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Privatization of Crown Corporations in Saskatchewan

BY FRANK ATKINS AND IAN MADSEN

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EXECUTIVE SUMMARY

Crown corporations have had a long history in Saskatchewan. The creation of these corporations began by the Territorial Government in 1901 when hail insurance was sold to farmers. In 1944, Saskatchewan elected Tommy Douglas, leader of the CCF, as premier. A great wave of creating Crown corporations began. But, almost 40 years later, a wave of privatizing many of those Crown corporations took place during the Devine Conservative era from 1982 to 1991. Ultimately, the Devine government privatized nine Saskatchewan Crown corporations.

There is a considerable literature on the economic outcomes of privatization. Most of the literature suggests that privatization increases efficiency and improves the company's productivity and improves the provincial economy. The Crown corporations considered in this paper are Potash Corporation of Saskatchewan and Cameco. Both of these corporations had, after 5 years in the private sector, particularly large reductions in their debt ratio, and outperformed the TSE index. Thus, it is quite clear that "ownership matters". This study provides considerable evidence that governments should not be directly involvement in funding and managing businesses. Often government involvement does not result in profitable businesses that create economic value.

INTRODUCTION

Crown corporations and the argument for their privatization, have played a significant role in many Saskatchewan elections. The 1957 Mossbank debate between Tommy Douglas and Ross Thatcher marked a pivotal point in the debate of Crown corporations in the province. Other notable examples where Crown corporations were a contentious topic were: the 1982 election won by the Devine Progressive Conservatives; the 2003 election where Lorne Calvert's NDP defeated the Saskatchewan Party; the 2007 election where Brad Wall's Saskatchewan Party vanquished the NDP; and even the most recent 2016 Saskatchewan election.[1]

A case can be made that the more crown corporations that are privatized, the better it is for the social welfare of the province. The wave of privatization of Crown corporations during the Devine Conservative era from 1982 to 1991 can be viewed as a success in spurring economic growth in the province. There is great value in studying the events of the Devine Era in Saskatchewan, studying the privatization of Crown corporations provides an important lesson and understanding about the economic landscape in Saskatchewan. It also aids in guiding the Saskatchewan Party's current thinking on the value and process of privatization.

A BRIEF HISTORY OF CROWNS IN SASKATCHEWAN

The history of the creation of and subsequent privatization of Crown corporations in Saskatchewan has been driven by a mix of economic needs, political ideology, and public opinion. The creation of Crown corporations started very early in Saskatchewan's history when hail insurance was sold by the Territorial Government in 1901, a few years before Saskatchewan even became a province. Saskatchewan was created as a Province in 1905, and the first commercial Crown corporation to be created was the Department of Railway, Telephones and Telegraphs in 1908. In 1929, the power needs of the Province were addressed through the creation of Saskatchewan Power Commission.[2]

In 1944, Saskatchewan elected Tommy Douglas of the CCF as premier, and the first great wave of creating Crown corporations began. In 1945, the Douglas government created the Saskatchewan Government Insurance, followed by the Saskatchewan Transportation Company in 1946, Saskatchewan Government Telephones in 1947, Saskatchewan Minerals in 1948, and Saskatchewan Power Corporation in 1949 (formerly the Saskatchewan Power Commission). In 1951, the Saskatchewan Power Corporation was designated as the provincial authority for all natural gas distribution.

In order to manage this growth, the provincial government passed the Crown Corporations Act in 1945, which led to the creation of the Government Finance Office (GFO) in 1947. The GFO was envisioned to be the central agency to oversee all Crown corporation operations.

This first great wave of Crown creation appeared to change course in 1964 with the election of Ross Thatcher and the Liberal government. Mr. Thatcher was a former CCF party member who established himself as a champion of free enterprise in the famous Mossbank debate of 1957 (Karasin, 1997). Mr. Thatcher eliminated some minor Crown corporations, but kept the major, more popular Crowns, avoiding the risk of alienating the electorate.

In 1971, Saskatchewan residents elected Alan Blakeney and the NDP. Blakeney and the NDP government would begin the second great wave of establishing Crown corporations: Saskatchewan Oil and Gas (SaskOil) in 1973, Potash Corporation of Saskatchewan (PCS) in 1975, Saskatchewan Mining Development Corporation (SMDC) in 1975, and the Prince Albert Pulp Company (Papco) in 1981.

In 1978, the GFO was renamed the Crown Investments Corporation (CIC). Technically, there are three types of state owned agencies in Saskatchewan: Treasury Board Crowns, commercial Crown corporations, and various agencies, boards and commissions. When the CIC was created in 1978, it became the holding company for all of the 17 commercial Crown corporations that existed at the time, these are generally referred to as the CIC Crowns.

DOES PRIVATIZATION LEAD TO ECONOMIC IMPROVEMENT

There is a considerable amount of literature concerning the economic outcomes of privatization. This literature is briefly summarized in this section with an emphasis on the studies that have attempted to answer the empirical question of whether the privatization of Crown corporations in any sense can be said to be successful.

International Studies

Megginson and Netter (2001) published an extensive review of privatization across the world. Among the many findings reached by the authors, "research now supports the proposition that privately owned firms are more efficient and more profitable than otherwise-comparable state owned firms".[3] A more recent study provided by Boubakri *et al.* (2009) analyzes a panel of 189 firms in 39 countries and concluded that: "privatization is associated with significant improvements in profitability, operating efficiency and capital expenditures spending".[4]

There are countless papers that have been published since these studies, and the general theme that emerges is that privatization generally leads to improving the welfare of the economy.

