CASE OF ECONOMIC VALUE CREATION ANALYSIS: COMMUNICATIONS INDUSTRY IN CANADA (BCE BELL - COGECO – ROGERS – SHAW – TELUS)

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WHAT IS ECONOMIC VALUE CREATION OR EVA®?

- a) Economic Value Creation, also known as Economic Profit or as Economic Value Added EVA® is the monetary value created in excess after covering the cost of financing all resources invested in the company. In other words, Economic Value Creation is the profit left after paying cost of funding both for external sources (for example, bank loans) and internal sources (shareholders).
- b) In a simple way to understand this concept, a company has \$18 of profit in a year (later we will say what specific definition of profit we are talking about) and has \$100 invested in assets (later we will talk about invested capital or capital employed). These invested assets are financed by debt (liabilities) and shareholders (equity). Let's assume this cost of financing is 10% a year (could be 8% debt and 12% equity, with an average rate of 10%). Therefore, this company has to pay \$10 to banks (debt) and shareholders. After paying this, \$8 are left (\$18 minus \$10). The Economic Value Creation is \$8.
- c) For whom is the Economic Value Creation? Eventually for the shareholder. Therefore, the shareholder will get the opportunity cost previously established and incorporated in the cost of financing plus the Economic Value Creation or EVA®.

WHAT IS THE RELATIONSHIP BETWEEN ECONOMIC VALUE CREATION OR EVA® AND PROFITABILITY OR RETURN ON CAPITAL EMPLOYED?

- a) In order to obtain profitability, measured with Return on Capital Employed (ROCE), two initial variables are needed: Net Operating Profit after Taxes (NOPAT) and the Capital Employed. Once obtained the ROCE, this can be compared with other companies, history, other references, but also it is expected to be above the cost of capital (WACC) in order to say the company is really a profitable business.
- b) In order to obtain Economic Value Creation or EVA® these same three variables are used: NOPAT, Capital Employed and WACC.
- c) Profitability or ROCE is a percentage measure, while Economic Value Creation or EVA® is a dollar amount measure. If we are comparing two companies with different size, one can have a larger ROCE (it is more profitable) but the other can have a larger EVA® (because it is larger).

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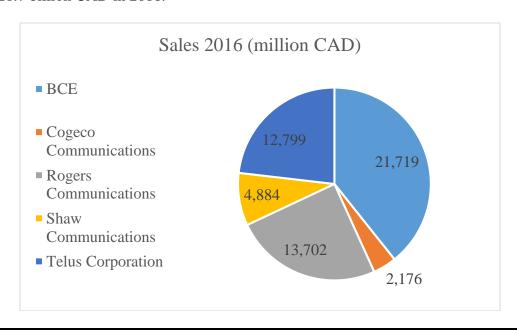
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- d) This is the case between BCE (Bell) and Rogers. In the last five years, Rogers has had an annual average ROCE (profitability) of 9.7% while BCE (Bell) has had an annual average ROCE of 8.5%. But, BCE is almost 80% larger than Rogers and therefore creates more economic value. BCE in average in the last five years has had an EVA® of 1.4 times that of Rogers.
- e) In business there are two things (among others, probably) for which we have to compensate a team of top executives. One is their ability to make a profitable company. The other one is their ability to manage a large (very large) company. One person can have a small coffee shop that is very profitable. But that person will never become rich (really rich) because the company is too small. But the top executives of a large chain of coffee shops make a lot of money because of their ability to manage a large size of invested capital, even though it is probably not as profitable as the small coffee shop.

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.



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- 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, NOPAT and capital employed). After this we do rough estimations of the cost of financing of each company and for each year, both with debt that has financing explicit cost and cost of shareholders equity. 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.

FIVE COMPANIES WITH DIFFERENT SIZES

a) In Table I we are presenting some relevant figures for 2016 in millions of Canadian Dollars (CAD) for each of the five companies here analyzed: sales, NOPAT and capital employed. BCE is clearly the largest in all measurements, followed by Rogers, Telus, Shaw and Cogeco. Cogeco is one tenth of BCE.

