Tax Revenue and Human Capital Development in Canada: A Complex Relationship

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Abstract

This study investigates the correlation between tax income and the growth of human capital in Canada. It utilizes data on educational achievement and health spending from 2000 to 2020 obtained from the World Bank. VAR/VECM analysis was employed to examine the relationship between tax revenue and two human capital development metrics. Granger Causality tests indicated that there were no immediate causal effects between tax revenue and the two human capital development metrics. Nevertheless, a cointegrating relationship indicates a stable and balanced long-term connection. Curiously, it was discovered that previous educational achievements have a negative effect on tax revenue, indicating the need for additional research into the underlying causes. The study emphasizes the intricate nature of tax policy and human capital development, suggesting future research to integrate supplementary aspects and employ more advanced models to achieve a more full comprehension.

Keywords: Tax Revenue, Human Capital, Canada, Economics
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Introduction

Everybody agrees that a population's health, education, and abilities make up its human capital, and that this in turn drives economic growth and social well-being (Becker & Gary, 1964). Canada, like other developed nations, invests substantially on healthcare and education to foster a creative and productive workforce capable of competing on a global scale. Despite the well-established correlation between human capital and economic success, there is a severe lack of study into the precise processes by which health and education expenditures pay off financially. These characteristics are frequently treated as general categories in the existing research.

One of the most important aspects of human capital is level of education. A country's productivity and economic potential are affected by it since it has a major impact on the workforce's skills and capacities (Hanushek & Woessmann, 2023). The proportion of Canadians aged 25 and up who have completed some kind of post-secondary education has been rising over the past few decades. This pattern shows that the government is serious about raising the level of education its residents have.

Around 57.5 percent of Canadians between the ages of 25 and 64 have completed some kind of postsecondary education, reports The Globe and Mail. This number exemplifies the effectiveness of Canadian policies that sought to expand access to post-secondary education and the country's focus on higher education. A robust human capital foundation is demonstrated by the high level of educational attainment among Canadians. Economic growth and progress are impossible without a strong foundation of human capital. It guarantees that workers have the education and experience to adapt to an ever-evolving economy. A highly educated populace also has a leg up when it comes to driving economic growth, adapting to new technology, and innovating. A rising level of education is, thus, a promising sign for Canada's future economic growth and development (Campbell, 2021).

Human capital also includes health expenditures. The proportion of GDP spent on healthcare in Canada has changed throughout time. The percentage of GDP that went for healthcare was 11.7% in 2021. In 2022, this number is projected to reach 12.2% (Statista, 2022). A healthy population is essential for a productive workforce, and high health expenditures show that the people's health is a major investment priority. Further, all spending on healthcare, including visits to the doctor, prescription drugs, and hospital stays, is included in health expenditure (Butler, 2020). According to Stats Canada (2021), the entire expenditure on healthcare in Canada amounted to around $308 billion, which translates to $8,019 per Canadian. The COVID-19 pandemic was a major factor in this expenditure boom since it called for more resources to strengthen health care systems, conduct tests, and provide vaccines. In order to handle public health emergencies and keep the economy stable, a strong healthcare system is crucial, as the pandemic demonstrated (Assefa et al., 2022).

According to Stats Canada (2021), the national health budget in Canada was anticipated to reach $331 billion in 2022, or to $8,563 for every Canadian. This expansion is due to both the pandemic's effects and other demographic variables, such as an aging and expanding population. Health spending is expected to increase due to the growing demand for healthcare services caused by an aging population. Health spending has increased for a number of reasons, one of which being the resumption of postponed treatment from the epidemic.

It is worth mentioning that Canada's health spending is distributed differently. According to National Health Care Spending (2023), the three main categories that received the most amount of money in 2022 were hospitals, doctors, and pharmaceuticals. Specifically, hospitals accounted for 9% of the total. Hospital expenditure has increased due to backlog reduction efforts, delayed demand for care, and other factors. As healthcare services progressively restarted post-pandemic, spending on physician services and pharmaceuticals also grew. When taken as a whole, Canada's high health spending reflects the importance the government places on its citizens' well-being. A healthy population is in a better position to contribute to economic growth and development, thus this investment is critical for keeping a productive workforce. Access to high-quality healthcare is critical to a country's health and economic growth, and Canada is making health spending a top priority to guarantee this for its residents.