Canadian Studies

Darilyn McLean, (1999) examined the efficiency and productivity of selected firms in Saskatchewan, pre- and post-privatization. The firms analyzed were privatized between 1985 and 1995, and include Cameco, PCS, Saskatchewan Wheat Pool and SaskOil. Each company was analysed over a 6-year period, 3 years before privatization and 3 years after privatization, but not including the year of privatization. The average of the 3 years before privatization was compared to the average of the 3 years after privatization. The characteristics considered were liquidity, efficiency, profitability, long term solvency and asset utilization, using a variety of accounting ratios. Generally, this study agreed with the above conclusions that privatization increases efficiency.

Boardman, Laurin, and Vining (2002) analysed the operating and stock price performance of major Canadian and provincial share-issue privatizations.[5] The paper looks at changes in operating and financial performance before and after privatization using time-series accounting data. It then compared Canadian performance experience to privatization in other countries. Finally, it looked at long-run effects of privatization on shareholder returns. The analysis shows that privatization significantly improved the operating and financial performance of Canadian companies.

The Saskatchewan-based companies considered in this paper are PCS and Cameco. Both companies had particularly large reductions in their debt ratio, and outperformed the TSE index 5 years after privatization.

The results of the study as a whole aligned with findings from other countries, providing further support for the notion that "ownership matters". More specifically, privatization has had a significant positive impact on the financial and operational performance of Canadian Crown corporations.

In their study, Boardman and Vining (2012) provided a detailed analysis of Federal and Provincial privatizations in Canada.[6] They note that most privatizations in Canada occurred in the 10-year period between mid-80s and mid-90s, which roughly coincides with the Devine push for privatization. They make a distinction between Direct Sale Privatizations (DSP) and Share Issue Privatizations (SIP), note that the major privatizations in Saskatchewan were via SIP.[7] The authors note that both PCS and Cameco have done very well since privatization, and conclude, "The privatization of entities operating in competitive markets has been social welfare-improving."

This study concludes that privatization of Crown corporations has been economically successful, and applies to major privatizations undertaken in Saskatchewan during the Devine regime.

CROWN CORPORATIONS IN SASKATCHEWAN

Privatization of Commercial Crowns under the Devine Administration

Grant Devine formed the government of Saskatchewan in the election of April 26, 1982. Mr. Devine came to power during a time when there was somewhat of a wave of conservatism sweeping politics. He also came to power at a time of economic turmoil.

The Bank of Canada's policy of maintaining very high interest rates in order to rid the economy of inflation that had driven the Canadian economy into a severe recession, with the national unemployment rate rising above 10 percent. This economic downturn was accompanied by a collapse in resource prices and the lingering effects of the National Energy Program. Saskatchewan's economy was, and still is, extremely sensitive to these resource price swings and the Devine government came to power at a time when resource prices were at record lows and the economy was in a slump.

Shortly after being elected, the Devine government hosted an "Open for Business" conference in the fall of 1982. The Devine government appeared to be trying to overcome the economic downturn by turning Saskatchewan to the right, and privatization initiatives were a part of this plan. In spite of this free market approach to the economy, the early years the Devine government did not appear to be in any rush to initiate privatization. The overall tone of any privatization initiatives in the early Devine years were captured by Finance Minister Bob Andrew in his budget speech of March 29, 1983, when he said that the public sector would be used as one element in a "balanced, mixed economy".

In 1986, following his re-election, Grant Devine immediately instituted a series of spending cuts. In conjunction with these cuts, the government began a series of privatization initiatives. With less government involvement in the economy through lower spending and a reduction in government-owned Crown corporations, the Devine government was attempting to implement a free market agenda.

Ultimately, the Devine government would privatized nine CIC Crowns. The major privatizations were: SaskOil, PCS, SMDC, and Papco. There was also a flurry of minor privatizations as well.[8] The latter group are termed minor as very little has been written concerning these privatizations and very little information is available to the public.

Major Privatizations in the Devine Era

In an earlier study written by Ian Madsen and published by the Frontier Centre of Public Policy, the report examined the investment performance of major resource-based Crown corporations with the most prominent being PCS and Cameco.[9] These companies formed from the merger of the Provincial Crown corporation Saskatchewan Mining Development Corporation and Eldorado Nuclear (a federal crown corporation). Madsen's analysis of the investment and operational performance demonstrates that these Crown corporations were more successful after they were privatized. Madsen's analysis argues that both companies grew in size, employment and number of employees after divestment from the government, although Madsen has identified some limitations to the success of Cameco, largely due to the downturn of the uranium market.

That being said, the overall performance of both corporations since their privatization demonstrates that it is better for governments to stay out of business. Madsen argues that although it may appear that Cameco's lack of profitability recently may appear to indicate the corporation would have been better if they continued to be owned by the Saskatchewan government, the fact remains that since it privatized, the company has grown: more employees, a higher investment in productive assets, and a higher operating cash flow than it showed as a Crown in the 1980s. Furthermore, prior to divestment, Cameco had negative returns on investment of -6.4 percent when adjusting for inflation in the period. Similarly, PCS had a negative return on investment at -8.2 percent between 1975-1989. This changed dramatically to 13.2 percent from 1989 to 2015 when it divested.

Based on the data provided by Madsen, the operational performance of PCS also improved. Since 1989, the company's revenues grew by 1,859 percent, its net income by 1,340 percent, and its operating cash flow by 2,073 percent. This incredible improvement can also be seen with Cameco when comparing 1991 and 2015. Cameco's revenue grew by 868.3 percent, its net income by 35.7 percent, and its operating cash flow by 273.7 percent. Although the numbers are not as strong as PCS, the numbers demonstrate an incredible positive change in operational performance since 1991.

To emphasize this performance even more, the return on equity for PCS has doubled since 1989 from a 7.3 percent return to 14.7 percent in 2015. This is an overall return on equity increase of 100.7 percent. Therefore, it is evident that PCS contributed to the economy of Saskatchewan far more after its divestiture.

