 0.1452	-$ 0.2905	$ --	$ 0.2905	$ 0.1452	$ 0.0968	$ 0.0726
7.00%	-$ 0.0968	-$ 0.1452	-$ 0.2905	$ --	$ 0.2905	$ 0.1452	$ 0.0968

	Minimum	Maximum	Median	Mean (Average)
Gross Value ($B)	$ 0.0484	$ 0.2905	$ 0.0847	$ 0.1045
Net Value	$ 0.0484	$ 0.2905	$ 0.0847	$ 0.1045

Source: Calculations from model derived from company annual reports.

This Scenario One for the intrinsic value yields (net of the amount of proceeds used to extinguish one quarter of the firm's long-term debt) a minimum of $48.4M to a maximum of $290.5M, with a more plausible range of a median (midpoint of the array of projected values) of $84.7M to a mean (simple average) of $104.5M.

Table 8

Market Value, One Quarter Cut to Projected Capital Expenditure

CASE 1: YXE Projections are for FY2019; Fully Taxed, Debt Free

Valuation metrics applied to YXE ie, Market Value of Common Equity. 1/4 L-T Debt Ext. Figures in $B.	Trailing P/E (Market Value to Estimated Net Income)	Forward P/E (Market Value to Estimated Net Income)	Price to Sales	Price to Book Value	Enterprise Value/Revenue (subtracting Net Debt)	Enterprise Value/EBITDA (subtracting Net Debt)	Price to Operating Cash Flow	Price to Free Cash Flow
Average Eleven Airport or Airport Terminal Operating or Holding Companies	$ 0.1014	$ 0.0825	$ 0.3177	$ 2.4787	$ 0.2125	$ 0.1795	$ 0.2104	$ 0.0531
Average Nine Port or Port Terminal Operating or Holding Companies	$ 0.3690	$ 0.2447	$ 0.1492	$ 0.3941	$ 0.2294	$ 0.8778	$ 0.2236	$ 0.0143
Average of All Above	$ 0.2771	$ 0.1096	$ 0.2577	$ 1.5081	$ 0.2522	$ 0.4885	$ 0.2403	$ 0.0851

Market Value Using Comparable Companies and Six Viable Valuation Ratios

	Minimum	Maximum	Median	Mean (Average)
Gross Value ($B)	$ 0.0851	$ 1.5081	$ 0.2550	$ 0.4023

Source: Capital IQ via Yahoo!Finance, additional material from BMO-Investorline, Valuation model formulae.

This Alternative Scenario One for the market value method yields a minimum of $85.1M to a maximum of $1.508B, with a more plausible range of a median (midpoint of the array of projected values) of $255M to a mean (simple average) of $402.3M.

ALTERNATIVE SCENARIO 2:
One Half Long-Term Debt Retired; Proceeds Net of Debt Paid Back

Table 9														
Intrinsic Value, One Half of Projected Capital Expenditure Cut														

CASE 2: Present Value of Projected Fully Taxed Free Cash Flow for FY2019 ($B); Half of Long-Term Debt Retired

Present Value of Discounted Free Cash Flow = Estimated Next Year Free Cash Flow (Required Rate of Return ['r'] = Growth Rate ['g'])

Projected Fully Taxed Free Cash Flow for FY2020 ($B): $ 0.0079

Matrix Values ($B) g==v; r==>	4.00%	5.00%	6.00%	7.00%	8.00%	9.00%	10.00%
0.00%	$ 0.1974	$ 0.1579	$ 0.1316	$ 0.1128	$ 0.0987	$ 0.0877	$ 0.0790
1.00%	$ 0.2632	$ 0.1974	$ 0.1579	$ 0.1316	$ 0.1128	$ 0.0987	$ 0.0877
2.00%	$ 0.3948	$ **0.2632**	$ **0.1974**	$ **0.1579**	$ **0.1316**	$ 0.1128	$ 0.0987
3.00%	$ 0.7896	$ **0.3948**	$ **0.2632**	$ **0.1974**	$ **0.1579**	$ 0.1316	$ 0.1128
4.00%	--	$ **0.7896**	$ **0.3948**	$ **0.2632**	$ **0.1974**	$ 0.1579	$ 0.1316
5.00%	−$ 0.7896	--	$ 0.7896	$ 0.3948	$ 0.2632	$ 0.1974	$ 0.1579
6.00%	−$ 0.3948	−$ 0.7896	$ --	$ 0.7896	$ 0.3948	$ 0.2632	$ 0.1974
7.00%	−$ 0.2632	−$ 0.3948	−$ 0.7896	$ --	$ 0.7896	$ 0.3948	$ 0.2632

	Minimum	Maximum	Median	Mean (Average)
Gross Value ($B)	$ 0.1316	$ 0.7896	$ 0.2303	$ 0.2840

Source: Calculations from model derived from Company Annual Reports.

