

Managing Saskatchewan's Expanding Aboriginal Economic Gap

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Introduction

Saskatchewan's Aboriginal people¹ have experienced some of the worst social and economic conditions in Canada. In Saskatchewan, compared to the Non-Aboriginal community, Aboriginal people have had higher mortality rates, higher incarceration rates, higher poverty levels, higher homicide and suicide rates, chronic unemployment and lower education levels. Although some conditions have improved in recent years, the current social and economic outlook for Aboriginal people in Saskatchewan does not look bright.

Currently, amongst Saskatchewan Aboriginal people, the poverty level is high, education levels are low, relative to the Non-Aboriginal population, and the estimated unemployment rate is 53% (Lendsay, Painter, and Howe, 1997). Compounding the problem, population growth in Saskatchewan is significantly higher for Aboriginal

people than it is for Non-Aboriginal people. Whereas Aboriginal people represented 13.3% of the Saskatchewan population in 1995, it is projected that they will represent 32.5% of the population by the year 2045 (Lendsay, Painter, and Howe, 1997). If Aboriginal people continue to be under-educated and under-employed, there will be significant social and economic consequences for Saskatchewan. We address those concerns by assessing the current and projected economic gap for Aboriginal people in Saskatchewan, the implications of the growing economic gap, and the possible approaches to managing the economic gap.

Objectives of the Study

The first objective of the study is to assess the current income, employment, education, and economic gaps for Aboriginal people in Sas-

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katchewan and to forecast those gaps over the next 50 years (1995–2045). Each of the gaps is estimated as the difference between average Aboriginal income, employment, education, and economic levels and the corresponding levels for the total Saskatchewan population. The second objective is to discuss the economic and social implications of the growing and unsustainable Aboriginal economic gap in Saskatchewan by assessing the impact on Aboriginal people, non-aboriginal people, governments, and the business community. The third objective is to discuss possible approaches for managing the Aboriginal economic gap over the next 50 years.

Methodology

The economic forecast for Saskatchewan (1995–2045) was prepared using PREMOS, a medium-sized macroeconomic model developed by Eric Howe.² PREMOS examines economic scenarios from a Saskatchewan provincial perspective only. It makes projections about the overall Saskatchewan economy and the relationship between economic variables.

PREMOS predicts Saskatchewan's economic future using a system of over one hundred simultaneous equations. Many of the equations of PREMOS are common sense. For example, the consumption function shows how consumption in Saskatchewan varies in response to disposable income; the government spending equation shows how government spending varies in response to government revenues and the demand for government services; and the migration equation shows how migration depends on the relationship between provincial labour demand and supply. The model forecasts the major provincial economic variables such as gross domestic product, consumption, investment, employment, disposable income, and industry employment. There are four exogenous components: the federal government, the natural resources industry, interest rates, and the Canadian labour market. There are five endogenous components: population, expenditure, labour demand, income, and provincial government revenue and expenses.

The output from PREMOS was combined with empirical data gathered from a variety of sources, including Statistics Canada, Federal Department of Indian and Northern Affairs, Aboriginal Business Canada, Aboriginal Peoples Survey (1991), Report on The Royal Commission

on Aboriginal Peoples, and the Government of Saskatchewan Indian and Metis Affairs Secretariat. These data were used as a starting point for the economic forecast as well as to disaggregate the economic output variables into Aboriginal and Non-Aboriginal categories.

Macroeconomic Forecast

The Saskatchewan Real Gross Domestic Product (GDP) is expected to increase by 1.9% per year over the forecast period (1995–2045). Employment is forecast to grow at 0.7% per year, somewhat more slowly than real GDP, due to increased labour productivity. Population is forecast to grow at 0.5% per year. With provincial employment growth of 0.7% per year and population growing at 0.5% per year, there will be some increase in the provincial labour force participation rate.

Saskatchewan Population Forecast

Over the 50 year forecast period, Aboriginal population growth is significantly greater than Non-Aboriginal population growth. The Saskatchewan population is forecast to grow at 0.55% per year, the Non-Aboriginal population at 0.04% per year, and the Aboriginal population at 2.36% per year, over the forecast period. The population forecast for Saskatchewan indicates that by the year 2045, it is expected that Aboriginal people will make up 32.5% of the Saskatchewan population, compared to 13.3% in 1995. Figure 1 shows that the Aboriginal population in 1995 is 135,000 people compared to 838,000 Non-Aboriginal people, or 13.3% and 86.7%, respectively. By the year 2045, the Aboriginal population is expected to increase from 135,000 to 434,000, or 32.5% of the total population. The Non-Aboriginal population grows from 883,000 to only 903,000 over the same time period.

Saskatchewan Labour Force Forecast

The labour force age group is defined as the population in the 15 and over age category. The labour force age group is a proxy for the total number of people in the population who are able to be employed. Since the Aboriginal population is growing faster than the Non-Aboriginal population, the Aboriginal labour force age group is growing faster than the Non-Aboriginal labour force age group. The forecast 50 year