Politics and the End of Privatization

In the end, the Devine government privatized nine CIC commercial Crown corporations, and given the economic and political history of Crown corporations in Saskatchewan prior to the Devine era this should be considered a major accomplishment. There were also other private sector initiatives under the Devine regime that were designed to shift Saskatchewan to a more market-oriented economy, such as, with Greystone Managed Investments, NorSask Forest Products, and Saskferco.[10]

Despite these successes, when Roy Romanow took over as leader of the Saskatchewan NDP party in 1987, public support for privatization shifted and the opposition intensified. This culminated in the creation of SaskEnergy in 1988. When SaskEnergy was created as a subsidiary to SaskPower to provide natural gas transmission and distribution, the Devine government announced it would offer shares to the public to privatize the company.[11] At the time, the public opinion favoured utilities to be maintained as Crown corporations rather than privately run companies. When the Devine government suggested privatizing SaskEnergy, it garnered a negative reaction. The public felt that Mr. Devine was going back on his previous statement that public utilities would be exempt from privatization.

Mr. Romanow's opposition party saw this as a political opportunity and before the bill to privatize SaskEnergy could be tabled, the NDP walked out of the legislature, leading to the famous "bell ringing" episode. The bell ringing forced the government to back down on SaskEnergy. This signaled the end to the Devine privatization initiatives, although the government did manage to subsequently get PCS privatized. However, the privatization of PCS required invoking closure for the first time in Saskatchewan history.

FROM GRANT DEVINE TO BRAD WALL

The Devine Privatization Legacy

The Devine Progressive Conservatives lost the 1991 election to Roy Romanow's NDP. In 1996, the Romanow government instituted a major review of Crown corporations in Saskatchewan. In a press release summarizing the results of the review, it was stated: "Despite numerous changes in the world in which they operate Saskatchewan's Crown corporations, can for the most part, remain viable and continue to operate as public enterprise entities, so long as they are made more responsive to the business climate." This Crown review also identify privatization as an alternative option for commercial Crowns.

Another election was called in 2003, with a new leader of the NDP, Lorne Calvert. Similar to the 1981 election campaign, the 2003 election focused on Crown corporations, alleging that the Saskatchewan Party had a hidden agenda to privatize Saskatchewan's commercial Crowns.[12]

In 2004, the Calvert government, with the support of all parties in the legislature, passed the *Crown Corporations Public Ownership Act,* protecting the privatization of Crown corporations.[13] Furthermore, any legislation that results in a privatization initiative cannot come into effect until there is an election.

Brad Wall 2007 to Present

Following the 2003 election, Brad Wall took over the leadership of the Saskatchewan Party and would become the premier in 2007. Once again, the issue of Crown corporations played a role in the election campaign. In September 2007, Brad Wall unequivocally stated that Crowns were not going to be privatized.

With the election of the Saskatchewan Party in 2007, there has been no privatization of major Crowns undertaken by the Wall government. In spite of this, Premier Wall has been accused of continuing the privatization that began under the Devine government.

In a year-end interview in 2012, Mr. Wall, indicted that he would like to "provide Saskatchewan voters with a clear policy on privatization of the province's commercial Crowns before the next election". It does not appear that this discussion will ever transpired as Brad Wall resigned in 2017. Rather, the meaning of privatization in Saskatchewan has shifted.

Under the Devine regime, privatization generally referred to selling Crown corporations to the private sector. Under the Wall regime, privatization refers to market-oriented initiatives, such as, selling government-owned liquor stores and the creation of P3s.[14] Many of these market-oriented initiatives are summarized in *Privatization in Saskatchewan 2004-2015 A Pocket Timeline,* by Canadian Centre for Policy Alternatives. This shift may be due to the existence of the *Crown Corporations Public Ownership Act.* In any event, it does appear that the attempts by the Devine government to shift Saskatchewan to a more market-oriented economy are being carried on by the Wall government, however, in a slightly different manner.

ADDENDUM I:

THREE REPRESENTATIVE SASKATCHEWAN CROWN CORPORATIONS[15]

This Appendix is an attempt to answer, through the documented financial results, the question which has seldom been asked regarding the record of Saskatchewan Crown corporation ownership: How did they perform as investments for the period they were owned and actively directed or managed by the provincial government?

This addendum focuses on three large, prominent, representative resource-oriented Crowns: Potash Corporation of Saskatchewan (PCS), Saskatchewan Oil and Gas Corporation, (SaskOil) and Saskatchewan Mining and Development Corporation (SMDC) which was later merged into Cameco. This addendum does not attempt to answer the philosophical or ideological reasons why the public establishment and ownership of such companies may or may not be in citizens' or taxpayers' interests, rather the addendum calculates the rate of return on the debt and equity capital the Saskatchewan government of the day invested into those companies on behalf of taxpayers.

The method used in this analysis was the isolation of the net direct capital flows into each company in each year and then using the Internal Rate of Return (IRR) to calculate the rate which makes all the outflows to the government equal to the inflows the government invested in the company.

Potash Corporation of Saskatchewan, 'PCS'

Saskatchewan is well-endowed with massive deposits of potassium chloride, commonly known as potash. Until the 1970s, exploitation of these deposits was entirely by private, often publicly listed companies. PCS was established in 1974 and it slowly accumulated potash deposits through to the end of 1970s. Large-scale commercial production and profits were not seen until near the end of the decade.

Originally PCS fiscal year end was June 30, from 1974 until 1979, the fiscal year end was changed to the calendar year for the purposes of the Saskatchewan government's CIC. There was a 'remainder' semi-annual year which was accounted for in the IRR calculations by dividing up the entire period from the inception of the company until the designated exit valuation at the time of its initial public offering (IPO) into semi-annual periods and then multiplying the resultant semi-annual IRR by two to arrive at the final value. The IPO was taken as the exit value because after that point the company was largely managed entirely for commercial purposes, as it was publicly listed and had many individual and institutional shareholders.