This Alternative Scenario Two yields (net of the amount of proceeds used to extinguish one half of the firm's long-term debt) a minimum of $131.6M to a maximum of $789.6M, with a more plausible range of a median (midpoint of the array of projected values) of $230.3M to a mean (simple average) of $284M.

Table 10

Market Value, One Half of Projected Capital Expenditure Cut

CASE 2: YXE Projections are for FY2019; Fully Taxed, Debt Free

Valuation metrics applied to YXE ie, Market Value of Common Equity. 1/2 L-T Debt Ext. Figures in $B.	Trailing P/E (Market Value to Estimated Net Income)	Forward P/E (Market Value to Estimated Net Income)	Price to Sales	Price to Book Value	Enterprise Value/Revenue (subtracting Net Debt)	Enterprise Value/EBITDA (subtracting Net Debt)	Price to Operating Cash Flow	Price to Free Cash Flow
Average Eleven Airport or Airport Terminal Operating or Holding Companies	$ 0.9597	$ 0.0825	$ 0.3177	$ 2.4787	$ 0.2096	$ 0.1766	$ 0.2302	$ 0.2518
Average Nine Port or Port Terminal Operating or Holding Companies	$ 0.3690	$ 0.2447	$ 0.1492	$ 0.3941	$ 0.2184	$ 0.8749	$ 0.2236	$ 0.2836
Average of All Above	$ 0.6756	$ 0.1096	$ 0.2534	$ 1.5522	$ 0.2367	$ 0.4833	$ 0.2302	$ 0.2783

Market Value Using Comparable Companies and Six Viable Valuation Ratios

	Minimum	Maximum	Median	Mean (Average)
Gross Value ($B)	$ 0.1096	$ 1.5522	$ 0.2658	$ 0.4774

Source: Capital IQ via Yahoo!Finance, additional material from BMO-Investorline, Valuation model formulae.

This Alternative Scenario Two for the market value method yields (net of the amount of proceeds used to extinguish one half of the firm's long-term debt) a minimum of $109.6M to a maximum of $1,552M, with a more plausible range of a median (midpoint of the array of projected values) of $265.8M to a mean (simple average) of $477M. For easier comparison, the three cases are presented together in the following table:

Table 11

Comparison of Different Scenarios Applied to Intrinsic Value and Market Value of the Company in 2020

Airport continues paying Federal Land Lease expense	Intrinsic Value (Average of Mean & Median)			Market Value (Average of Mean & Median)		
	2020 Valuation=v	2020 Valuation=v	2020 Valuation=v	2020 Valuation=v	2020 Valuation=v	2020 Valuation=v
Figures in $B.	No Extinguishing of L-T Debt	Extinguishing of 1/4 of L-T Debt	Extinguishing of 1/2 of L-T Debt	No Extinguishing of L-T Debt	Extinguishing of 1/4 of L-T Debt	Extinguishing of 1/2 of L-T Debt
Gross Value (Average of Mean & Median)	$ 0.0801	$ 0.0946	$ 0.2572	$ 0.2451	$ 0.3286	$ 0.3716

Calculations used models incorporating financial results from Company Annual Reports, key financial statistics from peer companies.

It is apparent that, whether or not projected capital expenditures are cut or share issue proceeds are used to pay for them, turning free cash flow from negative to positive, and improving it further via greater restraint in capex dramatically improves the potential valuation, by either method. However, more sophisticated sensitivity analysis could determine a different proportion. A higher amount of debt reduction was not explored. Generally, the greater the sustainable free cash flow, the more attractive and salable the company will be, which may be something that is hinted at in the analyses above, but needs further examination.

