

CASE OF FINANCIAL RATIO ANALYSIS:
COMMUNICATIONS INDUSTRY IN CANADA (2012-2016)
(BCE BELL - COGECO – ROGERS – SHAW – TELUS)

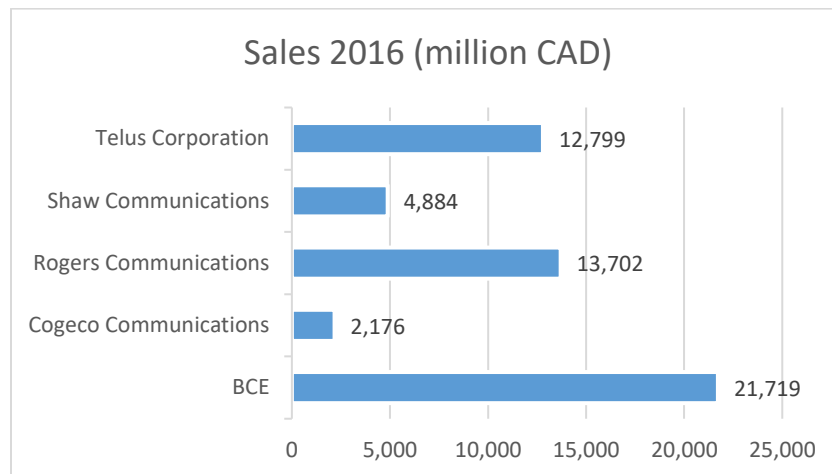
Alberto Calva // Acus Consulting Ltd
acalva@acusconsulting.com // Twitter: @acalva
July 21, 2017

CONCLUSIONS

- a) It is important for every manager or business owner to periodically do financial analysis of its business. One of these analysis can be a financial ratio analysis, to review both the performance of the company as well as its profitability.
- b) Financial ratio, as seen in this analysis, have certain advantages (and some disadvantages, too). It is possible to compare companies with different size. It is possible to compare companies from different countries. Changes in time because of size of the company or inflation can be minimized with a financial ratio analysis.
- c) All five companies analyzed in this report have in general a good performance and therefore a good profitability. Nevertheless, not all have the same profitability. The areas to improve are very likely not the same for all of them. Also, in general they present better ratios than those available for the Canadian market.

WHAT WE DO FOR THIS ANALYSIS

- a) This is a more or less common analysis that we do at Acus Consulting Ltd.
- b) Specifically for this analysis we selected five of the largest public companies in the communications industry in Canada. All of them are listed in the Toronto Stock Exchange (TSX).
- c) The five companies analyzed are BCE (Bell Canada Enterprises) (BCE), Cogeco Communications (CCA), Rogers Communications (RCI), Shaw Communications (SJR) and Telus Corporation (T). BCE and Rogers are based in Toronto, Cogeco is based in Montreal, Shaw is based in Calgary and Telus is based in Vancouver.
- d) Their relative size is quite different. The largest is BCE and the smallest is Cogeco. If we set the annual sales of 2016 of BCE as an index of 100, then Rogers is 63, Telus 59, Shaw 22 and Cogeco 10. Sales of BCE were 21.7 billion CAD in 2016.



e) We based our analysis in the financial statements that each company reported for the last five years in their annual reports. We gathered all the financial information in our computer in a standardized format. Then we did some calculations needed for the analysis (like EBIT, EBITDA, NOPAT and capital employed). After this we calculated financial ratios for each company and for each year. At last, we synthesized the ratios in some summarized tables and we prepared some graphs. We included information from the Canadian market as a reference. At last, the analysis based on this information, our knowledge and experience took place.

f) For practical reasons, we work with the figures of the balance sheet at the end of the year. It is definitively better to work with the average figures of the year (average of the 4 quarters or average of the 12 months). Doing the calculation of the ratios this way may imply certain imperfection in the process, although working with averages is not a perfect process neither.

RETURN ON CAPITAL EMPLOYED (ROCE)

a) In Table I we are presenting the Return on Capital Employed (ROCE) for the last five years for each of these five companies. This is probably the most important measurement in financial ratios. At the end, profitability is the reason why we have a business running. ROCE is defined as NOPAT over capital employed. NOPAT (net operating profit after taxes) is EBIT minus adjusted taxes. EBIT is close to operating income. Capital employed is the total assets minus liabilities with non-financial cost minus cash and cash equivalents. ROCE gives us a measurement of wealth creation based on invested resources in the company. The larger this figure the better. The central idea behind this ratio is that we should intend to create wealth with the least invested resources. If we invest more in a company (or business unit) a larger profit should be expected to justify the additional investment.