FIGURE 1: Saskatchewan Population Forecast 1995–2045

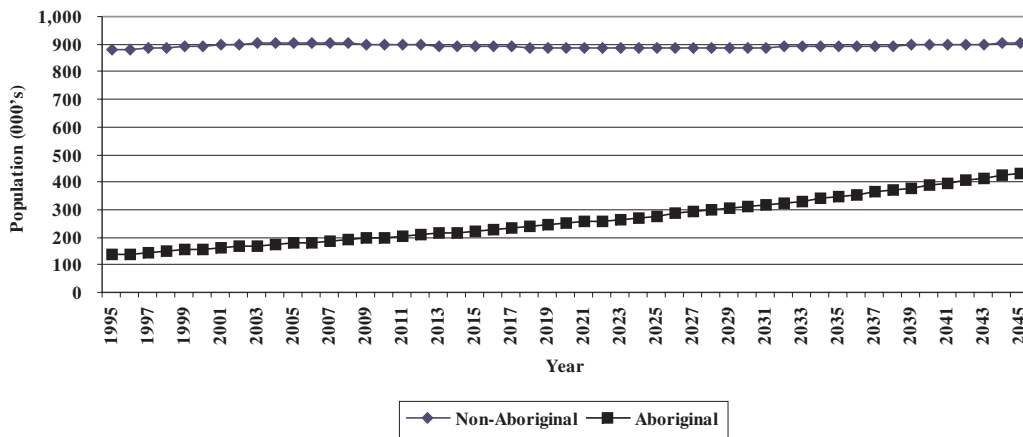
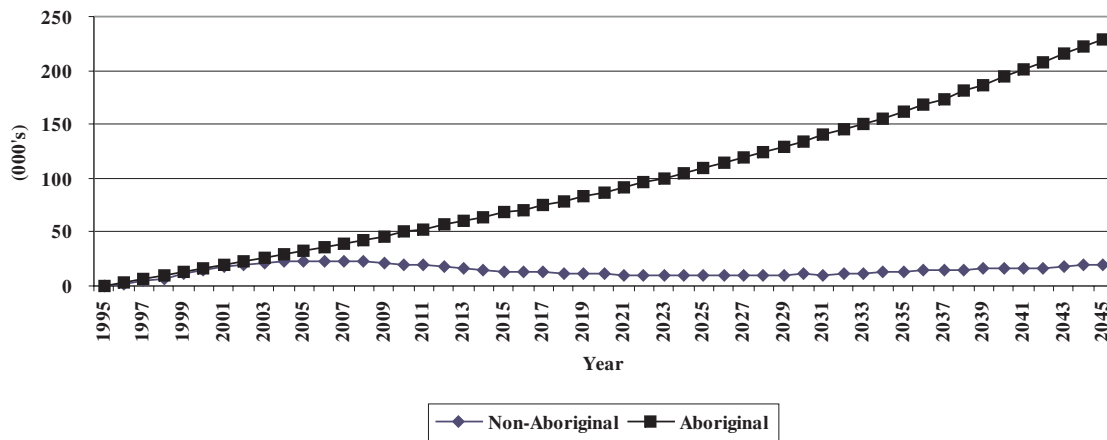


FIGURE 2: Cumulative Change in Labour Force Age Group from 1995 to 2045



average growth rate for the Saskatchewan labour force age group is 0.6% per year. When broken down, the average growth in labour force age group is 0.1% per year for Non-Aboriginal people and 2.7% per year for Aboriginal people. The Aboriginal proportion of the labour force age group in Saskatchewan is 11% in 1995 and increases to 31% by 2045. Figure 2 illustrates the cumulative change in labour force age group from 1995 to 2045 for Saskatchewan Aboriginal and Non-Aboriginal people. The difference mirrors the expected changes in population for the two groups. This forecast indicates that most of the growth in the Saskatchewan labour force

over the next 50 years is expected to come from Aboriginal communities. This is significant for government and business when planning for job placement and training in the future.

Saskatchewan Employment Forecast

The total number of jobs for Saskatchewan is projected in the aggregate economic model and broken down by Aboriginal and Non-Aboriginal employment. The rate at which employment occurs is forecast to be the same for both Aboriginal and Non-Aboriginal people, where the number of jobs for both groups will grow at an

TABLE 1
Saskatchewan Employment Rates (% of Labour Force Age Group Employed)

Year	1995	2005	2015	2025	2035	2045
Aboriginal	31%	24%	19%	16%	13%	11%
Non-Aboriginal	65%	70%	73%	77%	82%	88%
Saskatchewan	62%	63%	63%	64%	64%	64%

Source: Lendsay, Painter, and Howe (1997)

TABLE 2
Average Saskatchewan Employment Income (Constant 1995 \$)

Year	1995	2005	2015	2025	2035	2045
Aboriginal	15,210	16,856	17,465	18,476	19,890	21,631
Non-Aboriginal	22,393	24,816	25,713	27,201	29,283	31,847
Saskatchewan Average	21,988	24,368	25,248	26,709	28,754	31,271

Source: Lendsay, Painter, and Howe (1997)

average rate of 0.7% per year over the forecast period. There is expected to be increasing employment in construction, mining, public administration, services and wholesale and retail trade while there is expected to be decreasing employment in agriculture. The number of Saskatchewan jobs is expected to increase from 460,000 in 1995 to 641,000 in 2045.

The employment rate is defined as the percentage of the labour force age group that is employed, either full-time or part-time. Table 1 presents the forecast employment rate for Saskatchewan, broken down by Aboriginal and Non-Aboriginal people. The forecast is predicated on the assumption that there is no change in the current (1995) economic conditions.

Table 1 illustrates the impact of an increasing Aboriginal population and labour force age group while Aboriginal employment growth remains constant. Aboriginal population is expected to grow by 2.36% per year and the Aboriginal labour force age group is expected to grow by 2.7% per year, while Aboriginal employment is expected to grow by only 0.7% per year. This is the most important result of the forecast, which suggests a significantly decreasing employment rate in Aboriginal communities if nothing is done to change the rate at which Aboriginal people attain employment.