ALTERNATIVE SCENARIO 3:
No Federal Land Rental Expense; Half of Savings Lower Airline Fees

As the federal land lease rental expense is one unnecessary cost raising YXE's cost of doing business, lowering its competitiveness, and consequently lowering its potential valuation, an additional three experiments were conducted: removal of the expense, and the assumption that YXE would lower its landing fees by one half of the expense saved. As demand for air travel and cargo services is price elastic, calculated values for that price elasticity were used to determine a potential net effect on revenue: just a slight reduction, it turns out, as demand increases to make up some of the 'loss' from lowering prices.

Table 12			
3 Cases: Capex As Is; and One Quarter, then Half of Capital Expenditures Cut ($B)			
Price Elasticity of Air Fares:	**Study 1: Roughly −0.45** Source: https://partners.skyscanner.net/price-elasticity-a-long-haul-low-cost-opportunity-awaits/thought-leadership **Study 2: Roughly −1.1** Source: https://fin.gc.ca/consultresp/airtravel/airtravstdy_1-eng.asp **Average: −0.775**		
All figures $B	**2020 Base Case: No Debt Retirement** Landing and Terminal Fees are reduced by 1/2 the saving of land lease cost; revenue partially recovers as more activity is generated, calculated using elasticity of demand	**Case 1: Retirement of 1/4 L–T Debt** Landing and Terminal Fees are reduced by 1/2 the saving of land lease cost; revenue partially recovers as more activity is generated, calculated using elasticity of demand	**Case 2: Retirement of 1/2 L–T Debt**
Change in Revenue	−$ 0.0039 Note: Using price elasticity of demand, above, assuming half of cost elimination used to reduce fees to airlines.	−$ 0.0039	−$ 0.0039
Change in Expenses	$ 0.0016 (No land lease)	$ 0.0016 (No land lease)	$ 0.0016
Total Liabilities	$ 0.0110	$ 0.0110	$ 0.0110
Total Assets	$ 0.1661	$ 0.1661	$ 0.1661
Shareholders Equity	$ 0.1551	$ 0.1551	$ 0.1551
Total Interest-Bearing Debt	$ 0.0000	$ 0.0000	$ 0.0000
Total Interest Expenses	$ 0.0000	$ 0.0000	$ 0.0000
EBITDA	$ 0.0200	$ 0.0159	$ 0.0159
DD&A	$ 0.0106	$ 0.0106	$ 0.0106
EBIT	−$ 0.0054	−$ 0.0054	−$ 0.0054
Interest Income	$ 0.0000	$ 0.0000	$ 0.0000
Interest Expense	$ 0.0000	$ 0.0000	$ 0.0000
Pre-Tax Income	$ 0.0054	$ 0.0054	$ 0.0054
Income Tax (Combined 27%)	$ 0.0014	$ 0.0014	$ 0.0014
Net Income	$ 0.0039	$ 0.0039	$ 0.0039
Operating Cash Flow	$ 0.0140	$ 0.0140	$ 0.0140
Capital Expenditures	−$ 0.0200	−$ 0.0150	−$ 0.0100
Free Cash Flow	−$ 0.0059	−$ 0.0009	$ 0.0041

Source: Company Financial Statements. Taxes were calculated using current federal and provincial rates applied retroactively for comparability.

ALTERNATIVE SCENARIO 4:

No Federal Land Rental Expense; No Debt Reduction; Half of Rent Savings Cut Landing Fees; Revenue Loss Mitigated by Higher Demand at Lower Price

Table 13

Intrinsic Value, Discounted Free Cash Flow; Land Rent Removed; Capex Uncut

Method 1: Intrinsic Value, or Value as a Free Cash Flow-Generating Business

Net Income as a Proxy for Free Cash Flow for FY2020, from projection calculated above ($B): $ 0.006

Present Value of Discounted Free Cash Flow = Estimated Next Year Free Cash Flow (Required Rate of Return ['r'] = Growth Rate ['g'])

No Debt Reduction. Projected Fully Taxed Net Income as a Proxy for Free Cash Flow for FY2020 ($B): $ 0.006 (No land lease expense, thus increasing Gross Income)