Table I: Return on Capital Employed = NOPAT / Capital Employed

	2012	2013	2014	2015	2016	<i>Average</i>
BCE	9.4%	7.9%	8.4%	8.1%	8.4%	8.5%
Cogeco Communications	8.7%	5.8%	7.1%	6.6%	7.4%	7.1%
Rogers Communications	12.5%	11.7%	8.7%	7.6%	7.8%	9.7%
Shaw Communications	9.1%	8.9%	9.3%	6.5%	6.0%	8.0%
Telus Corporation	7.9%	8.4%	8.3%	7.1%	6.5%	7.6%
Canadian market	6.9%	6.5%	6.8%	5.2%	5.9%	6.3%

b) As we can see in Table I, in average for the last 5 years, Rogers has the largest ROCE with 9.7%. It is followed by BCE with 8.5%, Shaw 8.0%, Telus 7.6% and Cogeco 7.1%. All five companies have positive ROCE and all are above the average of the Canadian market. How important is that Rogers is 1.1 percentage points from Cogeco? Well, it is a matter of size. The capital employed of Rogers is around \$25.4 billion CAD. Therefore, that extra 1.1 percentage point will mean close to \$280 million CAD a year of additional profit. Not bad at all. Very likely, part of this extra profit will go to cover performance bonuses of the executive team.

c) Nevertheless, it calls our attention the trend. If we compare the trend looking initially at the number in 2012 and the number in 2016, Rogers has the worst position. The ROCE for Rogers has decreased from 12.5% in 2012 to 7.8% in 2016, a loss of 4.7 percentage points. Shaw decreased 3.1 percentage points from 2012 to 2016, Telus 1.4, Cogeco 1.3 and BCE 1.0. Fair to say that the average in the Canadian market shows a decrease from 2012 to 2016 of one percentage point.

d) Very likely, BCE is the company from these five that has the largest economic value creation or EVA®. This is a dollar amount measurement and has to do with profitability but also with the size of the invested capital (or capital employed). We will analyze this measurement in a coming article.

RETURN ON EQUITY (ROE)

a) In Table II we are presenting the Return on Equity (ROE) for the last five years for each of these five companies. This financial ratio is important for shareholders. But, in spite of this, ROCE is still more important since there cannot be ROE in the medium and long range if the company previously does not have a ROCE. Shareholders are looking for a return to their investment. The largest the better. ROE is defined as net income over shareholders equity. Shareholders should analyze this ratio, among several other things, when deciding about investing more in a company.

Table II: Return on Equity = Net Income / Shareholders Equity

	2012	2013	2014	2015	2016	Average
BCE	19.5%	14.7%	17.8%	15.8%	17.3%	17.0%
Cogeco Communications	14.3%	13.8%	13.9%	14.6%	-12.6%	8.8%
Rogers Communications	45.8%	35.7%	24.5%	23.8%	15.8%	29.1%
Shaw Communications	18.9%	17.8%	18.0%	15.6%	19.7%	18.0%
Telus Corporation	15.7%	16.1%	19.1%	18.0%	15.6%	16.9%
Canadian market	10.2%	9.4%	10.9%	6.2%	9.0%	9.1%

b) As we can see in Table II, in average for the last 5 years, Rogers has the largest ROE with 29.1%. It is followed by Shaw 18.0%, BCE with 17.0%, Telus 16.9% and Cogeco 8.8%. All five companies have positive ROCE and four of them are above the average of the Canadian market. In this case, as an example, one percentage point for Rogers in ROE means around \$53 million CAD of net income. This is considering that in 2016 Rogers' equity is around \$5.3 billion CAD.

c) Trend here calls our attention again. If we compare the trend looking initially at the number in 2012 and the number in 2016, Rogers has the worst position. The ROE for Rogers has decreased from 45.8% in 2012 to 15.8% in 2016, a loss of 30.0 percentage points. Cogeco decreased 26.9 percentage points from 2012 to 2016, BCE 2.2 and Telus 0.1 percentage points. On the contrary, Shaw's ROE has increased 0.8 percentage points from 2012 to 2016. Fair to say again that the average in the Canadian market shows a decrease from 2012 to 2016 of 1.2 percentage point.