Care was taken to ensure that all cash inflows, whether debt or equity in nature, were recorded properly and netted against any repayments, such as dividends, and that they were recorded in the time periods when they actually occurred. Some dividends were not paid as originally declared, even in the previous year's statements of changes in financial position (otherwise known as Statement of Cash Flows). The debt capital mentioned is only debt issued to the Province of Saskatchewan, segregated from other debt.

Finally, the reader needs to consider the performance measurements in context of the 1974-1981 economic times of very high inflation, rising interest rates, escalating resource and asset price environment, and a near-catastrophic drop in asset values and commodity prices in 1981. Hence, inflation-adjusting is used to show real investment returns, not just nominal.

It is obvious that the equity returns were poor, they were negative even before adjusting for inflation, even in comparison to companies listed on the Toronto Stock Exchange, which are heavily resource-company dominate during the same period. Debt returns look better, but not after adjusting for inflation, or in comparison to other debt instruments during the relevant period.

Table 1

PCS of Saskatchewan: Summarized comparative investment returns

Total Rates of Return		Real Rates of Return		Geometric Average	
Internal Rate of Return on Equity Capital Invested in PCS, 1975 – 1989	**-6.49%**	REAL Internal Rate of Return on Equity Capital Invested in PCS	**-14.00%**	Compound Annual Growth Rate (CAGE) in CPI, or Geometric Average Inflation Rate, 1975 – 1989	**7.51%**
Total Return on Toronto Stock Exchange, 1975 – 1989	**15.78%**	REAL Total Return on Toronto Stock Exchange, 1975 – 1989	**8.26%**		
Internal Rate of Return on Equity Capital Invested in PCS, 1978 – 1989	**-6.49%**	REAL Internal Rate of Return on Equity Capital Invested in PCS, 1978 – 1989	**-13.83%**	Compound Annual Growth Rate (CAGE) in CPI, or Geometric Average Inflation Rate, 1978 – 1989	**7.34%**
Total Return on Toronto Stock Exchange, 1978 – 1989	**16.45%**	REAL Total Return on Toronto Stock Exchange, 1978 – 1989	**9.11%**		
Internal Rate of Return on Debt Capital Invested in PCS, 1975 – 1987	**7.16%**	REAL Internal Rate of Return on Debt Capital Invested in PCS, 1975 – 1987	**-0.86%**	Compound Annual Growth Rate (CAGE) in CPI, or Geometric Average Inflation Rate, 1976 – 1987	**8.01%**
Total Return for Canada Treasury Bills, 1975 – 1987	**11.89%**	REAL Total Return for Canada Treasury Bills, 1975 – 1987	**3.88%**		
Total Return of Canada Long Bonds, 1975 – 1987	**12.63%**	REAL Total Return of Canada Long Bonds, 1975 – 1987	**4.62%**		
Total Return of Canada All Bonds, 1975 – 1987	**11.03%**	REAL Total Return of Canada All Bonds, 1975 – 1987	**3.01%**		
Internal Rate of Return on ALL Capital Invested in PCS, 1975 – 1989	**-0.78%**	REAL Internal Rate of Return on ALL Capital Invested in PCS, 1975 – 1989	**-8.29%**	Compound Annual Growth Rate (CAGE) in CPI, or Geometric Average Inflation Rate, 1975 – 1989	**7.51%**
Total Return on Toronto Stock Exchange, 1975 – 1989	**15.78%**	REAL Total Return on Toronto Stock Exchange, 1975-1989	**8.26%**		
Total Return for Canada Treasury Bills, 1975 – 1989	**11.77%**	REAL Total Return for Canada Treasury Bills, 1975 – 1989	**4.26%**	Note: It is quite appropriate to use inflation-adjustment for these returns, as the main operational period of the company was a highly inflationary one, and nominal returns do not account for the real depreciation of purchasing power of investors, including the taxpayer-owners of Crown corporations during this period.	
Total Return of Canada Long Bonds, 1975 – 1989	**12.71%**	REAL Total Return of Canada Long Bonds, 1975 – 1989	**5.20%**		
Total Return of Canada All Bonds, 1975 – 1989	**11.06%**	REAL Total Return of Canada All Bonds, 1975 – 1989	**3.55%**		

Saskatchewan Oil and Gas Corporation, 'SaskOil'

SaskOil was also established in fiscal 1975. Similarly to PCS, SaskOil changed its fiscal year end from March 31 to a calendar year end for the purposes of CIC. However, this does not affect multi-year IRR calculations to any significant extent, the transition year was nine months so the holding period from inception to the designated exit valuation was not divided into quarters nor any other adjustment made in the following calculations.

Care was taken to ensure that there was neither double counting of cash inflows nor outflows. As with the other two companies in the study, the usual balance sheet, income statement, and statement of cash flows were useful in understanding when and where money went, and verifying that it did so, but the main sources for the IRR calculation were in the notes to the financial statements.

While it may appear that the overall IRR for equity invested in the company was a positive 8.3 percent. It should be noted that inflation during that period was higher than that and returns on the resource-heavy Toronto Stock Exchange were more than double that figure, 18.7 percent. Furthermore, the firms listed on that exchange were all taxable and their profits used to calculate their IRR were all after tax, whereas SaskOil was non-taxable.