Matrix Values ($B) g==v; r==>	4.00%	5.00%	6.00%	7.00%	8.00%	9.00%	10.00%
0.00%	−$ 0.1479	−$ 0.1183	−$ 0.0986	−$ 0.0845	−$ 0.0740	−$ 0.0657	−$ 0.0592
1.00%	−$ 0.1972	−$ 0.1479	−$ 0.1183	−$ 0.0986	−$ 0.0845	−$ 0.0740	−$ 0.0657
2.00%	−$ 0.2958	**−$ 0.1972**	**−$ 0.1479**	**−$ 0.1183**	**−$ 0.0986**	−$ 0.0845	−$ 0.0740
3.00%	−$ 0.5917	**−$ 0.2958**	**−$ 0.1972**	**−$ 0.1479**	**−$ 0.1183**	−$ 0.0986	−$ 0.0845
4.00%	--	**−$ 0.5917**	**−$ 0.2958**	**−$ 0.1972**	**−$ 0.1479**	−$ 0.1183	−$ 0.0986
5.00%	$ 0.5917	--	−$ 0.5917	−$ 0.2958	−$ 0.1972	−$ 0.1479	−$ 0.1183
6.00%	$ 0.2958	$ 0.5917	--	−$ 0.5917	−$ 0.2958	−$ 0.1972	−$ 0.1479
7.00%	$ 0.1972	$ 0.2958	$ 0.5917	--	−$ 0.5917	−$ 0.2958	−$ 0.1972

	Minimum	Maximum	Median	Mean (Average)
Value ($B)	−$ 0.5917	−$ 0.0986	−$ 0.1726	−$ 0.2128

Source: Capital IQ via Yahoo!Finance; additional material from BMO Investorline; Valuation model formulas.

Using this method, the airport's free cash flow remains negative, as does the estimated value of the entity. Eliminating the land rent expense does *not* improve the airport's valuation significantly.

Table 14

Market Value, Next Fiscal Year, Land Rent Removed from Expenses

Method 2: Market Value, Using Financial Metrics from Comparable Companies

Saskatoon International Airport Projections are for FY2020, Fully taxed; no land lease expense.

Valuation metrics applied to Saskatoon International Airport. Figures in $B.	Trailing P/E (Market Value to Estimated Net Income)	Forward P/E (Market Value to Estimated Net Income)	Price to Sales	Price to Book Value	Enterprise Value/Revenue (subtracting Net Debt)	Enterprise Value/EBITDA (subtracting Net Debt)	Price to Operating Cash Flow
Average Eleven Airport or Airport Terminal Operating or Holding Companies	$ 0.0820	$ 0.0571	$ 0.2922	$ 2.4787	$ 0.2156	$ 0.1983	$ 0.1374
Average Nine Port or Port Terminal Operating or Holding Companies	$ 0.3260	$ 0.1694	$ 0.1510	$ 0.4296	$ 0.2142	$ 0.7532	$ 0.2085
Average of All Above	$ 0.1918	$ 0.0758	$ 0.2287	$ 1.5081	$ 0.2150	$ 0.4480	$ 0.1694

Market Value Using Comparable Companies and Seven Viable Valuation Ratios

	Minimum	Maximum	Median	Mean (Average)
Value ($B)	$ 0.0758	$ 1.5081	$ 0.2150	$ 0.4439

Source: Capital IQ via Yahoo!Finance, additional material from BMO-Investorline, Valuation model formulae.

Using this method, the calculations estimate a minimum of $75.8M (down from $102M from the base case of no change to land lease cost) to a maximum of $1,508.1M (unchanged), with a tighter, more plausible range of a median (midpoint of all relevant values) of $215M (down from $255M) to a mean (simple average of all relevant values) of $443.9M (vs. $235M).

ALTERNATIVE SCENARIO 5:
No Federal Land Rental Expense; One Quarter Debt Eliminated

Table 15

Intrinsic Value, No Land Rent Expense, One Quarter Cut to Projected Capital

Method 1: Present Value, of Projected Fully Taxed Free Cash Flow for FY2020, One Quarter Projected Capex Cut

Present Value of Discounted Free Cash Flow = Estimated Next Year Free Cash Flow (Required Rate of Return ['r'] = Growth Rate ['g'])

Projected Fully Taxed Net Income as a Proxy for Free Cash Flow for FY2020 ($B): $ 0.0009