THE DUPONT MODEL

a) The Dupont Model is a conceptual framework that Return on Capital Employed (ROCE), and profitability in general, can be explained and analyzed with two variable: NOPAT Sales Margin and Capital Employed Turnover. The first one is the margin that we get of NOPAT for every dollar of sales. The turnover is the sales over the capital employed. It will give us a measurement of efficiency in the use of resources invested. For example, a fancy restaurant has a low turnover (huge investment for every dollar of sales), but the margin is high (exotic prices for an exotic meal). On the contrary, a fast food has low margins but also a high turnover since investment is low and sales are relatively large for each dollar invested.

b) Usually this pattern is similar for companies in the same industry. In this case, NOPAT Sales Margin is 17.2% as an average for all five companies and for the five years. Cogeco has the largest average margin with 20.5% and Telus the lowest with 13.8%. But, what about Capital Employed Turnover? The average turnover for the five companies in the five years is 0.50. The highest turnover is that of Rogers with 0.60 and the lowest is that for Shaw with 0.41. Some of these companies probably have to work in improving margin and others in improving turnover (just making sure they are not underinvesting in reposition of assets).

c) We use the framework of the Dupont Model to define strategies for a company, aimed to increase profitability.

FINANCIAL LEVERAGE

a) How is each company funding itself? In Table III we are presenting the Financial Leverage (usually known only as “leverage”) for the last five years for each of these five companies. This financial ratio is telling us how much of external sources are being used for the funding of the company. Financial leverage is defined as total liabilities over shareholders’ equity. This is, for example, Telus has an average financial leverage of 2.1. This means that for every dollar the shareholders have in equity in the company, there are 2.1 dollars in liabilities. It is usually good to use external sources for funding the operation, but too much can increase the risks of not being able to pay financing on time. Cash inflows are usually seasonal and more unpredictable; payments to banks are fixed and monthly.

Table III: Financial Leverage = Total Liabilities / Shareholders Equity

	2012	2013	2014	2015	2016	<i>Average</i>
BCE	1.8	1.8	2.0	1.8	1.8	<i>1.8</i>
Cogeco Communications	1.4	2.8	2.4	2.4	2.6	<i>2.3</i>
Rogers Communications	4.2	4.1	3.8	4.2	4.4	<i>4.1</i>
Shaw Communications	2.2	1.9	1.7	1.6	1.4	<i>1.7</i>
Telus Corporation	1.7	1.7	2.1	2.4	2.5	<i>2.1</i>
Canadian market	1.4	1.4	1.5	1.5	1.5	<i>1.5</i>

b) As we can see in Table III, in average for the last 5 years, Rogers has the largest financial leverage with 4.1. It is followed by Cogeco 2.3, Telus with 2.1, BCE with 1.8 and Shaw with 1.7. All five companies are above the average of the Canadian market that is 1.5.

SOME OTHER RATIOS AND SOME GRAPHS

We do calculate around 20 ratios per company per year. Here below are only some graphs and some other ratios for you to understand more of the financial analysis with financial ratios for these companies:

Table IV: Relevant Figures for 2016 (in million CAD)

	Sales	NOPAT	Capital employed
BCE	21,719	3,784	44,807
Cogeco Communications	2,176	369	4,985
Rogers Communications	13,702	1,985	25,373
Shaw Communications	4,884	825	13,675
Telus Corporation	12,799	1,623	24,930

Table V: Some Financial Ratios for BCE

	2012	2013	2014	2015	2016
	Dec 2012	Dec 2013	Dec 2014	Dec 2015	Dec 2016
ROI Return on investment	10.6%	9.5%	10.0%	9.8%	10.3%
ROCE Return on capital employed	9.4%	7.9%	8.4%	8.1%	8.4%
ROE Return on equity	19.5%	14.7%	17.8%	15.8%	17.3%
EBIT / Sales	21.8%	21.1%	22.0%	21.8%	23.7%
EBITDA / Sales	38.8%	37.7%	38.4%	37.7%	39.8%
NOPAT / Sales	17.3%	15.7%	16.4%	16.3%	17.4%
Sales / Total assets	0.49	0.45	0.45	0.45	0.43
Sales / Capital employed	0.54	0.51	0.51	0.50	0.48
Sales / Net PPE	1.00	0.98	0.99	0.99	0.97
Cash / Total assets	0.3%	0.7%	1.2%	1.3%	1.7%
Current assets / current liabilities	0.58	0.64	0.50	0.48	0.48
Total liabilities / equity	1.8	1.8	2.0	1.8	1.8
Depreciation / sales	17.0%	16.6%	16.4%	15.9%	16.2%
Days sales	53	54	53	50	49
Days inventory	12	11	9	11	11
Days payable	115	123	122	115	119
Account receivables / Account payables	0.75	0.70	0.70	0.70	0.69