Table I: Relevant figures for 2016 (million CAD)

			Capital	Sales	NOPAT	Capital
	Sales	NOPAT	employed	index	index	employed
BCE	21,719	3,784	44,807	100	100	100
Cogeco Communications	2,176	369	4,985	10	10	11
Rogers Communications	13,702	1,985	25,373	63	52	57
Shaw Communications	4,884	825	13,675	22	22	31
Telus Corporation	12,799	1,623	24,930	59	43	56

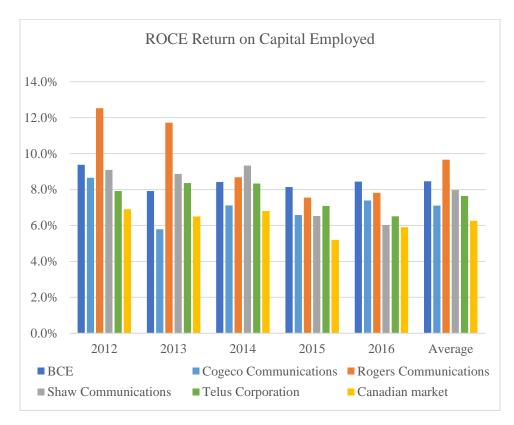
- b) NOPAT is net operating profit after taxes and is equal to EBIT (earnings before interests and taxes) minus adjusted taxes (this is, taxes calculated at the corporate rate specifically for EBIT). EBIT is close to operating income, although some differences can be found in between them.
- c) Capital employed is the total assets minus liabilities with non-financial cost minus cash and cash equivalents.
- d) Eventually we use the cost of capital or WACC (weighted average cost of capital) and is a weighted average of the cost of financing with debt and with equity.

RETURN ON CAPITAL EMPLOYED (ROCE)

a) In Table II 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. 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. Nevertheless, a company can be very profitable but also very small and therefore a dollar value will be still small.

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

	2012	2013	2014	2015	2016	Average
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 II, 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 1.2 percentage points from BCE? Well, it is a matter of size. The capital employed of Rogers is around \$25.4 billion CAD. Therefore, that extra 1.2 percentage point will mean close to \$300 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.

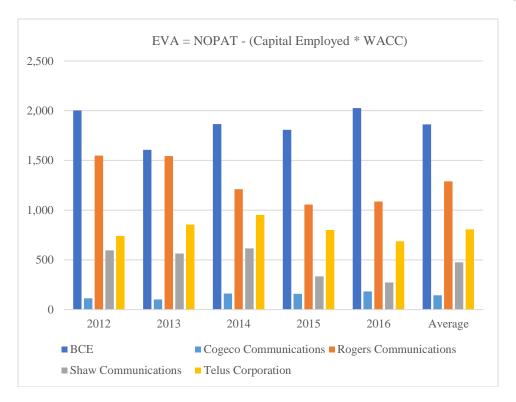
ECONOMIC VALUE CREATION OR EVA®

a) In Table III we are presenting the Economic Value Creation or EVA® 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. 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. Nevertheless, a company can be very profitable but also very small and therefore a dollar value will be still small.

<u>Table III: EVA = NOPAT - (Capital Employed * WACC)</u>

	2012	2013	2014	2015	2016	Average
BCE	2,002	1,606	1,866	1,808	2,027	1,862
Cogeco Communications	114	102	161	158	183	144
Rogers Communications	1,548	1,544	1,211	1,056	1,088	1,289
Shaw Communications	597	564	615	334	272	476
Telus Corporation	741	855	951	800	686	807

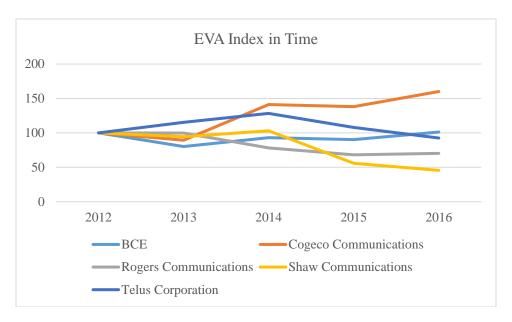
b) If we compare Table II (ROCE or profitability) and Table III (EVA®) we can find some interesting apparently contradictions. In Table II, best profitability is Rogers, followed by BCE, Shaw, Telus and Cogeco. But in Table III, best EVA® is BCE, followed by Rogers, Telus, Shaw and Cogeco. This is, Rogers is more profitable, but is smaller than BCE. Therefore BCE creates more economic value. Rogers should try to become a larger company without losing its profitability, and BCE should try to maintain its size but needs to work to increase its profitability.



c) Also trend is interesting. Rogers and Shaw have decreased its EVA® in time, Cogeco has increased it, while BCE and Telus are more or less stable. Here below, in Table IV we are presenting the EVA® as a 100 base index in 2012 for each company.

Table III: EVA Index in Time (2012 = 100)

	2012	2013	2014	2015	2016
BCE	100	80	93	90	101
Cogeco Communications	100	89	141	138	160
Rogers Communications	100	100	78	68	70
Shaw Communications	100	94	103	56	46
Telus Corporation	100	115	128	108	93



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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.

<u>About this report</u>. 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.

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