Matrix Values ($B) g==v; r==>	4.00%	5.00%	6.00%	7.00%	8.00%	9.00%	10.00%
0.00%	−$ 0.0231	−$ 0.0185	−$ 0.0154	−$ 0.0132	−$ 0.0116	−$ 0.0103	−$ 0.0093
1.00%	−$ 0.0309	−$ 0.0231	−$ 0.0185	−$ 0.0154	−$ 0.0132	−$ 0.0116	−$ 0.0103
2.00%	−$ 0.0463	**−$ 0.0309**	**−$ 0.0231**	**−$ 0.0185**	**−$ 0.0154**	−$ 0.0132	−$ 0.0116
3.00%	−$ 0.0926	**−$ 0.0463**	**−$ 0.0309**	**−$ 0.0231**	**−$ 0.0185**	−$ 0.0154	−$ 0.0132
4.00%	--	**−$ 0.0926**	**−$ 0.0463**	**−$ 0.0309**	**−$ 0.0231**	−$ 0.0185	−$ 0.0154
5.00%	$ 0.0926	--	−$ 0.0926	−$ 0.0463	−$ 0.0309	−$ 0.0231	−$ 0.0185
6.00%	$ 0.0463	$ 0.0926	--	−$ 0.0926	−$ 0.0463	−$ 0.0309	−$ 0.0231
7.00%	$ 0.0309	$ 0.0463	$ 0.0926	--	−$ 0.0926	−$ 0.0463	−$ 0.0309

	Minimum	Maximum	Median	Mean (Average)
Gross Value ($B)	$ 0.0926	$ 0.0154	$ 0.0270	$ 0.0333

Source: Calculations from model derived from Company Annual Reports.

Using this method, the calculations still show a negative valuation for the airport, because free cash flow is still negative. Eliminating the land rent expense helps, but a cut of just one quarter to projected capital expenditure only slightly improves the airport's valuation.

Table 16							

Market Value, NO Land Rent Expense; One Quarter Cut to Projected Capital Expenditure

Method 2: Market Value, Using Financial Metrics from Comparable Companies

Saskatoon International Airport Projections are for FY2020, Fully taxed; no land lease expense.

Valuation metrics applied to Saskatoon International Airport. Figures in $B.	Trailing P/E (Market Value to Estimated Net Income)	Forward P/E (Market Value to Estimated Net Income)	Price to Sales	Price to Book Value	Enterprise Value/Revenue (subtracting Net Debt)	Enterprise Value/EBITDA (subtracting Net Debt)	Price to Operating Cash Flow
Average Eleven Airport or Airport Terminal Operating or Holding Companies	$ 0.6642	$ 0.0571	$ 0.2820	$ 2.4787	$ 0.1847	$ 0.1521	$ 2.2621
Average Nine Port or Port Terminal Operating or Holding Companies	$ 0.2554	$ 0.1694	$ 0.1324	$ 0.3941	$ 0.1925	$ 0.7596	$ 0.1757
Average of All Above	$ 0.4888	$ 0.0758	$ 0.2287	$ 1.5081	$ 0.2200	$ 0.4209	$ 1.2360

Market Value Using Comparable Companies and Six Viable Valuation Ratios

	Minimum	Maximum	Median	Mean (Average)
Value ($B)	$ 0.0758	$ 1.5081	$ 0.2287	$ 0.5043

Source: Capital IQ via Yahoo!Finance, additional material from BMO-Investorline, Valuation model formulae.

Using this method, the calculations estimate a minimum of $75.8M (down from $85.1M from the base case of no change to land lease cost and one quarter of capex cut) to a maximum of $1,508.1M (unchanged), with a tighter, more plausible range of a median (midpoint of all relevant values) of $228.7M (down from $255M) to a mean (simple average of all relevant values) of $504.3M (vs. $402M). Again, eliminating the land rent expense generally improves the airport's valuation, but the cut to capital expenditure is even more important.

ALTERNATIVE SCENARIO 6:
No Federal Land Rental Expense; One Half Debt Eliminated

Table 17

Intrinsic Value, No Land Rent Expense, One Half Cut to Projected Capital Expenditure

Method 1: Present Value, of Projected Fully Taxed Free Cash Flow for FY2020, One Half Cut to Projected Capex

Present Value of Discounted Free Cash Flow = Estimated Next Year Free Cash Flow (Required Rate of Return ['r'] = Growth Rate ['g'])