Table VI: Some Financial Ratios for Cogeco Communications

	2012	2013	2014	2015	2016
	Aug 2012	Aug 2013	Aug 2014	Aug 2015	Aug 2016
ROI Return on investment	10.7%	7.3%	7.6%	7.9%	0.3%
ROCE Return on capital employed	8.7%	5.8%	7.1%	6.6%	7.4%
ROE Return on equity	14.3%	13.8%	13.9%	14.6%	-12.6%
EBIT / Sales	24.4%	22.2%	22.0%	23.3%	21.4%
EBITDA / Sales	45.9%	44.9%	45.6%	46.2%	44.3%
NOPAT / Sales	16.7%	16.6%	17.5%	17.9%	16.9%
Sales / Total assets	0.44	0.33	0.38	0.34	0.41
Sales / Capital employed	0.52	0.35	0.41	0.37	0.44
Sales / Net PPE	0.97	0.91	1.06	1.03	1.09
Cash / Total assets	7.4%	0.8%	1.2%	2.7%	1.2%
Current assets / current liabilities	0.94	0.41	0.42	0.50	0.44
Total liabilities / equity	1.4	2.8	2.4	2.4	2.6
Depreciation / sales	21.5%	22.6%	23.6%	22.9%	22.9%
Days sales	19	19	18	22	19
Days inventory	0	0	0	0	0
Days payable	115	101	107	94	86
Account receivables / Account payables	0.31	0.33	0.31	0.43	0.40