Essential public services like education and healthcare are made possible by tax income, which is a vital foundation of government finance (Coote & Percy, 2020). The health and progress of the populace depend on these services. The contribution of tax revenue to Canada's Gross Domestic Product (GDP) highlights the importance of this income source for the government. According to the OECD (2023), tax income was recorded at 13% of GDP in 2022. Investments in human capital cannot be sustained or improved without this massive influx of tax money.

Government spending pays out handsomely in two essential areas: education and healthcare. A well-informed and competent workforce is the result of a well-funded educational system that guarantees all residents have access to high-quality educational opportunities. In order to foster innovation, adaptability, and productivity—three cornerstones of economic growth—a highly educated populace is necessary. Equally important for maintaining a healthy population is investment in healthcare. People are able to live long, healthy lives devoid of crippling illnesses and ailments when they have access to high-quality healthcare services (Jayasinghe, Faghy & Hills, 2022). There will be less expense associated with sick days and employee absences and greater productivity from a healthy staff. More effective use of healthcare resources is possible in the long run thanks to public health programs and preventative treatment, which also lessen the strain on the system.

The beneficial effects of health and education on economic growth have been shown in several research. Higher levels of education are linked to greater job opportunities and higher

pay, according to Rodríguez-Hernández, Cascallar & Kyndt (2020). Better health outcomes are associated with increased productivity and decreased absenteeism (Labrague, Nwafor, & Tsaras, 2020). Investing in people creates a positive feedback loop wherein more money comes in via taxes, which can be used to fund further investments in people, and so on.
First hypothesis: between 2000 and 2020, tax revenue in Canada is positively and significantly correlated with educational attainment.
Second Hypothesis: Between the years 2000 and 2020, there will be a positive and statistically significant correlation between tax income and health spending in Canada.
Third Hypothesis: From 2000 to 2020, Canada's GDP will increase at a faster rate if more people get degrees.
From 2000 to 2020, the Canadian economy will increase thanks to higher health spending, according to the fourth hypothesis.
Human capital development (as measured by educational attainment and health spending) in Canada will be greater from 2000 to 2020 if tax measures that raise revenue do not. This is Hypothesis 5.
Sixth Hypothesis: in the Canadian context from 2000–2020, a Vector Autoregression (VAR) model provides a more satisfactory explanation of the link between tax income and human capital development (i.e., educational attainment and health spending) than a Vector Error Correction Model (VECM).

Literature review

Everybody agrees that a population's health, education, and abilities make up its human capital, and that this in turn drives economic growth and social well-being (Becker & Gary, 1964). Canada, like other developed nations, invests substantially on healthcare and education to foster a creative and productive workforce capable of competing on a global scale. Despite the well-established correlation between human capital and economic success, there is a severe lack of study into the precise processes by which health and education expenditures pay off financially. These characteristics are frequently treated as general categories in the existing research.
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Methodology

Using quantitative explanatory research approaches (Creswell, 2008) and the Eviews program for measurement, this study makes use of secondary data. With data from each variable provided in annual form by the World Bank from 2000 to 2020 and Canada as the sample country, the quantitative approach uses VAR/VECM estimates to measure the short-term or long-term influences between Tax Revenue, Educational Attainment, and Current Health Expenditure. The following system of equations is utilized in this investigation:

$$TRt = \beta0 + \beta1EAt + \beta2HEt + et$$
$$EAt = \beta0 + \beta1TRt + \beta2HEt + et$$
$$HEt = \beta0 + \beta1TRt + \beta2EAt + et$$

Description:
TR : Tax Revenue
EA : Educational Attainment
PHE : Current Health Expenditure
β : The magnitude of the effect of causality
e : Error term
t : Time period

Table 1. Variable Description

Variable	Definition	Data source
Tax Revenue In percent (%) With the symbol (TR)	Tax revenue refers to compulsory transfers to the central government for public purposes. Certain compulsory transfers such as fines, penalties, and most social security contributions are excluded. Refunds and corrections of erroneously collected tax revenue are treated as negative revenue.	World Bank
Educational Attainment In percent (%) With the symbol (EA)	The percentage of population ages 25 and over that attained or completed post-secondary non-tertiary education.	World Bank
Current Health Expenditure In percent (%) With the symbol (HE)	Level of current health expenditure expressed as a percentage of GDP. Estimates of current health expenditures include healthcare goods and services consumed during each year. This indicator does not include capital health expenditures such as buildings, machinery, IT and stocks of vaccines for emergency or outbreaks.	World Bank