Projected Fully Taxed Free Cash Flow for FY2020 ($B): $ 0.0041

Matrix Values ($B) g==v; r==>	4.00%	5.00%	6.00%	7.00%	8.00%	9.00%	10.00%
0.00%	$ 0.1016	$ 0.0813	$ 0.0678	$ 0.0581	$ 0.0508	$ 0.0452	$ 0.0407
1.00%	$ 0.1355	$ 0.1016	$ 0.0813	$ 0.0678	$ 0.0581	$ 0.0508	$ 0.0452
2.00%	$ 0.2033	$ 0.1355	$ 0.1016	$ 0.0813	$ 0.0678	$ 0.0581	$ 0.0508
3.00%	$ 0.4065	$ 0.2033	$ 0.1355	$ 0.1016	$ 0.0813	$ 0.0678	$ 0.0581
4.00%	--	$ 0.4065	$ 0.2033	$ 0.1355	$ 0.1016	$ 0.0813	$ 0.0678
5.00%	–$ 0.4065	--	$ 0.4065	$ 0.2033	$ 0.1355	$ 0.1016	$ 0.0813
6.00%	–$ 0.2033	–$ 0.4065	--	$ 0.4065	$ 0.2033	$ 0.1355	$ 0.1016
7.00%	–$ 0.1355	–$ 0.2033	–$ 0.4065	--	$ 0.4065	$ 0.2033	$ 0.1355

	Minimum	Maximum	Median	Mean (Average)
Gross Value ($B)	$ 0.0678	$ 0.4065	$ 0.1186	$ 0.1462

Source: Calculations from model derived from Company Annual Reports.

Using this method, the calculations estimate a minimum of $67.8M (down from $131.6M) from the base case of no change to land lease cost and one half cut of projected capital expenditure) to a maximum of $406.5M (versus $789.6M), with a tighter, more plausible range of a median (midpoint of all relevant values) of $118.6M (down from $230.3M) to a mean (simple average of all relevant values) of $146.2M (vs. $284M). Cutting the land lease expense does not sufficiently counteract the reduction in revenue from cutting the airline fees by one half.

Table 18

Market Value, No Land Rent Expense; One Half Debt Eliminated

Method 2: Market Value, Using Financial Metrics from Comparable Companies

Saskatoon International Airport Projections are for FY2020, Fully taxed; No land lease expense.

Valuation metrics applied to YXE ie, Market Value of Common Equity. 1/2 L-T Debt Ext. Figures in $B.	Trailing P/E (Market Value to Estimated Net Income)	Forward P/E (Market Value to Estimated Net Income)	Price to Sales	Price to Book Value	Enterprise Value/Revenue (subtracting Net Debt)	Enterprise Value/EBITDA (subtracting Net Debt)	Price to Operating Cash Flow	Price to Free Cash Flow
Average Eleven Airport or Airport Terminal Operating or Holding Companies	$ 0.62	$ 0.06	$ 0.31	$ 2.54	$ 0.25	$ 0.19	$ 0.19	$ 0.07
Average Nine Port or Port Terminal Operating or Holding Companies	$ 0.33	$ 0.17	$ 0.16	$ 0.44	$ 0.25	$ 0.74	$ 0.21	$ 0.17
Average of All Above	$ 0.49	$ 0.08	$ 0.24	$ 1.55	$ 0.25	$ 0.44	$ 0.20	$ 0.12

Market Value Using Comparable Companies and Six Viable Valuation Ratios

	Minimum	Maximum	Median	Mean (Average)
Gross Value ($B)	$ 0.0758	$ 1.5461	$ 0.3412	$ 0.5056

Source: Capital IQ via Yahoo!Finance, additional material from BMO-Investorline, Valuation model formulae.

Using this method, the calculations estimate a minimum of $75.8M (down from $109.6M from the base case of no change to land lease cost) to a maximum of $1,546M (versus $1,552M), with a tighter, more plausible range of a median (midpoint of all relevant values) of $341.2M (up from $265.8M) to a mean (simple average of all relevant values) of $505.6M (vs. $477M). In contrast to the Intrinsic Value (DCF) method, eliminating the land rent expense dramatically improves the airport's valuation. For easier comparison, the three cases are presented together in the following table:

Table 19

Comparison of Different Scenarios Applied to Intrinsic Value and Market Value of the Company in 2020

	Intrinsic Value (Average of Mean & Median)			Market Value (Average of Mean & Median)		
No Federal Land Lease expense	2020 Valuation=v	2020 Valuation=v	2020 Valuation=v	2020 Valuation=v	2020 Valuation=v	2020 Valuation=v
Figures in $B.	No Extinguishing of L-T Debt	Extinguishing of 1/4 of L-T Debt	Extinguishing of 1/2 of L-T Debt	No Extinguishing of L-T Debt	Extinguishing of 1/4 of L-T Debt	Extinguishing of 1/2 of L-T Debt
Gross Value (Average of Mean & Median)	$ 0.068	$ 0.030	$ 0.132	$ 0.329	$ 0.366	$ 0.423

Calculations used models incorporating financial results from Company Annual Reports, key financial statistics from peer companies. Note: Intrinsic Values use Fully Taxed Net Income as a Proxy for Free Cash Flow; Free Cash Flow remained negative in *all* three scenarios.