Table 2

Saskatchewan Oil and Gas Corp.: Summarized comparative investment returns

Total Rates of Return		Real Rates of Return		Geometric Average	
Internal Rate of Return on Equity Capital Invested in SaskOil, 1975 – 1986	**8.32%**	REAL Internal Rate of Return on Equity Capital Invested in SaskOil, 1975 – 1986	**-0.05%**	Geometric Average or Compound Annual Growth Rate (CAGR) in CPI, 1975 – 1986	**8.37%**
Rate of Return (total, ie. including dividends) on Toronto Stock Exchange, 1975 – 1986	**18.47%**	REAL Rate of Return (total, ie. including dividends) on Toronto Stock Exchange, 1975 – 1986	**10.10%**		
Total Return for Canada Treasury Bills, 1975 – 1986	**13.51%**	REAL Total Return for Canada Treasury Bills, 1975 – 1986	**5.14%**		
Total Return of Canada Long Bonds, 1975 – 1986	**15.14%**	REAL Total Return of Canada Long Bonds, 1975 – 1986	**6.77%**		
Total Return of Canada All Bonds, 1975 – 1986	**12.93%**	REAL Total Return of Canada All Bonds, 1975 – 1986	**4.56%**		
Internal Total Return on Debt Capital Invested in SaskOil 1975 – 1986	**-3.83%**	REAL Internal Total Return on Debt Capital Invested in SaskOil 1975 – 1986	**12.20%**	Geometric Average or Compound Annual Growth Rate (CAGR) in CPI, 1975 – 1986	**8.37%**
Total Return of Canada Treasury Bills, 1975 – 1986	**13.51%**	REAL Total Return of Canada Treasury Bills, 1975 – 1986	**5.14%**		
Total Return of Canada Long Bonds, 1975 – 1986	**15.14%**	REAL Total Return of Canada Long Bonds, 1975 – 1986	**6.77%**		
Total Return of Canada All Bonds, 1975 – 1986	**12.93%**	REAL Total Return of Canada All Bonds, 1975 – 1986	**4.56%**		
Internal Rate of Return on All Capital Prov. of Saskatchewan Invested in SaskOil 1975 – 1986	**5.16%**	REAL Internal Rate of Return on All Capital Prov. of Saskatchewan Invested in SaskOil 1975 – 1986	**-3.21%**	Geometric Average or Compound Annual Growth Rate (CAGR) in CPI, 1975 – 1986	**8.37%**
Rate of Return (total, ie. including dividends) on Toronto Stock Exchange 1975 – 1986	**18.47%**	REAL Rate of Return (total, ie. including dividends) on Toronto Stock Exchange 1975 – 1986	**10.10%**		
Total Return of Canada Treasury Bills, 1975 – 1986	**13.51%**	REAL Total Return of Canada Treasury Bills, 1975 – 1986	**5.14%**	Note: It is quite appropriate to use inflation-adjustment for these returns, as the main operational period of the company was a highly inflationary one, and nominal returns do not account for the real depreciation of purchasing power of investors, including the taxpayer-owners of Crown corporations during this period.	
Total Return of Canada Long Bonds, 1975 – 1986	**15.14%**	REAL Total Return of Canada Long Bonds, 1975 – 1986	**6.77%**		
Total Return of Canada All Bonds, 1975 – 1986	**12.93%**	REAL Total Return of Canada All Bonds, 1975 – 1986	**4.56%**		

Saskatchewan Mining and Development Corporation, 'SMDC' (Cameco)

SMDC was also established in fiscal 1975. SMDC was unusual in that it had no long-term debt directly issued to the Saskatchewan provincial government rather it made use of bonds issued to outside investors to fund the company. Note these returns are not included in SMDC's calculations.

The cost of debt capital during this period was high, it increased from a high single digit interest rates to low double digits in 1980-1982. This debt and the associated interest payments, were either paid out from cash flow from operations, sale of assets, or from equity capital injections from the provincial government.

Debt issued by the provincial government was part of the government's total debt outstanding. High interest payments made to investors during this period either were rolled over into more debt or paid for by taxes from Saskatchewan citizens.

The change in fiscal year to suit the purposes of the CIC, as was the case with SaskOil, created an anomalous nine-month year. As in the case with SaskOil, the effects on an IRR calculation were not judged to be significant, so that year was treated like the others in the long period of government ownership.

The overall IRR for equity invested in the company was a positive 0.66 percent which is much lower than the returns on the resource-heavy Toronto Stock Exchange, 11.1 percent. Again note that SMDC is non-taxable as a Crown corporation while the returns from the Toronto Stock Exchange are based on after-tax earnings.

Table 3

Saskatchewan Mining and Development Corp.: Comparative investment returns

Total Rates of Return		Real Rates of Return		Geometric Average	
Internal Rate of Return	**0.66%**	Inflation Adjusted IRR	**6.46%**	Geometric Average Inflation Rate, 1975 – 1991	**7.12%**
TSE or TSX (Renamed) Stock Market Return, Geometric Average 1975 – 1991	**11.17%**	REAL TSE or TSX (Renamed) Stock Market Return, Geometric Average 1975 – 1991	**4.06%**	Note: It is quite appropriate to use inflation-adjustment for these returns, as the main operational period of the company was a highly inflationary one, and nominal returns do not account for the real depreciation of purchasing power of investors, including the taxpayer-owners of Crown corporations during this period.	
Canada Long Bonds, Geometric Return, 1975 – 1991	**9.21%**	REAL Canada Long Bonds, Geometric Return, 1975 – 1991	**2.10%**		
Canada All Bonds, Geometric Average, 1975 – 1991	**7.90%**	REAL Canada All Bonds, Geometric Average, 1975 – 1991	**0.78%**		
Canada Treasury Bill Return Geometric Average	**8.24%**	REAL Canada Treasury Bill Return Geometric Average	**1.12%**		

SUMMARY AND CONCLUSION

LESSONS, ISSUES, CAUTIONARY NOTES

The three companies in this study have a number of things in common. They were started for political reasons, they were all started roughly in the same year (1974), they are all in resource sector, they all began by purchasing assets from other private businesses or investors, they all are non-taxable, all of them purchased assets or otherwise expanded during a time of escalating commodity prices and asset values in the late 1970s and early 1980s, they all tried to pay dividends (but often had to cancel or scale them back), they all lost money and destroyed economic value in the early and mid-1980's. Additionally, they all had substandard IRR on capital, whether debt or equity, despite the advantage of being non-taxable, and in some cases such as PCS and SMDC, they operated as near-monopolies within their regions. The government would have been better off not investing the money in any of these entities, and instead in either the stock market, bond market, or its own debt.