Discussion of Results

The unit root test has to be finished before the VAR/VECM estimation can be started. The goal of this test is to determine if the estimated values of the individual coefficients in the autoregressive model are identical. The results of this assessment, which used the Augmented Dicky Fuller Model, or ADF Test, were:

Table 2. Unit Root Test

Variables	Unit Root Test	Statistics ADF	Probability	Information
Tax Revenue	Level	-0.999811	0.7325	Non-stationary
	1st Difference	-5.577494	**0.0003**	**Stationer**
Educational Attainment	Level	0.169012	0.9631	Non-stationary
	1st Difference	-2.451601	0.1420	Non-stationary
	2nd Difference	-3.439451	**0.0231**	**Stationer**
Current Health Expenditure	Level	-1.076377	0.7012	Non-stationary
	1st Difference	-2.391835	0.1575	Non-stationary
	2nd Difference	-7.766688	**0.0000**	**Stationer**

The findings of the Unit Root Test in table 2 show that three variables—tax revenue, educational attainment, and current health expenditure—are stationary. Based on the data, it appears that the Tax Revenue series is not stationary; specifically, the ADF statistic is -0.999811 with a probability of 0.7325. Still, the ADF statistic improves to -5.577494 with a probability of 0.0003 at the 1st difference, indicating that the series becomes stable.
According to the data, Educational Attainment is not stationary; the ADF statistic at the level is 0.169012, and the likelihood is 0.9631. This series is still non-stationary even after accounting for the first difference; its ADF statistic is -2.451601 and its probability is 0.1420. Based on the ADF statistic of -3.439451 and the likelihood of 0.0231, the series becomes stationary at the second difference. Similarly, in the case of Current Health Expenditure, the analysis reveals that non-stationarity is indicated by an ADF statistic of -1.076377 with a probability of 0.7012. Even after accounting for the first difference, the series does not exhibit stationarity; the ADF statistic reads -2.391835, and the probability is 0.1575. The series becomes stable at the second difference, though, with an ADF statistic of -7.766688 and a probability of 0.0000. At the first difference, tax revenue becomes stationary, whereas at the second difference, educational attainment and current health expenditure both become stagnant. The purpose of the VAR lag order test is to remove autocorrelation issues from VAR/VECM estimates; the models that are tested here include LR, FPE, AIC, SIC, and HQC.

Table 3. VAR Lag Order Selection Criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-41.18296	NA*	0.050274*	5.522870	5.667730*	5.530288
1	-36.52669	6.984412	0.089339	6.065836	6.645277	6.095508
2	-24.51847	13.50925	0.071790	5.689808	6.703831	5.741734
3	-17.15801	5.520343	0.139475	5.894751	7.343355	5.968931
4	-1.499349	5.871997	0.218676	5.062419*	6.945604	5.158853*

Several columns are included in the VAR lag order selection criteria table that you provided: Lag, Log Likelihood, Likelihood Ratio, Final Prediction Error, Akaike Information Criterion, Schwartz Criterion, and Hannan-Quinn Criterion to name a few. See how many delays are part of the VAR model in the Lag column. The LogL column displays the log likelihood values for every lag order; larger values signify a more accurate model fit. More substantial improvements in model fit are shown by larger values in the LR column, which offers the likelihood ratio test statistics for comparing models with different lag orders. With lower values indicating greater predictive accuracy of the model, the FPE column provides the final prediction error for each lag order. Every lag order's AIC value is presented in the AIC column; lower values denote a better model fit. The SC values for each lag order are displayed in the SC column; lower values signify a better model fit. You can find the HQ values for each lag order in the HQ column; lower values mean that the model fits the data better. The model with Lag 0 has the lowest FPE (0.050274), suggesting the highest prediction accuracy, as can be seen from table 3. The best model by these measures is the one with Lag 0 since it also has the lowest AIC (5.522870) and HQ (5.530288). And according to this measure as well, the best model is the one with Lag 0 as it has the lowest SC (5.667730). To conclude, the model with a Lag of 0 is the best option according to the FPE, AIC, SC, and HQ criteria. The VAR stability test determines if the VAR estimate is stable; an unstable VAR estimate renders the IRF invalid in the final test. What follows are the findings of this examination