Saskatchewan Employment Income Forecast

Average employment income represents the average of both full-time and part-time jobs, without weighting for full-time equivalency. Therefore, the average employment income, calculated in this way, represents the average employment income received by anyone who is employed. Table 2 illustrates projected Saskatchewan employment income levels over the 50 year forecast period, in constant 1995 dollars. There is real growth expected in employment income, however, the employment income gap between Aboriginal and Non-aboriginal people remains constant in the forecast. The average rate of real growth in employment income for Aboriginal and Non-aboriginal people is projected at 0.7% per year.

Saskatchewan Personal Income Forecast

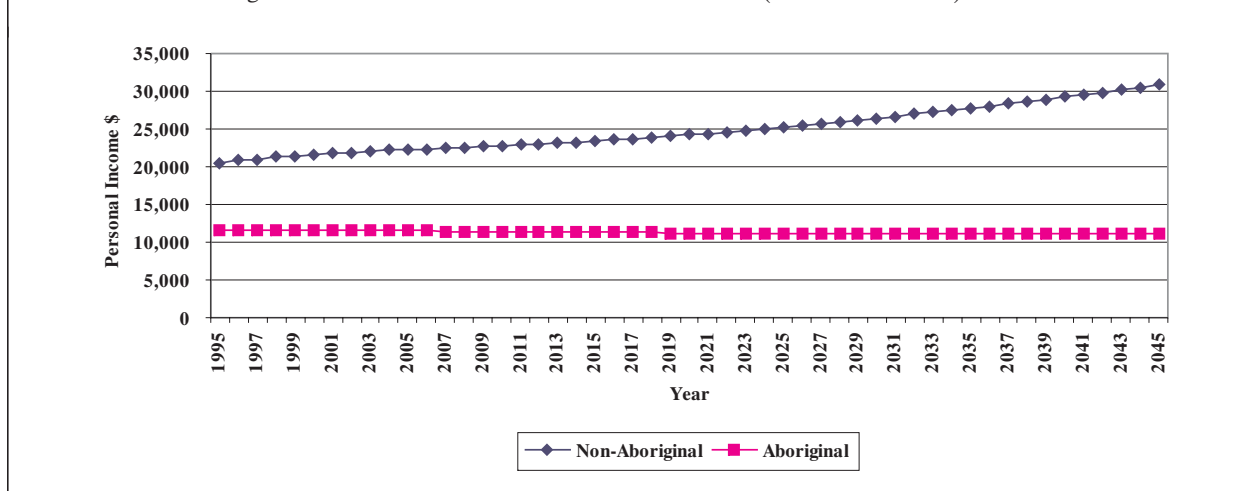
Personal income is defined as total income, or employment income plus non-employment income. Average personal income is total personal income divided by the population in the age 15 and over category. Total Aboriginal employment income was calculated in the eco-

TABLE 3
Average Saskatchewan Personal Income (Constant 1995 \$)

Year	1995	2005	2015	2025	2035	2045
Aboriginal	11,481	11,527	11,292	11,198	11,165	11,158
Non-Aboriginal	20,396	22,268	23,403	25,255	27,755	30,801
Saskatchewan Average	19,735	21,547	22,644	24,437	26,856	29,802

Source: Lendsay, Painter, and Howe (1997)

FIGURE 3: Average Saskatchewan Personal Income 1995–2045 (Constant 1995 \$)



conomic model by multiplying the average Aboriginal employment income by the expected Aboriginal employment figures. The next step for calculating average Aboriginal personal income was to project average Aboriginal non-employment income, which includes government transfers and assistance to individuals as well as investment income. The 1995 non-employment income for Aboriginal people was estimated by using total Aboriginal personal income (\$941 million) and subtracting total Aboriginal employment income (\$382 million) to get 1995 Aboriginal non-employment income of \$559 million. Average Aboriginal non-employment income per person, estimated at \$9,830 for 1995, was projected to increase each year over the forecast period at the expected rate of inflation (no real change).

While it is expected that average Aboriginal employment income will grow at the same rate as average Non-Aboriginal employment income, Aboriginal real personal income per capita is expected to decline over the 50 year forecast

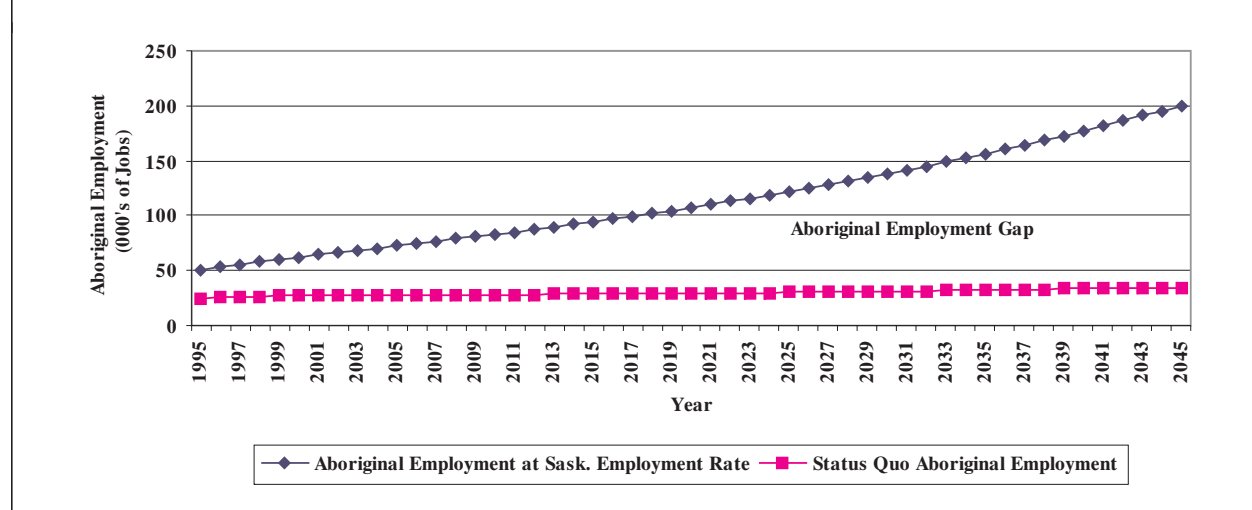
period. The reason for the decline in personal income is the decreasing Aboriginal employment rate. As the employment rate falls, the proportion of Aboriginal people who are unemployed increases, where the unemployed receive a much lower income. This has the effect of reducing the average personal income of Aboriginal people. Table 3 illustrates Saskatchewan personal income levels projected over the 50 year forecast period.