DISRUPTIONS FROM EVOLVING COMPETITIVE, ECONOMIC, AND TECHNOLOGICAL FORCES

Notwithstanding the Covid-19 crisis that befell the world in 2020, and the devastation it wrought in air travel, there previously was a relatively rosy longer-term outlook for global air traffic growth. However, the International Air Transport Association, 'IATA', predicts global air traffic will not recover to 2019 levels until 2023, and billions of dollars will have been lost.[10]

While the International Air Transport Association, Transport Canada, and YXE itself are optimistic about the more distant future of air travel and for SAA itself, there are some things that could make its future less bright. Most recently, of course, there has been a drastic drop in international, and even domestic air travel as a result of containment measures enacted to combat Covid-19, a highly contagious and deadly coronavirus. There could be more pandemics that wreak similar havoc, or regional wars that make air travel less safe or attractive, and even stop it in some parts of the world. Even an uptick in terrorism could do this. So could exacerbated trade hostilities, or a 'new Cold War' between the West and China. Improved fast rail travel could dent growth, as could self-driving automobiles, which would make long-distance travel by car less tiring, hazardous and aggravating.

Just as Zoom, Skype, and other video call and conferencing services have made much of business travel unnecessary, augmented reality, 'AR', and virtual reality, 'VR', could be enhanced to the point where more of business, family, and vacation travel could be substituted by those technologies. If one could have a realistic, immersive experience in an exotic or culturally significant place without having to pack luggage or deal with airports or security, AR and VR could be attractive major competitors to many such travel experiences. Air cargo may face threats from not just rail, ship, and trucks, but 3D printing or automated assembly at the point of, or near, the end-user of products, eliminating any need for freight transportation. Draconian 'green' climate change legislation or regulations could restrict air travel, which is CO_2-emission-intensive. There could soon be suborbital passenger rocket flights, if just for expensive pleasure (not yet point-to-point), which are the stated goals of some commercial space flight companies.[11,12,13]

Finally, we may not be able to discern, at this point, what could make air travel less attractive in the future, any more than railway executives and investors in the 1940's could foresee that widespread automobile ownership, multi-lane highways, and airlines would devastate their passenger business within thirty years' time. These factors are just more reasons why governments should remove themselves from the ownership risks of such assets as airports.

READYING YXE FOR SALE

The first thing that needs to be resolved regarding YXE and other Canadian airports is the high rental charges they pay on the land they occupy, which is owned by the federal government. This rental charge adds to their costs, narrowing their margins, and increasing costs to airlines and their passengers. It is also a cost that American airports, their main competitors, do not have. This rental policy also makes little sense, *as the government is, effectively, charging it to itself, since the government also, if not officially, owns the airports,* YXE included, although current operating authority has been granted to local operating authorities. Ownership or 'stakeholdership' of YXE is ambiguous: it is federal government-owned, ultimately, but effective control has been granted to local authority, but not irrevocably.

Infrastructure investments usually pay a dividend to their investors. The airport is showing sufficient income statement accounting-based net income to pay a small dividend, but, given current modest cash generation, and its ambitious capital spending program, investors may not consider the dividend sustainable. So, some investors that like a substantial and growing dividend may not find YXE attractive once the airport's shares are floated, if its Board decides that it cannot currently afford such a dividend. The company has negative free cash flow but more satisfactory returns on assets, equity and capital employed (Please see Table 6). There may need to be operational improvement to expand margins before any equity is sold to the public so that higher value can be realized in any such sale.

The company has a modest capital expenditure program to improve efficiency, incrementally increase capacity and improve operational capability. Hence, constraints on free cash flow growth could remain for an extended period, if YXE cannot raise funds from selling equity.