Table 4. Roots of Characteristic Polynomials

No	Root	Modulus
1	-0.701771 - 0.567007i	0.902208
2	-0.701771 + 0.567007i	0.902208
3	0.131091 - 0.874067i	0.883843
4	0.131091 + 0.874067i	0.883843
5	0.530361 - 0.247307i	0.585187
6	0.530361 + 0.247307i	0.585187

According to Table 4 the modulus of all characteristic root values is less than 1. Thus, it is safe to say that the analysis's estimating model is stable. The findings of the Granger causality test, which is used to demonstrate the reactive link between variables, are:

Table 5. Granger Causality Test

Null Hypothesis	F-Statistic	Prob.
D(HE) does not Granger Cause D(EA)	16	1.49766
D(EA) does not Granger Cause D(HE)	0.55189	0.7046
D(TR) does not Granger Cause D(EA)	16	0.98625
D(EA) does not Granger Cause D(TR)	2.02370	0.1954
D(TR) does not Granger Cause D(HE)	16	1.78538
D(HE) does not Granger Cause D(TR)	0.29425	0.8729

All of the variables do not have a Granger cause relationship, as shown in Table 5 from the Pairwise Granger Causality Tests. In particular, the typical significance levels (e.g., 0.05, 0.01) are surpassed by the probability values of all the null hypotheses. The probability value of 1.49766 for the null hypothesis that D(HE) does not Granger cause D(EA) is higher than the significance levels, thus we cannot reject it. Likewise, we cannot reject the null hypothesis because the probability value is 0.7046 for the hypothesis that D(EA) does not Granger cause D(HE). The other hypotheses follow the same pattern: 0.98625% chance that D(TR) does not Granger cause D(EA), 0.194 % chance that D(EA) does not Granger cause D(TR), 1.78538% chance that D(TR) does not Granger cause D(HE), and 0.8729 % chance that D(HE) does not Granger cause D(TR). So, we may deduce from these findings that the variables D(HE), D(EA), and D(TR) do not exhibit Granger causality. The long-term effect between variables can be examined by cointegrity tests. The following are the test findings of the Johansen Cointegration-based cointegration test:

Table 6. Cointegration Test

Hypothesized	**Eigenvalue**	**Trace**	**0.05 CV**	**Prob.****
None *	**0.874429**	**44.93956**	**29.79707**	**0.0005**
At most 1	0.443345	11.74138	15.49471	0.1698
At most 2	0.137592	2.368421	3.841466	0.1238

As shown in Table 6, the purpose of doing the Johansen Cointegration Test is to ascertain the existence of a long-term link between several time series. According to the findings of the tests, there is a single cointegrating link between the variables. The first hypothesis accounts for the absence of cointegration and has the following parameters: eigenvalue=0.874429, trace statistic=44.93956, 0.05 critical value=29.79707, and probability= 0.0005. We may reject the null hypothesis of no cointegration since the trace statistic is larger than the crucial value and the probability is less than 0.05. This means that there is at least one cointegrating link among the variables. Assuming no more than one cointegration, the second hypothesis has an eigenvalue of 0.443345, a trace statistic of 11.74138, a 0.05 critical value of 15.49471, and a probability of 0.1698. We cannot reject the null hypothesis of no more than one cointegrating link since the probability is higher than 0.05 and the trace statistic is lower than the crucial value. This points to the possibility of a single cointegrating link among the variables. Under the third hypothesis, which states that no more than two cointegrations would be considered, the following values are given: eigenvalue: 0.137592, trace statistic: 2.368421, 0.05 critical value: 3.841466, and probability: 0.1238. Again, we can't rule out the possibility of more than two cointegrating interactions because the probability is more than 0.05 and the trace statistic is lower than the crucial threshold. Everything considered, the results show that the variables are in a long-term equilibrium connection with one another (cointegrating), and that any departures from this equilibrium are mean-reverting. One reason to use VECM estimate is to understand how different factors affect each other in the short and long run. The following are the anticipated conclusions from this test:

Table 7. VAR Estimate

	D(EA)	**D(HE)**	**D(TR)**
D(EA(-1))	-0.230370	0.157325	0.156978
	(0.34292)	(0.18626)	(0.11711)
	[-0.67180]	[0.84465]	[1.34046]
D(EA(-2))	-0.204914	0.015262	-0.245252
	(0.34583)	(0.18784)	(0.11810)
	[-0.59253]	[0.08125]	[-2.07661]
D(EA(-3))	-0.438637	-0.021449	-0.119539
	(0.40259)	(0.21867)	(0.13749)
	[-1.08954]	[-0.09809]	[-0.86946]

D(HE(-1))	-0.440782	0.170134	-0.441009
	(1.28304)	(0.69690)	(0.43816)
	[-0.34355]	[0.24413]	[-1.00649]
D(HE(-2))	1.052185	-0.917785	-0.394579
	(1.00818)	(0.54761)	(0.34430)
	[1.04364]	[-1.67598]	[-1.14603]
D(HE(-3))	-0.211392	-0.091322	-0.388314
	(1.45178)	(0.78856)	(0.49579)
	[-0.14561]	[-0.11581]	[-0.78322]
D(TR(-1))	-0.522714	-1.043185	-0.164820
	(1.14979)	(0.62453)	(0.39266)
	[-0.45462]	[-1.67036]	[-0.41975]
D(TR(-2))	0.708466	0.547080	0.417668
	(1.03143)	(0.56024)	(0.35224)
	[0.68688]	[0.97651]	[1.18575]
D(TR(-3))	-0.548578	0.174599	-0.301546
	(0.87193)	(0.47360)	(0.29777)
	[-0.62915]	[0.36866]	[-1.01268]
C	1.480392	0.244217	0.339574
	(0.74883)	(0.40674)	(0.25573)
	[1.97695]	[0.60043]	[1.32787]

Table 7 displays the outcomes of a VAR model including three variables: D(EA), D(HE), and D(TR). Here we may see the initial disparities in Educational Attainment (EA), Health Expenditure (HE), and Tax Revenue (TR). Standard errors are shown in parenthesis, whereas t-statistics are in square brackets.

A negative but statistically insignificant association is shown by the coefficient for D(EA(-1)) on D(EA) of -0.230370 and a t-statistic of -0.67180. In the case of D(HE), the t-statistic is 0.84465 and the coefficient is 0.157325, suggesting a positive but not statistically significant association. The positive but statistically insignificant link is indicated by the coefficient of 0.156978 and the t-statistic of 1.34046 for D(TR). Determining the effect of EA(-2) on D(EA) yields a t-statistic of -0.59253, suggesting a negative but statistically insignificant link, as indicated by the coefficient of -0.204914. With a t-statistic of 0.08125 and a coefficient of 0.015262 for D(HE), we can see that there is a positive link, but it is not statistically significant. The t-statistic for D(TR) is -2.07661, and the coefficient is -0.245252, therefore the association is negative and statistically significant. The t-statistic is -1.08954, and the coefficient for D(EA(-3)) on D(EA) is -0.438637, suggesting a negative but statistically insignificant link. A t-statistic of -0.09809 and a coefficient of -0.021449 for D(HE) suggest a negative but statistically insignificant association. There is a negative but statistically insignificant connection for D(TR) with a coefficient of -0.119539 and a t-statistic of -0.86946.

Determining the impact of HE(-1) on EA yields a t-statistic of -0.34355 and a coefficient of -0.440782, suggesting a negative but statistically insignificant association. The t-statistic for D(HE) is 0.24413, and the coefficient is 0.170134, therefore the association is positive but not statistically significant. There is a negative but statistically insignificant connection for D(TR) with a coefficient of -0.441009 and a t-statistic of -1.00649. An unimportant positive correlation is shown by a t-statistic of 1.04364 and a coefficient of 1.052185 for D(HE(-2)) on D(EA). A t-statistic of -1.67598 and a coefficient of -0.917785 for D(HE) show that there is a negative but not statistically significant link. There is a negative but statistically insignificant connection for D(TR) with a coefficient of -0.394579 and a t-statistic of -1.14603. Determining the impact of HE(-3) on EA yields a t-statistic of -0.14561 and a coefficient of -0.211392, suggesting a negative but statistically insignificant association. With a t-statistic of -0.11581, the negative but statistically insignificant association is indicated by the coefficient of -0.091322 for D(HE). There is a negative but statistically insignificant connection for D(TR) with a coefficient of -0.388314 and a t-statistic of -0.78322.