Figure 3 presents the average personal income levels for Aboriginal and Non-Aboriginal people in Saskatchewan and illustrates the increasing gap between the two groups. Over the 50 year period, Non-Aboriginal personal income is growing at an average annual real rate of 0.8% while Aboriginal personal income is declining by 0.1% (negative real growth).

The Saskatchewan Aboriginal Employment Gap

The Aboriginal employment gap is referred to as the number of new jobs required to bring the

FIGURE 4: Saskatchewan Aboriginal Employment Gap (1995–2045)

TABLE 4
Aboriginal Unemployment (000's) and Aboriginal Unemployment Rates (%)

Year	1995	2005	2015	2025	2035	2045
Aboriginal Labour Force Age Group	82	115	150	191	244	311
Sask. Participation Rate	66%	66%	66%	66%	6%	66%
Aboriginal Labour Force	54.1	76.0	99.3	126.4	161.5	205.9
Aboriginal Employment	25.1	27.7	28.7	30.1	2.3	34.9
Aboriginal Unemployment	29.0	48.3	70.7	96.3	129.2	171.0
Aboriginal Unemployment Rate	53.6%	63.5%	71.1%	76.2%	80.0%	83.0%

Source: Lendsay, Painter, and Howe (1997)

Aboriginal employment rate up to the average employment rate for the province. For example, the average employment rate for Saskatchewan in 1995 is 62%. That is calculated by dividing the total number of Saskatchewan jobs (460,000) by the total population in the labour force age group (747,000). The average employment rate for Aboriginal people in 1995 is 31%. That is calculated by dividing the number of Aboriginal jobs (25,100) by the population in the Aboriginal labour force age group (82,000). If the Aboriginal community had the same employment rate as the average for the province, there would be $82,000 \times 62\% = 50,840$ Aboriginal jobs in total. Since there are only 25,100 Aboriginal jobs, the employment gap is $50,840 - 25,100 = 25,740$ jobs. In 1995 it would take 25,740 Aboriginal jobs to close the Aboriginal employment gap.

Figure 4 illustrates the forecast Aboriginal employment gap over the next 50 years. While the average employment rate for Saskatchewan as a whole is expected to be between 62% and 64% over the forecast period, the Aboriginal employment rate is forecast to decline from 31% in 1995 to 11% in 2045. This results in an ever increasing Aboriginal employment gap.

Forecast Aboriginal Unemployment

The Aboriginal employment gap has been described in terms of employment rates. The employment gap can also be described in terms of unemployment rates for Aboriginal people over the 50 year forecast period. To calculate the Aboriginal unemployment rates, the average Saskatchewan participation rate has been applied to the Aboriginal labour force age group to

get the Aboriginal labour force. The unemployment rate is then calculated as the number of unemployed Aboriginal people divided by the Aboriginal labour force. The Aboriginal unemployment rate is presented in Table 4 and is estimated to be 53.6% in 1995, increasing to 83% by 2045.

The Saskatchewan Aboriginal Income Gap

The Aboriginal income gap is referred to as the extent to which average Aboriginal employment income is less than Saskatchewan average employment income. Average Saskatchewan employment income in 1995 is \$21,988 when averaged over all jobs, full-time and part-time. The average Aboriginal employment income, calculated in the same way, is \$15,210. The Aboriginal income gap for 1995 is \$21,988 – \$15,210 = \$6,778. Over the 50 year forecast period, Aboriginal employment income is expected to increase at the same rate as Non-Aboriginal employment income, therefore, the income gap grows at the real rate of employment income growth.

Using 1991 census data, full-time employment ratios were calculated for Aboriginal and Non-Aboriginal people in Saskatchewan. The full-time employment ratio is the number of full-time jobs divided by the total number of jobs. The full-time employment ratio for Aboriginal people was 33.2%, and for Non-Aboriginal people it was 52.8%. The income gap is a function of lower full-time employment ratios (relatively more part-time work which carries with it lower employment income) and lower rates of pay for Aboriginal people. For example, in 1991 the

average Aboriginal full-time employment income was \$24,685 while average Non-Aboriginal full-time employment income was \$28,006. Average Aboriginal part-time employment income was \$8,603 while average Non-Aboriginal part-time employment income was \$12,150. Therefore, the Aboriginal income gap is caused by lower rates of pay for Aboriginal people as well as the lower Aboriginal full-time employment ratio.

The Saskatchewan Aboriginal Economic Gap

The Aboriginal economic gap refers to the additional economic activity and employment income that would be created if both the Aboriginal employment and income gaps were closed. Table 5 illustrates the calculation of the Aboriginal economic gap for Saskatchewan. The economic gap can be calculated in two steps. The first step is to calculate the dollar amount required to bring employed Aboriginal people up to the average employment income level in Saskatchewan. This is referred to in Table 5 as 'Economic Gap I'. The second step is to calculate the dollar amount required to bring the Aboriginal employment rate up to the average Saskatchewan employment rate, at the average Saskatchewan employment income level. This is referred to in Table 5 as 'Economic Gap II'. The Total Economic Gap is the sum of Economic Gap I and Economic Gap II.