Table VII: Some Financial Ratios for Rogers Communications

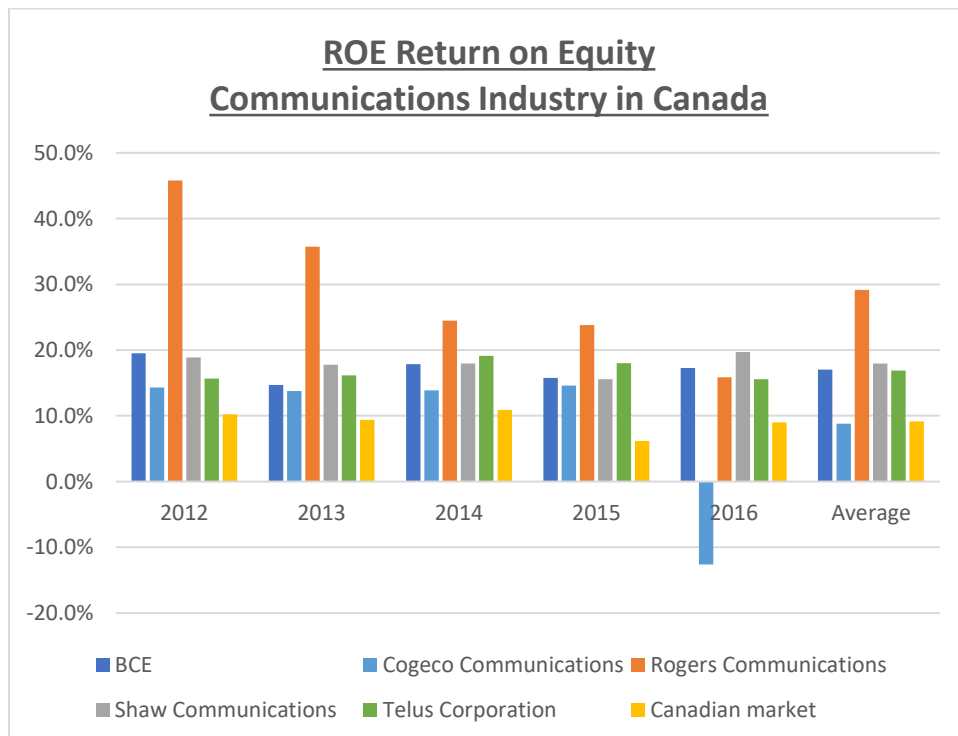
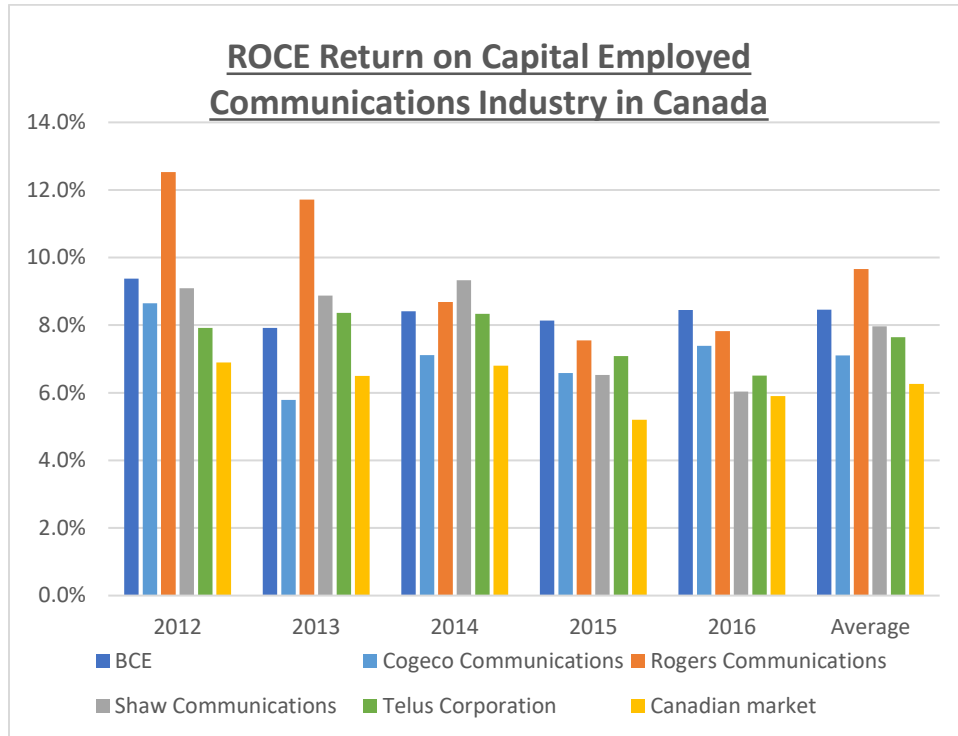
	2012	2013	2014	2015	2016
	Dec 2012	Dec 2013	Dec 2014	Dec 2015	Dec 2016
ROI Return on investment	14.1%	12.4%	10.0%	8.9%	7.4%
ROCE Return on capital employed	12.5%	11.7%	8.7%	7.6%	7.8%
ROE Return on equity	45.8%	35.7%	24.5%	23.8%	15.8%
EBIT / Sales	23.5%	23.7%	22.1%	20.1%	20.1%
EBITDA / Sales	38.1%	38.6%	38.8%	37.1%	36.7%
NOPAT / Sales	17.3%	17.5%	16.0%	14.8%	14.5%
Sales / Total assets	0.64	0.54	0.48	0.46	0.48
Sales / Capital employed	0.72	0.67	0.54	0.51	0.54
Sales / Net PPE	1.30	1.24	1.21	1.22	1.27
Cash / Total assets	1.1%	9.7%	0.7%	0.0%	0.0%
Current assets / current liabilities	0.74	0.94	0.48	0.52	0.50
Total liabilities / equity	4.2	4.1	3.8	4.2	4.4
Depreciation / sales	14.6%	14.9%	16.7%	17.0%	16.6%
Days sales	44	43	45	48	51
Days inventory	14	13	11	14	13
Days payable	99	108	118	116	116
Account receivables / Account payables	0.72	0.64	0.62	0.66	0.70