An unimportant negative correlation is shown by the t-statistic of -0.45462 and the coefficient of D(TR(-1)) on D(EA) of -0.522714. A t-statistic of -1.67036 and a coefficient of -1.043185 for D(HE) show that there is a negative but not statistically significant association. A t-statistic of -0.41975 and a coefficient of -0.164820 for D(TR) suggest a negative but statistically insignificant association. An unimportant positive correlation between TR(-2) and EA is shown by a t-statistic of 0.68688 and a coefficient of 0.708466. There is a positive but statistically insignificant connection for D(HE) with a coefficient of 0.547080 and a t-statistic of 0.97651. The t-statistic for D(TR) is 1.18575, and the coefficient is 0.417668, therefore the association is positive but not statistically significant. Statistically, there is no significant link between TR(-3) and EA, as shown by the negative coefficient of -0.548578 and the t-statistic of -0.62915. The t-statistic for D(HE) is 0.36866, and the coefficient is 0.174599, therefore the association is positive but not statistically significant. An unimportant negative correlation is shown by the t-statistic of -1.01268 and the coefficient of -0.301546 for D(TR).

Statistical analysis shows a positive and statistically significant association between the constant term C for D(EA) and a t-statistic of 1.97695, where the coefficient is 1.480392. The t-statistic for D(HE) is 0.60043 and the coefficient is 0.244217, suggesting a positive but not statistically significant link. The t-statistic for D(TR) is 1.32787, and the coefficient is 0.339574, therefore the association is positive but not statistically significant.

By virtue of their t-statistics being smaller than the threshold value—usually about 1.96 for a 95% confidence level—most of the coefficients are deemed statistically unimportant. Negative D(EA(-2)) on D(TR) is the sole statistically significant coefficient; this means that there is a negative relationship between tax revenue and previous values of educational attainment. Statistical analysis confirms a positive correlation between the constant term and educational attainment for D(EA), suggesting that the two variables are positively related. You are conducting research on tax policy and human capital development in Canada, and this interpretation sheds light on the links between educational attainment, health spending, and tax income.

The links between health spending, educational achievement, and tax revenue in Canada were studied in this investigation. To have all three variables ready for analysis, some tweaking was necessary. They showed trends and shifting variances over time at first, but differencing (taking the current value and subtracting the prior one) fixed this and brought attention to the changes. In addition, the research sought for links between variables that might have an impact on one another in the near term, but it turned up no evidence of any such linkages. That is to say, shifts in health care spending and educational attainment are unrelated to changes in tax income, and vice versa. However, a different scenario emerged from the data when looking at the bigger picture. These variables have a steady equilibrium connection, which means they tend to move in tandem with each other throughout time. Disruptions to this balance will most likely be transient and fix themselves. Taking a closer look, we looked at how each variable's historical changes may affect its present and future variations. Although the majority of the results did not reach statistical significance, one intriguing finding did emerge. Tax income fell in the most recent period in correlation with falling educational attainment in the two preceding periods. Furthermore, holding all other factors constant, educational attainment has a favorable long-term tendency. Keep in mind that there may be other issues at play that our research has overlooked. Possible other elements that have not been taken into account here are impacting the results. To get to the bottom of the negative correlation between increases in educational attainment over time and tax revenue, more research is needed. In sum, the results of this study offer preliminary understanding of these connections in Canada. These factors may not have a direct impact on one another in the near future, given the absence of short-term cause-and-effect relationships. The negative correlation between educational attainment and tax revenue, as well as the long-term equilibrium connection, need additional investigation in order to guide Canadian policy decisions about taxes and education.

Conclusion

In the short run, neither increases in tax income nor changes in educational attainment nor health expenditures directly affect one another, according to the data, which also showed no statistically significant Granger Causality among the variables. On the other hand, a cointegrating link was found, which means that these variables will be associated in a long-term equilibrium. An intriguing discovery did arise, however the majority of coefficient estimates were not statistically significant. Evidence suggests that tax income is negatively affected by past values of educational attainment. Additional research is necessary to determine the components at play here. The research shows how complicated the relationship is between health spending, educational achievement, and tax income in Canada. The results call for a more sophisticated strategy to investigate the link between tax policy and the promotion of human capital. To further understand this important topic, future studies may implement more complex models and investigate other variables.

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