The Aboriginal economic gap in Saskatchewan can be viewed as lost opportunity for the Aboriginal community, or Aboriginal employment income that could be gained if the employment and income gaps could be closed. The economic

TABLE 5
The Aboriginal Economic Gap for Saskatchewan

Year	1995	2005	2015	2025	2035	2045
Number of Aboriginal Jobs (000's)	25.1	27.7	28.7	0.1	32.3	34.9
Aboriginal Income Gap	6,788	7,512	7,783	8,233	8,864	9,640
Economic Gap I (m \$)	170	208	223	248	286	336
Aboriginal Employment Gap (000's)	25.4	45.0	66.2	1.5	124.0	165.2
Average Saskatchewan Employment Income	21,988	24,368	25,248	26,709	28,754	31,271
Economic Gap II (m \$)	558	1,097	1,672	2,444	3,566	5,166
Total Economic Gap (millions of \$)	728	1,306	1,895	2,693	3,852	5,503

Source: Lendsay, Painter, and Howe (1997)

TABLE 6
The Aboriginal Economic Gap as a Proportion of Saskatchewan GDP

Year	1995	2005	2015	2025	2035	2045
Saskatchewan GDP (constant 1995 m \$)	25,456	32,017	38,756	47,351	58,054	71,200
Aboriginal Economic Gap (millions of \$)	728	1,306	1,895	2,693	3,852	5,503
Economic Gap as a Proportion of GDP	2.9%	4.1%	4.9%	5.7%	6.6%	7.7%

Source: Lendsay, Painter, and Howe (1997)

TABLE 7
The Aboriginal GDP Gap

Year	1995	2005	2015	2025	2035	2045
Saskatchewan GDP (constant 1995 m\$)	25,456	32,017	38,756	47,351	58,054	71,200
Sask Employment (000's)	460.0	508.2	524.2	551.4	590.8	640.6
GDP/Employed Person	55.3	63.0	73.9	85.9	98.3	111.1
Aboriginal Employment Gap (000's)	25.4	45.0	66.2	91.5	124.01	65.2
Potential Increase in Canadian GDP (m\$)	1,405	2,837	4,896	78591	2,185	18,361

Source: Lendsay, Painter, and Howe (1997)

gap of \$728 million in 1995 is approximately 2.9% of total Saskatchewan GDP, a relatively small amount. However, given the forecast growing employment gap, the Aboriginal economic gap grows to \$5.5 billion by 2045, or 7.7% of GDP at that time. Table 6 illustrates the economic gap over the forecast period, relative to total Saskatchewan GDP.

The Aboriginal GDP Gap

Table 7 presents the projected Saskatchewan GDP and the potential increase in Canadian GDP if the Aboriginal economic gap is closed. The potential increase in Canadian GDP (called the Aboriginal GDP Gap) is calculated by applying the average GDP per person employed to the Aboriginal employment gap. For example, in 1995 the Aboriginal employment gap is estimated to be 25,400 jobs. Also for 1995, the average Saskatchewan GDP per person employed is \$55,339. The potential increase in Canadian GDP is estimated by multiplying the Aboriginal employment gap by the average GDP produced by an employed person. Therefore, the potential increase in Canadian GDP is 25,400 x \$55,339 to arrive at \$1,405 million.

Because the population of Saskatchewan can easily migrate, we cannot say how much of the potential increase in Canadian GDP would attribute to Saskatchewan. It is possible that closing the Aboriginal economic gap would mean that more Aboriginal people are employed in Saskatchewan and less Non-Aboriginal people, leaving total Saskatchewan employment and GDP unchanged from the forecast amounts. In that case, we would expect that Canadian GDP would increase, but it is not possible to say which area of Canada would be the beneficiary. However, it is also possible that in closing the Aboriginal economic gap, economic activity is created in Saskatchewan that would not otherwise have been present. For example, this would be true if the new economic activity is a result of Aboriginal culture, Aboriginal specific initiatives, or Aboriginal industries that would not otherwise have been created.

The Economic Cost of Aboriginal Unemployment

There are two important economic costs associated with Aboriginal unemployment. The first is

TABLE 8
The Costs of Social Assistance for Aboriginal People (Constant 1995 \$)

Year	1995	2005	2015	2025	2035	2045
Aboriginal Labour Force Age Group (000's)	82	115	150	191	244	311
Aboriginal Employment	25.1	27.7	28.7	30.1	32.3	34.9
# of Aboriginal People Receiving Federal Assistance	12.4	19.0	26.4	34.9	46.0	60.0
# of Aboriginal People Receiving Provincial Assistance	17.3	26.6	36.9	48.9	64.4	84.0
Average Social Assistance/Person	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000
Total Fed Social Assistance to Aboriginal People (m\$)	98.8	151.7	210.9	279.5	367.9	479.8
Total Provincial Social Assistance to Aboriginal People (m\$)	138.4	212.4	295.3	391.5	515.2	672.0
Total Social Assistance to Aboriginal People (m\$)	237.3	364.1	506.2	671.0	883.1	1,151.8
Sask Gov't Budget (m\$)	5,200	5,901	6,589	7,503	8,657	10,068
Provincial Social Assistance (% of Sask Gov't Budget)	2.7%	3.6%	4.5%	5.2%	6.0%	6.7%
Total Social Assistance to Aboriginal People (% of Sask Gov't Budget)	4.7%	6.2%	7.7%	8.9%	10.2%	11.4%

Source: Lendsay, Painter, and Howe (1997)

the waste of human capital resources that could otherwise be employed to enhance Canadian and Saskatchewan GDP. This cost has been illustrated by presenting the employment, income, economic, and GDP gaps. The second economic cost associated with Aboriginal unemployment is the government cost of social assistance for those who do not have a job. As Aboriginal unemployment increases over the 50 year forecast period, the government cost of social assistance will also increase. Table 8 presents the projected number of people in the aboriginal labour force age group who are unemployed and the expected average real cost of social assistance. In Saskatchewan, the current social assistance received by a single person is \$465 per month, or \$5,580 per year. Individuals who are in families with children receive greater amounts, depending on the number of children. The amounts paid by the federal government for on-reserve Aboriginal people is similar to the provincial amounts.