This analysis period ends at the time of the partial exit of the government from its investments through the IPO of shares in each company. However, these companies became largely commercial enterprises operating with market-oriented strategy once they became publicly listed and investor-owned, even with significant remaining government ownership. The later ownership was largely portfolio-centered and not strategic in nature. Choosing later periods may not have been useful in showing a higher rate of return, as the 1980s and 1990s remained dismally depressed for commodity markets and the companies that produced those commodities. Also, those companies evolved considerably from how they were constituted prior to their IPO.

Finally, this study provides a strong argument that governments should avoid direct and massive involvement in investing in businesses. Whatever the motivation may be, such involvement is difficult to translate into real profitable enterprises that create economic value.

ADDENDUM II:

POST-IPO PERFORMANCE AT PCS AND CAMECO

Both companies grew in absolute size, employment, and in numbers of employees since their divestment by the Saskatchewan government.

By most measures, PCS improved in performance in revenue per employee, net income per employee, operating cash flow per employee, return on assets, return on equity, return on capital employed, and operating cash flow return on assets.

However, Cameco had mixed performance largely due to the unusual nature of the uranium markets, which have been hurt by factors unique to that market and more tangentially, by the commodity cycle downturn which started about three years ago.

The downturn has hurt Cameco operationally and financially. Therefore, its net income is negative, although its operating cash flow is still large and positive. It also generated losses that could be used to shelter it from income tax, so it is not showing any taxes paid to either the Province or the federal government. Negative net income is also depressing such metrics as return on assets, return on equity, and return on capital employed.

The unsettled and unprofitable situation that Cameco finds itself in lately, along with several negative performance measures may lead to an incorrect conclusion that it was better off when it was owned by the Saskatchewan provincial government. However, other measures show that it is a much larger company with more employees and higher investment in productive assets than it showed as a Crown. Also, most importantly, its operating cash flow, disregarding non-cash write-downs, is very strong and far higher than it was in the 1980s, before the IPO.

Its current situation also illustrates the great risk a government takes in making a large investment (hundreds of millions of dollars, in the cases of both PCS and Cameco). The future may turn out to be not just uncertain, but potentially very uncertain and possibly requiring a major restructuring, with closure of facilities and the firing of employees, to struggle to get back to a positive cash flow. Hence, a reasonable conclusion is the government should stay out of business.

Potash Corporation of Saskatchewan

The overall IRR for equity invested in PCS post-IPO is a positive 14.1 percent which had been slightly lower than the returns on the resource-heavy Toronto Stock Exchange, 16.7 percent. The overall IRR for equity invested in Cameco post-IPO is a positive 10.7 percent which despite being slightly lower than the returns on the resource-heavy Toronto Stock Exchange, 16.7 percent. Again note that both PCS and Cameco returns are based on after-tax earnings which was the same as the returns from the Toronto Stock Exchange.

It should be noted that investment performance for both firms improved (i.e., increased dramatically) after becoming publicly listed. Prior to their divestment, both underperformed the Toronto Stock Exchange 300 Index average, with negative returns when adjusting for inflation in the period.

Table 4

PCS Shareholder Returns 1989 – 2015

POTASH CORP. Shareholder Returns 1989 – 2015		Potash Corp., 1975 – 1989 <= From an earlier study (Equity capital only)	
Internal Rate of Return Without Dividend Reinvestment (Simple Return) **14.17%**	REAL Return (Discounted by inflation in the period) **10.70%**	[This calculation was not performed in the original study.]	
Internal Rate of Return With Dividend Reinvestment (Total Return) **16.78%**	REAL Return, (Discounted by inflation in the period) **13.23%**	Internal Rate of Return on All Capital Invested in PCS, 1975 – 1989 **-0.78%**	REAL Internal Rate of Return on All Capital Invested in PCS, 1975 – 1989 **-0.78%**
TSX Index Total Return 1990 – 2015 **14.14%**	REAL Return (Discounted by inflation in the period) **10.66%**	Total Return on Toronto Stock Exchange, 1975 – 1989 **15.78%**	REAL Total Return on Toronto Stock Exchange, 1975 – 1989 **8.26%**
CAMECO CORP. Shareholder Returns 1991 – 2015		Cameco Corp., as SMDC, 1975 – 1991 <= From an earlier study (Equity capital only)	
Internal Rate of Return Without Dividend Reinvestment (Simple Return) **10.74%**	REAL Return (Discounted by inflation in the period) **7.14%**	[This calculation was not performed in the original study.]	
Internal Rate of Return With Dividend Reinvestment (Total Return) **12.07%**	REAL Return, (Discounted by inflation in the period) **8.42%**	Internal Rate of Return **0.66%**	Inflation Adjusted IRR **-6.46%**
TSX Index Total Return 1991 – 2015 **15.22%**	REAL Return (Discounted by inflation in the period) **11.47%**	TSE or TSX (Renamed) Stock Market Total Return, Geometric Average, 1975 – 1991 **11.17%**	REAL TSE or TSX (Renamed) Stock Market Total Return, Geometric Average, 1975 – 1991 **4.06%**

In the case of PCS, the company has grown enormously. Revenues by 1,859 percent, net income by 1,340 percent, operating cash flow by 2,073 percent, employee count by 334 percent, and assets by 1,120 percent. It is also active internationally, and has lines of business in all three main types of fertilizer: nitrogen-based, phosphates, as well as the original potash.