CONCLUSION

In general, entirely private sector companies tend to perform better than those within the government orbit or ownership. Crown ownership of a company exposes taxpayers, citizens, and even customers, and suppliers to the risks of business, economic, and technological trends that are unnecessary to experience; that is what private investors, whether institutional, individual or corporate, undertake in nearly every sector of the economy. It may not have occurred to anyone in the past that an airport, seaport, or other infrastructure could, would, or should be in the hands of private investors, or be ensconced in a publicly listed company. That is not true anymore; there are many such infrastructure companies now, and much more infrastructure that is owned by private equity funds and pension, endowment and sovereign wealth funds. There is a keen appetite for infrastructure investments of all kinds among these private and institutional investors.[14,15,16]

Airports have a number of public controversies that make them contentious assets to own. They are expensive to build or expand. They occupy a lot of land, so there are land use and zoning disputes, and it can be hard to expand their operations by, for instance, building a new runway. They generate a lot of noise and vehicular traffic, so there are arguments over their operations and expansion of them. This is a minor issue for YXE as it serves a smaller city.

Independence and removal of the risk of bad governance can only be guaranteed if YXE is totally removed from politicians' clutches; i.e., if it is fully divested to other, private sector investors. There are not a lot of infrastructure investment choices available to individual investors, or even many that pop up for institutional ones. There are only a few airports that are publicly listed, but some of them are quite large or important to their regions or even nations, such as in Tel Aviv, Beijing, Auckland, Sydney, Bangkok, Tokyo, and Frankfurt. Should YXE become one such independent company, whether publicly listed or not, it could be very attractive and successful, with fewer political complications that confront it today. To truly realize its potential, it must be free. For taxpayers and citizens to shed this risk, it is crucial.

ENDNOTES

1. See https://skyxe.ca/Portals/0/YXE%20Master%20Plan%20Final%20published%20November%202018_1.pdf, p 11.

2. See https://skyxe.ca/en-us/about-us/mission-history.

3. Source: City of Saskatoon and Saskatoon census metropolitan area population projection,
https://skyxe.ca/Portals/0/YXE%20Master%20Plan%20Final%20published%20November%202018_1.pdf, p 34.

4. See https://skyxe.ca/Portals/0/YXE%20Master%20Plan%20Final%20published%20November%202018_1.pdf, P 39.

5. See https://skyxe.ca/Portals/0/YXE%20Master%20Plan%20Final%20published%20November%202018_1.pdf, P 13.

6. See https://skyxe.ca/Portals/0/YXE%20Master%20Plan%20Final%20published%20November%202018_1.pdf, p 60.

7. See https://skyxe.ca/Portals/0/YXE%20Master%20Plan%20Final%20published%20November%202018_1.pdf, P 61.

8. See https://skyxe.ca/Portals/0/YXE%20Master%20Plan%20Final%20published%20November%202018_1.pdf, P 63.

9. See https://economics.td.com/provincial-economic-forecast, "Saskatchewan".

10. See https://www.theglobeandmail.com/business/article-airports-poised-to-lose-13-billion-amid-travel-collapse-industry/.

11. See https://www.iata.org/en/pressroom/pr/2020-07-28-02/.

12. See https://www.wired.com/story/the-race-to-get-tourists-to-suborbital-space-is-heating-up/.

13. See https://spacenews.com/blue-origin-still-planning-commercial-suborbital-flights-in-2018/.

14. See https://www.theglobeandmail.com/business/article-the-airline-industry-boom-may-open-the-runway-for-the-government-to/.

15. See https://www.theglobeandmail.com/report-on-business/private-airports-canada-investment/article35881967/.

16. See https://www.theglobeandmail.com/business/international-business/european-business/article-frances-vinci-to-pay-37-billion-to-acquire-majority-stake-in/.

APPENDIX 1:

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, specific case.

1. The government has no mandate to own or run a commercial enterprise. 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. 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.

5. 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.

6. 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.

7. 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.

8. 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.

9. 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.

10. 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.

11. 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.

12. 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.

13. 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.

14. 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 and more constructive ways.

15. Governments, generally, have a poor record of picking winners, or creating or owning enterprises that have market-competitive profitability, or attractive returns on assets, equity, or even returns that exceed governments' own cost of debt service. If, rarely, they actually do, it generally turns out that they have been provided unusually good market, operational, regulatory, or other conditions not available to other, investor-owned firms.

16. 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 portion of the economy the government occupies increases.