To forecast the cost of social assistance (welfare only, not including employment insurance), current data on Aboriginal social assistance was received from both the Saskatchewan Department of Social Services and Indian and Northern Affairs Canada (INAC). For the Saskatchewan provincial government, there were (in March 1997) 17,304 Aboriginal adults receiving social assistance, at an average annual amount of

\$8,183. For INAC, there were 12,356 Aboriginal adults receiving assistance at an average annual amount of \$7,928. This totals to 29,660 Aboriginal adults receiving social assistance, at a weighted average amount of \$8,076 per year. As a proportion of the Aboriginal labour force age group, there were approximately 36% receiving social assistance from either Saskatchewan Social Services or INAC. As a proportion of unemployed Aboriginal people, there were approximately 52% receiving social assistance. For the forecast, we have estimated the average government assistance to be \$8,000 per recipient for 1995, increasing each year at the expected rate of inflation (no real growth). We have also assumed that 52% of unemployed Aboriginal people will receive social assistance over the forecast period. Table 8 presents the projected costs of social assistance for Aboriginal people in Saskatchewan, over the 50 year forecast period.

Table 8 illustrates the increasing government social costs as Aboriginal unemployment increases over the 50 year forecast period. It shows the increasing real dollar cost of social assistance to the Federal and Provincial governments. It also shows the increasing social cost proportion of the Saskatchewan provincial budget. If the Saskatchewan provincial government continues to share the cost of Aboriginal social assistance with the federal government,

TABLE 9
Educational Attainment of the Employed Labour Force in Canada (thousands of people)

<i>Educational Attainment</i>	<i>1990</i>	<i>1996</i>	<i>Annual % Change</i>
Did Not Complete High School	3,377	2,658	-3.9%
Received High School Diploma	2,857	2,949	0.5%
Some Education After high School, Including Trade Certificates	6,338	8,069	4.1%
Total	12,572	13,676	1.4%

Source: Labour Force Annual Averages

TABLE 10
Educational Attainment of the Employed Labour Force in Saskatchewan (thousands of people)

<i>Educational Attainment</i>	<i>1990</i>	<i>1996</i>	<i>Annual % Change</i>
Did Not Complete High School	137	111	-3.4%
Received High School Diploma	111	110	-0.2%
Some Education After high School, including Trade Certificates	201	241	3.1%
Total	449	461	0.4%

Source: Labour Force Annual Averages

at the current federal/provincial proportions, by 2045 the proportion of the Saskatchewan budget going towards Aboriginal social assistance is forecast to be 6.7%, compared to the current 2.7%. If the Saskatchewan government takes total responsibility for Aboriginal social costs, the proportion of the budget going towards Aboriginal social assistance is forecast to increase to 11.4%.

The Aboriginal Education Gap

Part of the reason for the Aboriginal economic gap is the lower than average education level in the Aboriginal community. An educated workforce is important for future employment in Canada and Saskatchewan. Table 9 shows the educational attainment of Canadian employees and the change in those levels of attainment thus far in the 1990's. Note that employment of people who do not complete high school has fallen by 3.9% per year. The primary reason for this change is the increasing skill, knowledge and training requirements demanded in the labour force. Employment of people who have some education beyond high school has increased 4.1% per year. Employment of people whose highest

level of educational attainment is a high school diploma increased, but only moderately. In fact (although the table does not include unemployment rates) during the period 1990-1996, the unemployment rate for people with only a high school diploma went from being significantly less than the Canadian average unemployment rate to being somewhat higher.

Table 10 shows that the educational requirements of employment in Saskatchewan are similar to that of the whole of Canada. Employment of people with less than a high school education decreased by a large amount, 3.4% per year. But employment of people with some education after high school increased by 3.1% per year. Employment prospects for people with a high school diploma decreased moderately.

Tables 9 and 10 show that education is required in order to obtain a job in Saskatchewan or elsewhere in Canada. Moreover, even if an individual with a lower education level manages to obtain a job, their rate of pay will be less. That is a problem for Aboriginal people because there exists an education gap between the average levels of education for Aboriginal and Non-Aboriginal people, as shown in Table 11.

TABLE 11
The Aboriginal Education Gap in 1991 (population % age 15 and over)

<i>Educational Attainment</i>	<i>Aboriginal</i>	<i>Non-Aboriginal</i>	<i>Education Gap</i>
Did Not Complete High School	60.4%	44.5%	15.9%
Received High School Diploma	6.6%	11.5%	-4.9%
Some Education After high School, including Trade Certificates	41.7%	55.3%	-13.6%

Source: Aboriginal Peoples Survey (percentages do not add to 100% due to overlap)

In the Aboriginal community, 60.4% of the population 15 and over have not completed high school; people who haven't completed high school have difficulty finding jobs and are paid at a lower rate if they are employed. Less than half of Aboriginal people 15 and over have any education after high school; people with some education after high school have a much better chance of finding a job and are paid at a higher rate when they are employed. The problem of the Aboriginal education gap is compounded by the fact that the Aboriginal population is growing at a significant rate. Consequently, enrollments in educational programs must increase at a rate to match the emerging population rate and an additional increase is required to close the education gap.