Table 5

PCS Operational Performance

Potash Corp. All Figures in U.S. $$	Employees	Net Income ($$M)	Operating Flow ($$M)	Revenues ($$M)	Pre-Tax Income ($$M)	Taxes Paid ($$M)	Total Assets ($$M)	Average Assets ($$M)	Total Liabilities + Owners Equity ($$M)	Avg. Total Liabilities + Owners Equity ($$M)	Book Value ($$M)	Average Book Value ($$M)	Cash + Equivalents ($$M)	Average Cash ($$M)
1987											$1,147.28		$6.39	
1988							$1,343.72		$1,343.72		$1,206.12		$72.95	$39.67
1989	1,242	$88.18	$107.60	$320.38		$0.00	$1,431.97	$1,387.82	$1,431.91	$1,387.82	$1,188.18	$1,197.15	$65.62	$69.29
2013	5,787	$1,785.00	$3,212.00	$2,692.00	$2,472.00	$687.00	$17,958.00		$17,958.00		$9,628.00		-$628.00	
2014	5,136	$1,536.00	$2,614.00	$7,115.00	$2,164.00	$628.00	$17,724.00	$17,841.00	$17,724.00	$17,841.00	$8,792.00	$9,210.00	-$215.00	$421.50
2015	5,395	$1,270.00	$2,338.00	$6,279.00	$1721.00	$451.00	$17,469.00	$17,596.50	$17,469.00	$17,596.50	$8,382.00	$8,587.00	-$91.00	$153.00
Change in 2015 vs. **1989**	334.38%	1340.16%	2072.77%	1859.86%			1119.98%	1167.93%	1119.98%	1167.93%	605.45%	617.29%	-238.67%	320.82%

As to productivity, revenue per employee has grown 351 percent, net income per employee by 232 percent, average assets per employee by 192 percent, and average operating cash flow per employee by a full 400 percent.

Turning to key metrics on efficiency of capital employed, while return on average assets has improved by a modest 13.5 percent, return on equity, that is, money invested by shareholders and retained earnings, has doubled, increasing by 100.7 percent, to 14.7 percent.

Disregarding the obscuring effects of non-cash expenses, operating cash flow to average assets has improved 71.3 percent, operating cash flow to average equity by 202.9 percent, and operating cash flow to average invested capital has improved by 62.4 percent. Therefore, the company is using invested funds much more efficiently than it did just prior to becoming a public company. Not incidentally, income taxes paid to Regina and Ottawa were non-existent until late in 1989, last year they were US $451 million.

The conclusion is that PCS improved its operation performance after it ended its status as a government-controlled company, and contributed to the economic vitality of Saskatchewan and Canada far more after the IPO than it did beforehand.

Table 6

PCS Rates of Return

Potash Corp. All Figures in U.S. $$	Average Book Value	Cash + Equivalents ($$M)	Average Cash ($$M)	Average Invested Capital ($$M)	Return on Average Assets	Return on Equity (Average Book Value)	Return on Invested Capital (Average Invested Capital)	Average Assets/ Employee ($$M P/Person)	Average Revenue/ Employee	Average Net Income/ Employee	Average Operating Cash Flow/ Employee	Operating Cash Flow/ Average Assets	Operating Cash Flow/ Average Equity (Book Value)	Operating Cash Flow/ Average Invested Capital
1987		$6.39												
1988		$72.95	$39.67											
1989	$1,197.15	$65.62	$69.29	$1,322.19	6.35%	7.37%	6.67%	$1.12	$257,954.85	$71,002.36	$86,638.33	7.75%	8.99%	8.14%
2013		-$628.00												
2014	$9,210.00	-$215.00	-$421.50	$18,056.00	8.61%	16.68%	8.51%	$3.47	$1,385,319.31	$299,065.42	$508,956.39	14.65%	28.38%	14.48%
2015	$8,587.00	-$91.00	-$153.00	$17,687.50	7.22%	14.79%	7.18%	$3.26	$1,163,855.42	$235,403.15	$433,364.23	13.29%	27.23%	13.22%
Change in 2015 vs. **1989**	617.29%	-238.67%	320.82%	1237.74%	13.58%	100.78%	7.66%	191.89%	351.19%	231.54%	400.20%	71.36%	202.92%	62.42%

Cameco

The results for Cameco are mixed, owing largely to the negative uranium market conditions of the past few years. The size of the company has increased greatly since the IPO. Revenues grew by 868 percent, total assets by 564 percent, operating cash flow by 274 percent, employee count by 234 percent, but net income by only 35.7 percent. Cash on hand has increased enormously which can indicate either very prudent financial management, or an inability to employee funds effectively in either capital projects, or by giving the money back to shareholders.

Turning to productivity, revenue per employee has grown 190 percent, net income per employee fell by 59.3 percent, average invested capital per employee grew by 82 percent, and average operating cash flow per employee increased by 12 percent.

Due to its current pricing issues and its non-cash write-downs, the company is showing poor capital productivity and efficiency metrics. Its return on average assets has declined by 79 percent, its return on average equity by 74 percent, and its return on average invested capital by 78 percent. All these measures, however, are still positive, if quite low.

Removing the effects of non-cash charges, operating cash flow return on average assets fell by just 42 percent, to 5.2 percent; operating cash flow return on equity fell by 28 percent, to 8.1 percent; and operating cash flow return on average invested capital fell by 38 percent to 5.5 percent. These figures are not impressive, but it is notable that they are still significantly positive despite the difficult uranium market the company has been facing for the past few years.