Table VIII: Some Financial Ratios for Shaw Communications

	2012	2013	2014	2015	2016
	Aug 2012	Aug 2013	Aug 2014	Aug 2015	Aug 2016
ROI Return on investment	10.4%	10.7%	10.9%	7.8%	7.4%
ROCE Return on capital employed	9.1%	8.9%	9.3%	6.5%	6.0%
ROE Return on equity	18.9%	17.8%	18.0%	15.6%	19.7%
EBIT / Sales	26.4%	26.6%	27.5%	25.3%	23.2%
EBITDA / Sales	42.6%	43.2%	42.1%	44.5%	42.8%
NOPAT / Sales	20.6%	19.5%	20.4%	19.0%	16.9%
Sales / Total assets	0.39	0.40	0.40	0.31	0.32
Sales / Capital employed	0.44	0.45	0.46	0.34	0.36
Sales / Net PPE	1.54	1.53	1.44	1.06	1.06
Cash / Total assets	3.4%	3.3%	4.8%	2.7%	2.7%
Current assets / current liabilities	0.66	0.54	0.95	0.52	0.48
Total liabilities / equity	2.2	1.9	1.7	1.6	1.4
Depreciation / sales	16.2%	16.6%	14.6%	19.3%	19.6%
Days sales	31	34	34	38	20
Days inventory	13	12	14	9	8
Days payable	102	106	98	128	122
Account receivables / Account payables	0.53	0.57	0.60	0.53	0.28

Table IX: Some Financial Ratios for Telus Corporation

	2012	2013	2014	2015	2016
	Dec 2012	Dec 2013	Dec 2014	Dec 2015	Dec 2016
ROI Return on investment	9.8%	10.3%	10.3%	8.9%	7.9%
ROCE Return on capital employed	7.9%	8.4%	8.3%	7.1%	6.5%
ROE Return on equity	15.7%	16.1%	19.1%	18.0%	15.6%
EBIT / Sales	18.3%	19.4%	19.8%	18.8%	17.0%
EBITDA / Sales	35.3%	35.2%	35.1%	34.1%	33.0%
NOPAT / Sales	13.6%	14.2%	14.7%	13.6%	12.7%
Sales / Total assets	0.53	0.53	0.52	0.47	0.46
Sales / Capital employed	0.58	0.59	0.57	0.52	0.51
Sales / Net PPE	1.34	1.35	1.32	1.28	1.22
Cash / Total assets	0.5%	1.6%	0.3%	0.8%	1.6%
Current assets / current liabilities	0.63	0.71	0.62	0.55	0.50
Total liabilities / equity	1.7	1.7	2.1	2.4	2.5
Depreciation / sales	17.1%	15.8%	15.3%	15.3%	16.0%
Days sales	51	46	44	41	41
Days inventory	18	16	15	16	13
Days payable	77	85	93	87	98
Account receivables / Account payables	1.02	0.84	0.73	0.72	0.63



DISCLAIMER

This analysis and conclusions have the sole purpose of exemplifying the use of financial analysis with financial ratios in companies. Neither Acus Consulting Ltd nor Alberto Calva are responsible for any decision made based on the information or comments here presented, neither for the accuracy of the figures or information. Neither Acus Consulting Ltd nor Alberto Calva represents, warrants or guarantees the accuracy or completeness of the information contained in this document and we are not responsible for any errors or omissions in or your use of, or reliance on, the information provided.

We do not have any relationship with the companies here presented and up to today neither of them is a client of Acus Consulting Ltd.

< *END* >

About Acus Consulting. This firm supports companies, organizations and government agencies in financial and strategic analysis, investment project evaluations, financial modeling, valuation of ongoing companies, financial planning, risk analysis and decision making. Acus Consulting works in consulting projects and offers seminars and workshops of finance for executive training. It is based in Toronto.

About Alberto Calva. His expertise field is finance and economy. He has been a business consultant for more than 20 years. He has given seminars and workshops in 8 different countries having trained with this around 10,000 executives and entrepreneurs from 20 different countries. He has a unique mix of academic, practical, entrepreneurial, hands on experience and board member background. He holds a Bachelor degree of Industrial Engineering, a Master degree of Economics and an MBA with a major of Finance.

About this report. We prepare several reports every month regarding financial, economic and business issues. These reports are sent free of any charge to our database of clients and friends. We have been preparing and sending our reports for 20 years. We send each report to around 16,000 people.

Neither Acus Consulting nor Alberto Calva are responsible for any decisions taken based on the information or comments here presented, neither for the accuracy of the figures or information.

| [Alberto Calva](#) | acalva@acusconsulting.com | acalva@acus.ca | Cell & WhatsApp +1-416-824-1924 |