The Economic and Social Implications of the Forecast Aboriginal Economic Gap

The forecast provides a bleak picture of the economic and social future of Saskatchewan. The forecast is predicated on a scenario where the growth in the Aboriginal economic and education gaps is unabated. The most obvious economic consequence is the loss of economic potential and GDP due to the waste of human capital resources, which is illustrated by the high and growing Aboriginal unemployment rate. The potential increase in economic activity that could be derived from closing the Aboriginal economic gap is very significant for Saskatchewan's economy. While the whole province would benefit economically from closing the Aboriginal economic gap, the largest beneficiaries would be Aboriginal people and Aboriginal communities, as more Aboriginal people were employed and average Aboriginal personal income increased.

Another important economic consequence is that the cost of government social assistance will increase significantly if the Aboriginal economic gap is allowed to grow. Since the Saskatchewan and Federal governments are responsible for funding welfare, either Saskatchewan taxes will increase significantly or the increase in welfare spending will displace funding of other government programs, such as health care or education. In either case, Non-Aboriginal people, governments, and the business community will be affected. If the growing Aboriginal population experiences an increasing unemployment rate, the burden on the wealth producing sectors of the Saskatchewan economy will become greater and greater, which could cause a serious out-migration of taxpayers if Saskatchewan's tax rates increase significantly, relative to tax rates in other jurisdictions. The Saskatchewan business community could face increased provincial taxes and severe shortages of skilled labour and management, which could lead to out-migration of important job-producing companies.

The social implications of the growing Aboriginal economic gap are no less serious than the economic implications. The most striking social consequence of a growing Aboriginal economic gap is the abject poverty within Aboriginal communities. The forecast illustrates that average personal income of Aboriginal people is \$11,481 in 1995, compared to \$20,396 for Non-Aboriginal people, which indicates that average Aboriginal personal income is only 56% of Non-Aboriginal personal income. Given that this is a serious problem today, the forecast illustrates that it could get much worse in the future. The forecast average Aboriginal personal income for 2045 is only \$11,158 compared to \$30,801 for Non-Aboriginal people. At that point average Aboriginal personal income is only 36% of Non-

Aboriginal personal income. Forecast average Aboriginal personal income does not increase but rather decreases over the 50 year period, implying that the poverty situation in Aboriginal communities would be even worse than it is today, if the gaps are not addressed.

Confounding the economic gap and growing poverty situation is the Aboriginal education gap. It is clear that increasingly higher education levels are required to attain employment. If Aboriginal people have consistently lower levels of education, then they will continue to bear the brunt of the unemployment in Saskatchewan and Canada. Unemployment leads to welfare dependency and, over time, can lead to a welfare mentality or what is often referred to as the 'welfare trap'. People may tend to give up trying to become employed after years of not being able to get a job. Children who are raised in such an environment may come to believe that welfare dependency is simply a fact of life and that education is not important or necessary. So the dual problem is that with inadequate education, Aboriginal people will be unemployed, but if they are unemployed, there is a greater chance that Aboriginal education levels will continue to be lower than average. Therefore, Aboriginal unemployment and Aboriginal education must jointly be considered in any strategy designed to decrease and eliminate the economic gap.

Managing the Aboriginal Economic Gap

Developing initiatives to close the Aboriginal economic gap is the responsibility of all Saskatchewan people and organizations. It is the Aboriginal people and Aboriginal communities who have the most to gain or the most to lose. If nothing is done to change the current trend of increasing Aboriginal unemployment, Aboriginal people will suffer the most. Therefore, Aboriginal organizations, governments, and leaders should be at the forefront in developing strategies and programs to manage and eventually eliminate the economic gap. It is absolutely crucial that Aboriginal individuals, families, and communities become involved in this process. Aboriginal people must be committed to solving the unemployment problem. If they are not, strategies, programs, and initiatives will fail. Ultimately, it must be Aboriginal individuals, families, and communities who will close the economic gap, but they need assistance in doing so. That is where other stakeholders have a role to play.

The role of Aboriginal governments and leaders is to develop strategies and initiatives that will help Aboriginal people to increase their education levels, create economic activity through Aboriginal economic development, and attain jobs. In assisting with education, Aboriginal orga-

TABLE 12
Aboriginal Post-Secondary Enrollment in Saskatchewan (1996)

<i>First Nations Institutions</i>	<i>Enrollment</i>
Saskatchewan Indian Institute of Technology	809
Saskatchewan Indian Federated College	1,542
Teacher Education: ITEP, NORTEP	504
<i>Metis Institutions</i>	
Gabriel Dumont Institute	120
Dumont Technical Institute	136
Teacher Education: SUNTEP	144
<i>Non-Aboriginal Institutions</i>	
Saskatchewan Indian Institute of Applied Technology	2,321
University of Saskatchewan (All Colleges except Education)	651
College of Education	1,611
Total Number Enrolled	7,838

Source: Lendsay, Painter, and Howe (1997)

nizations have made significant gains in recent years through increasing enrollment in Aboriginal post-secondary programs. Table 12 provides a sample of Aboriginal post-secondary enrollment figures for 1996. There are other Aboriginal students enrolled in other non-native institutions and native programs that were not included in this sample.