Table 7

Cameco Operational Performance

Cameco All Figures in U.S. $$	Employees	Net Income ($$K)	Net Income/ Employee	Taxes Paid ($$K)	Pre-Tax Income ($$K)	Operating Cash Flow ($$K)	Operating Cash Flow/ Employee	Revenues ($$K)	Revenues/ Employee	Operating Cash Flow Margin	Pre-Tax Margin	Net Income Margin	Total Assets ($$K)
1989													
1990		$91,600		$2,462	$94,083	$58,400		$315,600		18.50%	29.81%	29.02%	$1,367,567
1991	1,200	$47,900	$39,917	$2,635	$50,528	$120,400	$100,333	$284,400	$237,000	42.33%	17.77%	16.84%	$1,325,373
2013		$317,687		-$89,758	$227,929	$524,000		$2,439,000		21.48%	9.35%	13.03%	$8,039,317
2014	3,963	$185,000	$46,682	-$175,268	-$119,098	$480,000	$121,120	$2,398,000	$605,097	20.02%	-4.97%	7.71%	$8,472,667
2015	4,005	$65,000	$16,230	-$142,630	$79,268	$450,000	$112,360	$2,754,000	$687,640	16.34%	-2.88%	2.36%	$8,794,637
Change in 2015 vs. **1991**	233.75%	35.70%	-59.34%	-5512.90%	-256.88	273.75%	11.99%	868.35%	190.14%	-61.40%	-116.20%	-85.99%	563.56%

Table 8

Cameco Rates of Return

Cameco All Figures in U.S. $$	Equity Book Value ($$K)	Average Book Value ($$K)	Average Book Value (Equity)/ Employee	Cash + Equivalent ($$K)	Average Cash ($$K)	Average Invested Capital ($$K)	Average Invested Capital/ Employee	Return on Average Assets	Operating Cash Flow/ Return on Average Assets	Return on Equity (Average Book Value)	Operating Cash Flow/ Return on Equity (Average Book Value)	Return on Invested Capital (Average Invested Capital)	Operating Cash Flow/ Return on Invested Capital (Average Invested Capital)
1989													
1990	$977,972			$0									
1991	$1,133,772	$1,055,872	$879,893	$0	$0	$1,346,470	$1,122,058	3.56%	8.94%	4.54%	11.40%	3.56%	8.94%
2013	$5,439,394			$229,135									
2014	$5,443,804	$5,441,599	$1,373,101	$566,583	$397,859	$7,689,409	$1,940,300	2.24%	5.81%	3.40%	8.82%	2.41%	6.24%
2015	$5,545,279	$5,494,541	$1,371,920	$458,604	$512,593	$8,175,048	$2,041,210	0.75%	5.21%	1.18%	8.19%	0.80%	5.50%
Change in 2015 vs. **1991**	389.10%	420.38%	55.92%			507.15%	81.92%	-78.84%	-41.71%	-73.92%	-28.18%	-77.65%	-38.44%

In conclusion, the performance measures show a company that is not giving good results at present, but has abundant cash resources to give it options to transform itself to adapt to a more austere future. The adverse circumstances it finds itself in would also have happened should it have remained a Crown corporation, and taxpayers would be suffering for what could be an extended period, if that were the case.

ENDNOTES

1. For an interesting summary of privatization issues in the 2016 election campaign see Saskatchewan election issues 2016: "Privatization" by Emma Graney in the *Regina Leader Post,* March 14, 2016.
2. A chronology of the history of Crown corporations in Saskatchewan is provided on the Crown Investment Corporation webpage, under History of Crowns.
3. Quoted from page 380. Megginson and Netter note the following concerning China. "There is limited empirical evidence, especially from China, that suggests that non-privatizing reform measures, such as price deregulation, market liberalization, and increased use of incentives, can improve the efficiency of SOE [State-Owned Enterprises], but it also seems likely that these reforms would be even more effective if coupled with privatization".
4. Quoted from page 378.
5. Anthony E. Boardman, Claude Laurin and Aidan R. Vining. "Privatization in Canada: Operating and Stock Price Performance with International Comparisons", *Canadian Journal of Administrative Sciences,* 2002.
6. Anthony E. Boardman and Aidan R. Vining. *A Review and Assessment of Privatization in Canada,* The School of Public Policy, 2012. Tables 1 and 2 provide a detailed list of major privatizations.
7. The major exception appears to be the provincial DSP of Prince Albert Pulp Company to Weyerhaeuser in 1986.
8. The minor privatizations included: Saskatchewan Minerals, Saskatchewan Computer Utility Corporation; Agricultural Development Corporation of Saskatchewan; Saskatchewan Government Printing Company; and Saskatchewan Fur Marketing Company. It is somewhat surprising that Saskatchewan Minerals falls into this category. Saskatchewan Minerals was created in 1948 by Tommy Douglas. After privatization in 1988, it went on to become a successful private sector producer of sodium sulphate. This company is not mentioned as being created or sold in the CIC History of Crowns, and it is not mentioned in any of literature reviewed above.
9. This section presents a summary of the major results. The quantitative analysis can be found in the Addendums to this paper.
10. For instance, Greystone Managed Investments was created as an employee owned company to manage Saskatchewan government pension funds. Greystone went on to be a successful multi-billion dollar company with clients across Canada (See the discussion in MacKinnon, page 45). Also the Devine government sold some publicly owned sawmills to employees to create NorSask Forest Products, and SaskFerco was created as a joint venture between Cargill and the Saskatchewan government.
11. In the throne speech of March 1989, the Devine government announced that it would offer shares to the public in order to privatize SaskEnergy.
12. It is possible that the Saskatchewan Party lost the election due to the fact that their leader at the time, Elwin Hermanson, would not completely rule out privatization of commercial Crowns as a policy option.
13. For instance, Section 3 of the Act prohibits the privatization of any Crown corporation unless there is specific authorizing legislation, and Section 4 of the Act requires that before such legislation can be passed, the terms of the proposed privatization are subject to legislative scrutiny and detailed expert analysis, and the government must then table this report.
14. The exception to this is Information Services Corporation (ISC), which is a commercial Crown that was not listed in the 2004 *Crown Corporations Public Ownership Act* legislation. In November, 2012, the Wall administration began the privatization process of this Crown.
15. This Appendix was written by Ian Madsen. The author wishes to acknowledge the very great help he received from Brianna Heinrichs, of the Frontier Centre for Public Policy, who garnered all the financial data I used, manually, including important Notes to Annual Reports. Thanks also to Bob Murray, formerly Research Director at the Frontier Centre for his encouragement, support and guidance. Any mistakes are attributed to the author alone.

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