Aboriginal communities also need to increase the number of students who complete high school. One improvement in this area is the increasing number of Aboriginal teachers in Aboriginal communities and schools. In addition to having more Aboriginal teachers, Aboriginal leaders, parents, and community organizations need to continuously stress the value of education to Aboriginal children. The formula for success and an essential component of any strategy aimed at closing the economic gap is education, education, education. Aboriginal governments, along with federal and provincial governments, must ensure that the proper educational infrastructure is in place so that there are no barriers to completing high school and moving on to post-secondary training. The final responsibility for ensuring that young Aboriginal people become educated rests with parents and the communities, who must provide on-going encouragement for achieving higher educational levels and the community respect and recognition to individuals when those levels are achieved.

Besides education, the other important area that must be considered is Aboriginal economic development, which will create jobs for Aboriginal people. Once again, there is a role for the federal, provincial, and Aboriginal governments in facilitating economic development initiatives and job creation. Ultimately, it must be Aboriginal people, in conjunction with the Saskatchewan business community, who will sustain any economic development initiatives. Governments can and should facilitate job creation but they cannot solve the unemployment problem by simply hiring people because that is not economically sustainable. Governments can best facilitate Aboriginal economic development and job creation by ensuring a good educational infrastructure, providing assistance with market research and development, feasibility analysis, and business planning, and providing assistance in obtaining financing. All of these can be part of an Aboriginal economic and business development strategy that involves, and is possibly led by, governments.

The objective of an Aboriginal business development strategy is to create jobs for Aboriginal people by providing a path for individuals and communities to invest their time, human capital, and financial capital into successful business ventures. The economic forecast indicates that over the next 50 years, there is expected to be increasing employment in construction, mining, public administration, services, and wholesale and retail trade. There is expected to be decreasing employment in agriculture, where agriculture is defined as grain and livestock production. The economic forecast indicates that by 2045, 44% of all Saskatchewan jobs will be in the service sector, with the second largest employer being the wholesale and retail trade industry. Aboriginal communities should consider targeting these two industries and plan to have Aboriginal businesses provide services and retail products in their own communities, at a minimum. If Aboriginal businesses have a competitive advantage in Aboriginal communities, then, because of the growing Aboriginal population, supplying Aboriginal people in the services and retail industries should experience significant growth as well. A reasonable target and expectation is to have Aboriginal businesses provide services and retail products to Aboriginal people in Aboriginal communities. This is no different than expecting that Aboriginal teachers will provide education in schools located in Aboriginal communities.

Capabilities and competitive advantage should be used for long term community business planning. Capabilities refers to the human capital available to the community or region. The human capital development plan is critical for business development. Every business and industry requires certain skills and knowledge, which means that the education and training programs must be linked to the business development strategy. The long term community plan should show education and training integrated with business and economic development. Economic development cannot occur without human capital development. Capabilities must be developed through education and training before economic development can occur. Each community should take an assessment of their human capital inventory, which is an assessment of their capabilities, before they begin to plan the business development.

Each Aboriginal community should also assess the areas in which they feel they have a

competitive advantage. For example, ownership of natural resources provides a competitive advantage when it comes to mining, forestry, and processing. A construction company located in the community should have a competitive advantage when it comes to building homes, since its operating costs should be lower than construction firms outside the community. Retail firms in the community should have a competitive advantage because they are closer to their customers. A community may have a competitive advantage in tourism if the community is located near forests, lakes, rivers, or other natural sites that attract tourists. A community may have a competitive advantage if it has a strong historic, cultural or social component. And, a community may have a competitive advantage in a labour intensive business, if it has a good supply of skilled workers who are able to provide their skills to a business at a reasonable unit labour cost. Each Aboriginal community should consider where its competitive advantages exist and develop their long term business development strategies around those advantages. The communities should also be aware of those initiatives and businesses in which they do not have a competitive advantage. Those business initiatives should not be pursued.

The base for a community or regional Aboriginal business development strategy should be the capabilities assessment and the competitive advantage assessment. The plan should include business development over time, as well as capability development (education and training) to match the business development. The capabilities and business development should be integrated in the overall economic and business development plan.

Conclusion

The growing Aboriginal economic gap in Saskatchewan is a serious problem. By the end of the 50 year forecast, only eleven percent of the Aboriginal labour force age group is employed assuming socio-economic conditions remained unchanged. The economic impact of this is devastating for Aboriginal people and the Province of Saskatchewan.

Positive changes have been implemented in Saskatchewan. The focus on education and training has resulted in more students completing grade twelve and more students entering post-secondary education and training programs. Partnerships between educational institutions and the

private sector can help to address the education gap.³ Focusing and concentrating on the positive strategies and initiatives must continue in order to slow and reverse the growing economic gap.

We have concluded that Aboriginal education and economic development strategies must be continued (those that are in existence) and developed in order to manage and eventually close the economic gap. For Aboriginal communities to close the economic gap, Aboriginal people have to be competitive with the rest of the world in human capital. Increasing the level of Aboriginal human capital will assist business and government in creating economic activity. Both Aboriginal and Non-Aboriginal companies can assist in decreasing the Aboriginal economic gap by recognizing Aboriginal human capital in their business planning.

NOTES

1. Aboriginal People includes the Inuit, First Nations and Metis peoples of Canada as defined by Section 35(2) of the Constitution Act 1982.
2. The methodology of empirical macroeconomic model building is discussed at length in Almon (1989), Fair (1984 and 1994), and Treyez (1993). There is an annotated list of macroeconomic models in Uebe and Fischer (1992). PREMOS is described at length in Howe (1995).
3. For example, the Saskatchewan Indian Federated College and the College of Commerce at the University of Saskatchewan have an MBA Program that provide students with the opportunity to concentrate on Aboriginal issues. The Scotiabank provided funding to the College of Commerce to establish "The Director of Aboriginal Business Programs-Scotiabank Directorship"; a position dedicated to further the development of Aboriginal business education.

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